



**National Society of
Professional Engineers**
Professional Engineers in Industry

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THE COMPLETE PEI HISTORY OF NSPE

Prepared by the PEI History Committee

ACKNOWLEDGEMENTS

The *Complete PEI History of NSPE* was planned as far back as 2007 when Bob Becnel was asked to Chair the PEI History Committee. The Committee at the time was given two charges: 1) create a static document of the history since the previous publication in 1997; 2) digitize and collect PEI material. During the time since, the Committee published a supplement entitled *75 Years of PEI in Missouri (1937-2012)* which was released in August 2012. The purpose of the supplement evolved as a result of the wealth of information available for a dedicated Missouri PEI history.

Taking on this project was never supposed to be over five years' worth of effort, however, several hurdles popped up along the way. These were good things. Many of the PEI periodicals were provided by long time editor and publisher for PEI, Steve Storts; Jason Krohn of Chicago provided ten years' worth of the *Engineering Times* and other material; and the discovery of the Hathitrust Project which developed a rich collection of PEI materials that were very helpful. Discovery of the Hathitrust Project alone, likely added another two years to the project along with some time to work out a contract between NSPE and Hathitrust. Additionally, many hours of time were spent at the Washington University Olin Library and St. Louis University Pius XII Library in St. Louis due to fine facilities and a rich repository of PEI material.

Acknowledgement of the many individuals that helped with this document is identified herein. The willingness of NSPE staff members Arthur E. Schwartz (Deputy Executive Director) for contract support; the PEI EB for approval to purchase some past PEI newsletters from Black Rose; and the PEI Chairs along the way that kept the Committee alive when it was evident that the process was very slow – John Wall, Jonn Nebbe, Rich Buchanan, Curt Beck and Stephen Hutti.

Several members provided or loaned personal archives, furnished email interviews, made themselves available via telephone, and responded with clarifications along the way. The following are to be specifically acknowledged: Mark Brumbach, Stephen Hutti, Denis Fessler, Douglas Benner, Curtis Beck, Clyde Nagata, Gale Sights, Glenn Landguth, Rick Fazio, Ken Roy, and Steve Storts, long time editor and publisher of the PEI periodicals. Most notably, Neerali J. Desai, P.E. labored through the entire document for several months to correct grammar, typos and tense throughout. I am truly grateful.

Lastly, Erin Garcia, in the NSPE headquarters has always been available to support PEI's members and found time to dig through the NSPE archives when requested. Her help and devotion through the years on behalf of the members and officers are the reason why we can have such a focused organization that serves the best interest of its members. Her help has been instrumental during the entire PEI History Committee's work.

NSPE PEI History Committee

Bob Becnel, P.E., F.NSPE – Editor

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CONTENTS

ACKNOWLEDGEMENTS	2
CONTENTS	3
THE EARLY YEARS.....	6
THE COMMITTEE YEARS.....	17
EARLY PRACTICE DIVISION YEARS	37
PRACTICE DIVISION PROJECTS	49
AMERICAN QUALITY AND PRODUCTIVITY INSTITUTE	49
CAREER ASSET MANAGER	50
CONGRESSIONAL FELLOW	52
DERGULATIONS OF UTILITIES.....	53
EDUCATION ASSISTANCE, LTD. (EAL)	53
ENGINEERING EMPLOYMENT SERVICES	56
ENGINEERING MANAGEMENT.....	60
GUIDELINES TO PROFESSIONAL EMPLOYMENT.....	62
INDUSTRY ADVISORY GROUP	64
INDUSTRY RELATIONS PROGRAM	68
INNOVATIVE ENGINEERING AWARD	72
METRIC CONVERSION	73
PATENT INVENTION PROTECTION	74
PEI HANDBOOK.....	75
PEI HISTORY	75
PROFESSIONAL EDGE	77
SCHOLARSHIPS.....	78
SOFTWARE ENGINEERING	81
SUSTAINING SPONSOR PROGRAM.....	83
VALUE ENGINEERING	88
VIRTUAL UNIVERSITIES	88
WOMEN IN PEI	89
YOUNG ENGINEERS.....	91
INTEREST GROUP YEARS	96
COMMUNICATIONS	99
SLIDE SHOWS.....	102
BROCHURES	102
PERIODICALS	103
PUBLICATIONS	104
ARTICLE BIBLIOGRAPHY	107
ADMINISTRATION.....	114
RECOGNITION	120
NSPE AWARD.....	120
NSPE DISTINGUISHED SERVICE AWARD	120

NSPE FELLOW.....	121
INDUSTRIAL PROFESSIONAL DEVELOPMENT AWARD (IPDA).....	122
PEI DISTINGUISHED SERVICE AWARD (DSA).....	124
QBS AWARD FOR INDUSTRY.....	126
NSPE/PEI NEW PRODUCT AWARD (NPA).....	127
COMMITTEE ROSTERS AND OFFICERS.....	132
STATE PEI DIVISION HISTORIES.....	159
ALABAMA.....	161
COLORADO.....	161
CONNECTICUT.....	162
DELAWARE.....	162
DISTRICT OF COLUMBIA.....	164
FLORIDA.....	167
GEORGIA.....	172
HAWAII.....	175
IDAHO.....	176
INDIANA.....	177
IOWA.....	180
KANSAS.....	184
KENTUCKY.....	186
MASSACHUSETTS.....	189
MINNESOTA.....	190
MISSISSIPPI.....	193
MISSOURI.....	193
MONTANA.....	194
NEW JERSEY.....	194
NEW MEXICO.....	197
NEW YORK.....	199
NORTH CAROLINA.....	200
OHIO.....	203
OREGON.....	205
PENNSYLVANIA.....	206
TEXAS.....	210
VIRGINIA.....	211
WASHINGTON.....	214
WISCONSIN.....	215
CHAIR REPORTS.....	218
CHAIR REPORT 1994 - 1995.....	218
CHAIR REPORT 1995 - 1996.....	222
CHAIR REPORT 1999 - 2000.....	224
CHAIR REPORT 2001 - 2002.....	231
CHAIR REPORT 2002 - 2003.....	239
CHAIR REPORT 2003 - 2004.....	242

CHAIR REPORT 2004 - 2005245
CHAIR REPORT 2005 - 2006254
CHAIR REPORT 2006 - 2007266
CHAIR REPORT 2007 - 2008268
CHAIR REPORT 2008 - 2009269
CHAIR REPORT 2012 - 2013270
REFERENCES..... 272

THE EARLY YEARS

1930'S TO 1950'S

In order to begin a historical account of Professional Engineers in Industry, it would be prudent to provide an early summary of the National Society of Professional Engineers. Long before the notion of segregating NSPE members and Engineers, per say, by Practice Division; NSPE began with the highest calling, which was to focus on the Professional Engineer.

D. B. Steinman served as president of the American Association of Engineers (AAE) in 1925-1926, which was a predecessor of NSPE. He had long been an advocate of registration and AAE had as one of its goals the registration of engineers in every state. However, it did not require registration as a prerequisite for membership and he felt this was necessary.

In May of 1934, he issued a call to four organizations that were existing in the Northeast: the New Jersey Association of Professional Engineers and Land Surveyors, the New York State Society of Professional Engineers, the Pennsylvania Society of Professional Engineers, and the Connecticut Society of Professional Engineers.

Steinman proposed the new organization be called the National Society of Professional Engineers. Every member must also belong to a State Society and Chapter Association - an individual membership organization. It was decided that membership would be restricted to professional engineers and the organization would limit its activities to non-technical concerns of all engineers. Committees were organized to establish funding to draw up a constitution and bylaws, and to consider other organization details.¹



"Father" of NSPE, D.B. Steinman, P.E. founder and first President of NSPE. (Photo from American Engineer, Sep 1944).

The official organization meeting of NSPE was subsequently scheduled for Labor Day, September 3, 1934. At this meeting, the first Constitution of the society was adopted and the officers were elected to hold office until January 1, 1936. Membership was limited to Professional Engineers. The first committees of NSPE included: Executive, Legislative, Public Relations, Publication, and Membership. The dues were established at \$4.²

¹ PEI Handbook 2006-2007

² The American Engineer, September 1934, page 4.

Steinman's observations from the initial meeting went as follows, "In this organization, the essential importance of the local unit is recognized. The National Society, the State Societies, and the County Chapters are closely and reciprocally integrated, and all are regarded of equal importance. Membership in one involves membership in all, wherever State Societies and County Chapters are organized. The National Society starts with an organized membership of 3000 Professional Engineers. It is confidently expected that, within a few years, we shall have 20,000 members."³

The American Engineer became the Official Publication of the National Society of Professional Engineers and was published in Jersey City, NJ.⁴ The first NSPE Convention was held in Columbus, OH on Oct 23-25, 1935 and drew an attendance of 1250.⁵

In the early days, the organization of NSPE did not begin to look at issues related to a practice of engineering. Many of the issues grappled both in its communications and governance involved licensure and the promotion of licensure. Since NSPE originated from the roots of the ASCE, the perspective of many issues began to be bounded in terms of Civil and Mining Engineering. It was also common for member states of NSPE at this time not have a licensure law on the books within their state. This provided a great opportunity for NSPE to help out the member State Societies and

Initial NSPE Officers Elected September 3, 1934		
Name	State	Position
D. B. Steinman	NY	President
T. W. Battin	PA	First Vice President
Hugh A. Kelly	NJ	Second Vice President
Willard S. Conlon	CT	Treasurer

flex their lobbying power. Nevertheless, industry began to be engaged with NSPE as early as the Third Annual NSPE Convention in New York in 1937. Companies including General Electric, Long Island Lighting Company, American Radiator Company, Portland Cement Association, Westinghouse, and Automatic Switch Company were all in

attendance as presenters, exhibitors and sponsors. This observation would probably have to be the mark that identifies the birth of industry within NSPE that has continued for 75 years.⁶

The concept of Unionism in engineering was one of real reasons for NSPE's creation and a movement that D.B. Steinman wanted to prevent with engineers. This topic is covered frequently as early as the late 1930's in The American Engineer. Early on, the issue was covered from the perspective of affecting more than just Industry. However, as industry related and employee relations type committees were formed, Unionism became a passion for NSPE members that in the industry practice. This eventually was a large draw for Industry members and also presented a significant, or the primary, catalyst for the organization to prosper beyond World War II.

³ The American Engineer, September 1934, page 16.

⁴ The American Engineer, January 1935.

⁵ The American Engineer, November 1935, page 7.

⁶ The American Engineer, November 1937, page 15.

In the early 1940's, World War II and defense related topics were frequent. This also raised the level of patriotism in the organization during the war years. In fact, on May 18, 1940 the NSPE President offered the President, Senate and House of Representatives their services of the Society. This action prompted the National Committee on Construction Preparedness to be formed of which NSPE was invited as a member⁷.

As early as 1941, NSPE was discussing engineering as a five or six year program in college. The suggestion was that Engineers should have 2 years of pre-Engineering required courses. At this time, the required courses would be Liberal Arts. For example, additional English, economics, psychology, etc., would all be advantageous to the Engineer if required⁸.

In the latter years of PEI, Industry Visitations became common. In the 1940's, at NSPE meetings, "inspections" were arranged. These were "field trips" to sights of varying engineering interest, such as a bridge, or major thoroughfare or even an industrial plant. The purpose was similar and the implementation was done to offset the meetings in much the same manner that visitations or plant tours are conducted today.

One of the earliest "industry" related forms of governance or committee deliberations established by NSPE was the Patents Committee, observed as early as January 1942. This was considered a "special" committee as opposed to a "standing committee". Dr. Ralph H. McKee of New York City was the Chair. In the spring, the Committee presented a Progress Report that enumerated several interesting findings. 1) The Patent Office was greatly overwhelmed and under employed due to the War effort, 2) Patent payments by the US Treasury will be denied if originating from enemy territory, 3) The US Congress was urged to shut down the US Patent System during the War effort in the name of Patriotism, 4) Patent pooling has been implemented in order to not impede manufacturing in order to utilize the best methods⁹.

At the October 31, 1942 NSPE Board of Director's Meeting in Indianapolis, the Board approved a "zone map" as required by Article V of the Constitution. The Zones were to be used to identify the demographic area served by NSPE Vice Presidents. The Zones were intentionally aligned with those used by the National Council of State Board of Engineering Examiners¹⁰. The Zones were allocated as such:



Dr. Ralph H. McKee, Chair of NSPE Patents Committee responsible for bringing attention to improvements in the US Patent Office. (Photo from American Engineer, Jan/Feb 1943).

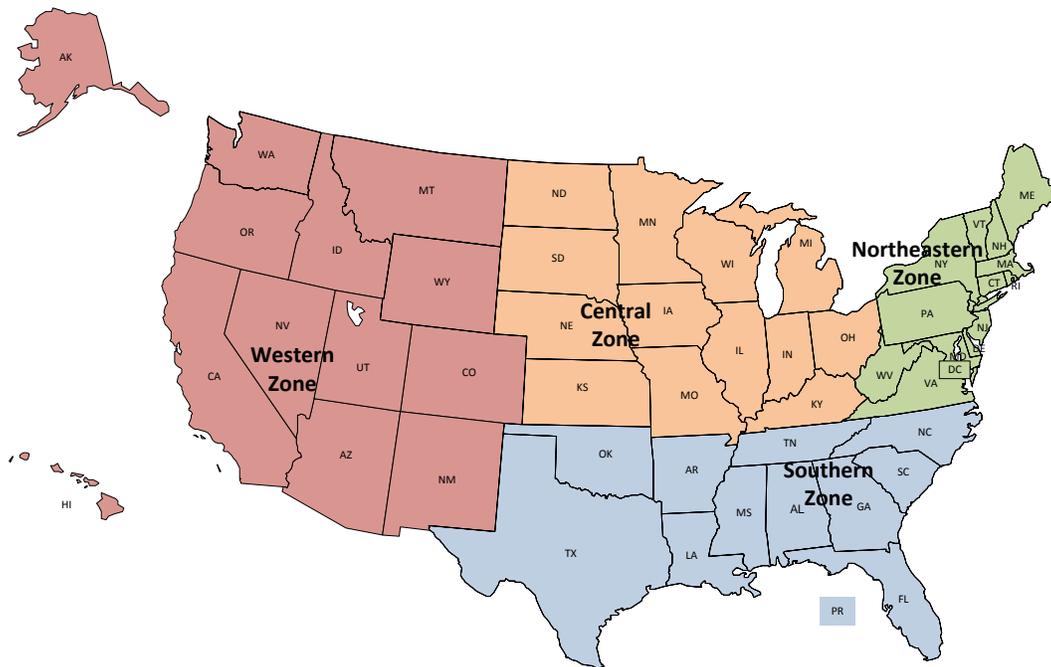
⁷ Larson, Edward, "Our National Society", The American Engineer, December 1940, page 14.

⁸ Peters, Vincent, "Engineering: A Five or Six Year Course", The American Engineer, March-April 1941, page 9, 23.

⁹ McKee, Ralph, "Patents Committee Progress Report", The American Engineer, July -August 1942, page 14-16.

¹⁰ Board of Directors Minutes, The American Engineer, January-February 1943, page 15.

- Northeastern Zone – Maine, Connecticut, New Hampshire, Vermont, Massachusetts, Rhode Island, New York, Pennsylvania, New Jersey, Delaware, Maryland, District of Columbia, Virginia and West Virginia.
- Southern Zone – North Carolina, South Carolina, Georgia, Florida, Alabama, Tennessee, Mississippi, Arkansas, Louisiana, Oklahoma, Texas and Puerto Rico.
- Central Zone – Ohio, Kentucky, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, Missouri, Kansas, Nebraska, South Dakota and North Dakota.
- Western Zone – Montana, Wyoming, Colorado, New Mexico, Arizona, Utah, Idaho, Washington, Oregon, Nevada, California, Alaska (Territory) and Hawaii (Territory).



Originally, geographic sections were divided up into 4 zones according to the 1942 NSPE Board of Director action.

Due to the World War II, NSPE activity decreased considerably. The Board reduced travel, partly because of the difficulty of train travel at the time. The primary use of trains was to carry War material. Also, The American Engineer reduced the content in each issue as well as frequency of publication. Moreover, it was not uncommon to have one or more of the Executive Officers of NSPE enlisted or serving the War in some capacity, hence unavailable for NSPE activities.

As the War passed its mid-way point, the Society began to consider post War topics. The Education Committee evaluated the quality of the Engineering programs that would soon find returning servicemen. Articles in The American Engineer presented postwar housing construction.

There was a sense that the Profession was forward looking to how it can improve the Profession and prepares for addressing America's issues.



Milton Lunch, first employed lobbyist for NSPE. (Photo from American Engineer).

At the 1944 Board of Directors Meeting held February 10-11 in Columbus, OH, there was considerable discussion on professionalism and unionism. It reaffirmed its position on the subject by a unanimous expression vote that the Society could not become a union or collective bargaining agency in the framework set forth in the Labor Relations Act. NSPE is the only strictly professional national engineering organization in the country and must adhere to professional procedures. It does contemplate an active program to represent professional engineers and engineers-in-training before government and industry.¹¹

The first reference to "Engineers in Industry" appears to have occurred in 1944. The Ohio Society of Professional Engineers (OSPE) either created or had an existing Committee on Problems of Engineers in Industry to study concerns and problems of engineers in industry and try to provide helpful answers. Thomas Rolph, OSPE President, suggested that this committee expand its scope and more actively become a source for countering collective bargaining for engineers. The suggestion included the development of a brochure or other literature that engineers and managers could use.¹² In June 1944, Thomas Rolph visited the Akron Chapter of OSPE and spoke to them on the topic of Engineers in Industry at a dinner. It was reported that 74 were in attendance.¹³

As early as June 1944, NSPE began promoting the Metric System. Similar arguments were used to convince the membership and engineers as used through NSPE and PEI history. The simplicity and common senses approach to measurement is what the Metric System offers. Indication that the US Army, in the design of armament, and the US Coast and Geodetic Survey are current users of the Metric System.¹⁴

In 1945, the Ohio Society of Professional Engineers reported to have developed a "Professional Engineer in Industry" booklet. The booklet explains to engineers in industry, the Society and the Professional Engineering movement.¹⁵

A report was read at the Annual NSPE Meeting in Cleveland, OH on December 8, 1945 by a Committee on Fact Finding for Collective Bargaining, which was chaired by J.S. Kennedy, P.E. The

¹¹ "NSPE Directors Meet, Hold First 1944 Session", The American Engineer, March 1944, page 11,26.

¹² Rolph, Thomas, "Engineers in Industry", The American Engineer, April 1944, page 16.

¹³ "Ohio (OSPE) Report to NSPE", The American Engineer, August 1944, pages 21-22.

¹⁴ Elliott, Louis, "Engineers Should Take an Interest in the Metric System", The American Engineer, June 1944, pages 29-32.

¹⁵ "Ohio (OSPE) Report to NSPE", The American Engineer, January 1945, pages 25-26.

Committee was setup by NSPE in late 1944 or early 1945. In 1946, this Committee became Employment Practices. In January of 1947, NSPE President recommended that the Economic Status Committee be merged with the Employment Practices Committee.¹⁶

On September 16, 1946, Mr. Milton F. Lunch was hired by NSPE and Paul Robbins for the purpose of legislative and administrative analysis. Lunch served in this position for many years and supported PEI for a long time and on many different fronts.¹⁷

The Wagner Act was deliberated in the US Senate in early 1947 for modifications. NSPE and Milton Church worked feverishly with Senator John Ball (MN) to lobby the entire US Senate to make changes favorable to NSPE and other professional employees. During the ensuing months of 1947, the NSPE Legislative Committee monitored this progress very closely and reported to its members¹⁸.

The Hartley-Taft bill became law in 1947, which amended the National Labor Relations Act. The law was passed by an override of the President's veto. Some of the significant provisions for engineers and other professional employees relate to that for the first time since the passage of the original Labor Relations Act, engineers will have the right to choose representatives for collective bargaining who do not also represent unskilled and skilled workers. It will be possible for the engineers to have their own representatives whose major concern will be engineers and their welfare, rather than the welfare of many different types of workers, including unskilled and professionals. NSPE indicated that this opens the way for full professional development and elimination of the stigma of "technician" which has been attached by large segments of the public to engineers as a group.¹⁹



New NSPE Headquarters in 1948 which was rental space on du Pont Circle in Washington, D.C. (Photo from The American Engineer, Oct. 1948).

Mr. Clark W. Ransom, Chair of the National Societies Committee of the General Electric Engineers' Association, presented a proposal to the NSPE Board of Directors at the December 1946 meeting in Atlanta, GA. The proposal insisted that NSPE take the lead on relevant issues of the engineer in industry and do so quickly, as well as flow down the implantation to State Groups of

¹⁶ "Committee Personnel for 1947", The American Engineer, February 1947, page 5.

¹⁷ Robbins, Paul, "National and State Society News", The American Engineer, October 1946, page 18.

¹⁸ Lunch, Milton, "Professional Engineers Covered by New Labor Bill", The American Engineer, March 1947, page 6.

¹⁹ "Congress Overrides Labor Bill Vote", The American Engineer, June 1947, page 22.

NSPE. This proposal led to the formation of a special NSPE committee on Problems with Industrial Groups in February 1947 to study the concerns and proposal. The Chair of this committee was W.F. Ryan (MA). Other members that served include W. H. Larkin (NY) and Bruce Williams (MO).²⁰

A new committee to study problems of industrial groups was formed July 12, 1947, by the NSPE Board of Directors called the Committee on Industrial Problems, which was established as a standing committee. This formation further demonstrated the impact and significance that the



William F. Ryan, Chair of the NSPE Committee on Problems with Industrial Groups. (Photo from The American Engineer, Oct. 1947).

engineering members in Industry were having on NSPE. Moreover, a report called the “Ryan Report” from the special NSPE committee on Problems with Industrial Groups to the Board of Directors and authored by William Ryan (Massachusetts) led to Ryan being named Chair of the new committee and the special committee was discharged. The committee’s purpose included: 1) the status of engineers under labor and wage hour legislation and the promotion of a professional relationship between engineers in industry and their employers; 2) relationships which exist between engineers who were employed in industry and those who function in a consulting capacity; 3) responsibilities of the engineering profession to the public; 4) civic duties and program which the engineer in industry must assume and foster; 5) means of aiding newly graduated engineers and other young engineers in adapting themselves to a professional mien and mode of thinking.²¹ While this committee was established as standing committee, it appears that by 1948, it was no longer referenced.

NSPE adopted a recommendation from the Regional Reclassification Committee that the Vice-President zones be increased from 4 to 6 at the NSPE Fall Meeting in Oklahoma City, OK on Sept 2-4, 1948. Also of significance at this meeting, NSPE approved changing its administrative year to July 1 to June 30. The fiscal year remained January 1 to December 31. Up until now, the administrative year was January 1 to December 31. The Fall Meeting also put NSPE on record on two key positions:²²

- 1) That the individual responsibility and independent judgment required of a professional engineer is incompatible with the regimentation fundamentally inherent in unionization; and

²⁰ “Committee on Industrial Problems Established by NSPE Directors”, The American Engineer, August 1947, page 4-5.

²¹ “Committee on Industrial Problems Established by NSPE Directors”, The American Engineer, August 1947, page 3-5, 14.

²² Page, Franklin, “Oklahoma City Meeting Marked Big Milestones in NSPE Progress”, The American Engineer, October 1948, page 5-10.

- 2) That the NSPE believes that the provisions of the Taft-Hartley Act which apply to professional employees should be utilized by registered professional engineers as a means of avoiding regimentation into unions.

The changes to the administrative year and region demographics required approval by the members of a new Constitution and Bylaws. This occurred as a result of the Constitution being approved in 1949. Engineer-in-Training membership was also extended in this version of the Constitution. Included at this time was enumerating the “Employment Practices Committee” as a standing committee. The objectives of this committee were identified in the Bylaws as the following:

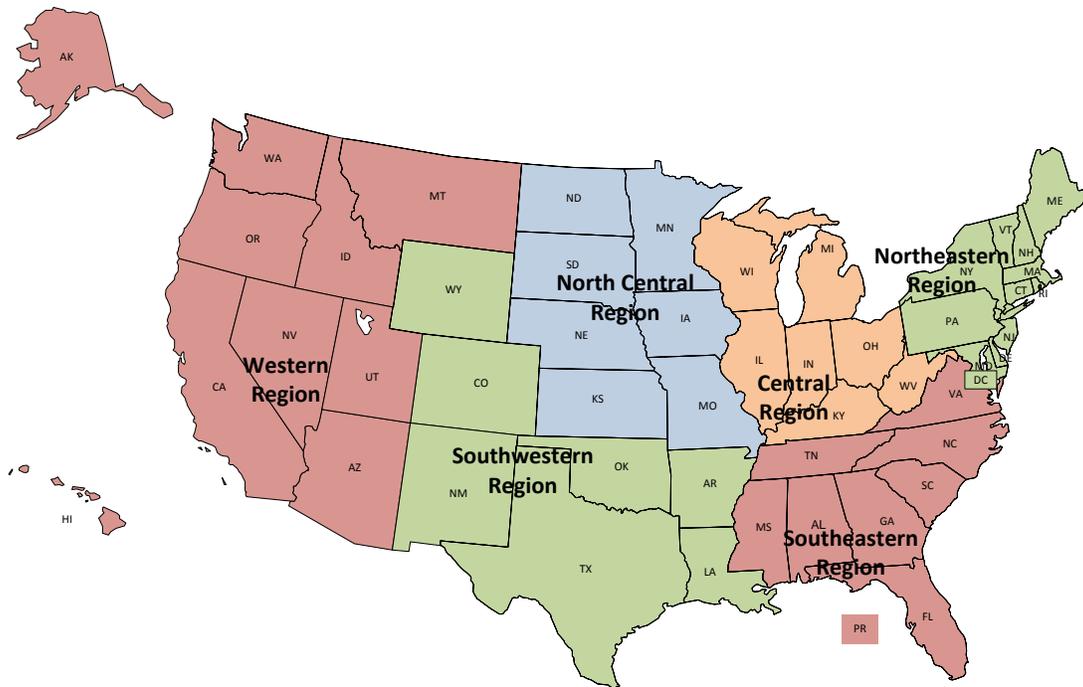
- 1) To make a continuing study of procedures, standards, and policies governing the employment of professional engineers,
- 2) To study the relationship between the employment of professional engineers and the laws of the United States and the several States concerned with employment practices and labor relations,
- 3) To write and publish reports and articles on employment practices and labor relations development,
- 4) To make recommendations to the Legislative Committee for new legislation, amendment to existing legislation, or the position which should be taken with respect to pending legislation affecting employment practices and labor relations,
- 5) To confer and cooperate with other professions and with other professional engineering organizations in advancing employment practices for professional engineers.

As a result of the new Constitution & Bylaws, NSPE was divided into six (6) geographical areas²³:

- Northeastern Area (Region 1) – Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.
- Southeastern Area (Region 2) – Alabama, Georgia, Florida, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, Puerto Rico.
- Central Area (Region 3) – Illinois, Indiana, Kentucky, Michigan, Ohio, West Virginia, and Wisconsin.

²³ The American Engineer, January 1949, pages 11.

- North Central Area (Region 4) – Iowa, Minnesota, Missouri, Kansas, Montana, Nebraska, North Dakota, South Dakota and Wyoming.
- Southwestern Area (Region 5) – Arkansas, Colorado, Louisiana, New Mexico, Oklahoma, and Texas.
- Western Area (Region 6) – Alaska (Territory), Arizona, California, Idaho, Nevada, Hawaii (Territory), Oregon, Utah, and Washington.



Since 1949, geographic areas have been divided by six (6) regions. Other changes over the years have included renaming the “Western Region” to “Western & Pacific Region in the 1990’s. Guam is now a State Society in the Western & Pacific Region and the Panama Canal Zone has disbanded.

In anticipation for the 1952-1953 administrative year, the NPSE Nominating Committee placed John D. Coleman for nomination for President-Elect. Coleman represents the first member from Industry to be nominated for the top spot. It is also ironic that Coleman is from Ohio, since the state of Ohio is credited with the first Functional Section for Industry of all of the States. Many more PEI members will follow suit and become NSPE Presidents.

Executive Research Surveys			
Survey	Theme	Date	PE Conf Board for Industry Chair (PECBI)
No 1	How to Improve Engineering-Management Communications	Apr 1952	C.G. Roush
No 2	How to Improve the Utilization of Engineering Manpower	Dec 1952	C.G. Roush
No 3	How to Attract and Hold Engineering Talent	Feb 1954	John D. Coleman
No 4	How to Train Engineers in Industry	Apr 1955	John D. Coleman
No 5	Career Satisfactions of Professional Engineers in Industry	Sep 1957	Noah Hull
No 6	Engineering Professionalism in Industry	Dec 1960	W.K. Adkins

Members of the Professional Engineers Conference Board for Industry (PECBI)			
Name	State	Title	Company
Robert Allen	OH	Chief Engineer	Univis Lens
Ben Curry	MN	Manager,, Maintenance Division	Northwest Airlines
James F. Fairman	NY	Vice President	Consolidated Edison
Robert M. Gates	NY	President	Air-Preheater Co
Elmer Housely	TN	District Power Manager	Aluminum Co of America
G.W. McCullough	OK	General Manager and Vice President	Phillips Chemical Co
C.D. Blackwelder	VA	Vice President of Engineering	Reynolds Metals Co
Harry Darby	KS	President	Darby Corp
John Forslew	CA	Chief Engineer	Carnation Co
W.H. Gille	MN	Chief Engineer	Minneapolis Honeywell
Charles Lawall	WV	Assistant Vice President	C&O Railroad
Allison C. Neff	OH	Vice President	Armco Drainage & Metal Products
Elgin B. Robertson	TX	President	Elgin Robertson, Inc.
E.W. Seeger	WI	Vice President	Cutler-Hammer Co
C.Y. Thomas	KS	Vice President	Spencer Chemical Co
E.M. Toussaint	IL	Assistant to President	Micro-Switch Co
William F. Ryan	MA	Engineer Manager	Stone & Webster Engineering Corp
Stephen G. Szabo	MI	Director Works Engineer	Fisher Body, General Motors
William L. Thrailkill	WA	Assistant General Manager	Spokane Water Power Co
C.G. Roush	MO	Kansas City Manager	Westinghouse Corp

NSPE

President Dresser set the wheels in motion on a new public relations campaign to survey engineers and managers in industry. A series of six industrial research studies were designed to acquaint top management of industry with the value of employing registered, professional engineers. These were referred to as the *Executive Survey Series*. The first questionnaire's theme was "How to Improve Engineering-Management Communication". Also, as part of this undertaking established at the November 9-10, 1951 Fall Board of Directors in Kansas City, MO, was the appointment of a Professional Engineers Conference Board for Industry. The funding for the public relations campaign was conducted during the preceding months among all members. Over \$26,000 was

raised for the effort. Subsequent surveys were funded by member contributions and eventually, a dues increase was implemented to partially fund the effort as well. The subsequent five surveys ran through the 1950's, with the last appearing in 1960. The format of the finished product was approximately 60 pages.

The Conference Board had been established as an advisory group to guide the National Society of Professional Engineers in conducting its research program on engineering-management problems. Members of the Conference Board for Industry were composed of professional engineers who have attained prominent positions in industry.²⁴

Around the time the Professional Engineers Conference Board for Industry (PECBI) released its 3rd Survey, the entity incorporated as a separate organization. The purposes of the incorporation was to provide continuing research into important problems, publishing and distributing information thus gleaned, conducting clinics and conferences by which the experience of industrial organizations may be exchanged. Furthermore, the incorporated PECBI disseminated information so that the engineering profession may be of greater service to industry and, in turn, enhance its professional status.²⁵ The Internal Revenue Service granted the independent organization with tax-exempt status in 1954 as a 501(c)3 classification, which permitted it to accept contributions which were tax deductible for the donors.^{26,27}

A survey was taken of the 1953-1954 NSPE Board of Directors to which function (practice) that they belonged: 33% Industry, 24% Private Practice, 19% Government, 13% Public Utilities, and 11% Education.²⁸

²⁴ "Engineering Conference Board for Industry Appointed", The American Engineer, December 1951, page 27.

²⁵ Robbins, Paul, "NSPE Believes...Professional Engineers Conference Board for Industry", January 1954, page 28.

²⁶ Coleman, John, "A Message About the Report by the PECBI", The American Engineer, May 1955, page 20.

²⁷ Robbins, Paul, Building for Professional Growth, NSPE, page 56.

²⁸ Robbins, Paul, "NSPE Believes...The Function of the Board", The American Engineer, September 1953, page 30.

THE COMMITTEE YEARS

1950'S - 1967

As a result of the Employment Practices Committee Report given at the June 17-19, 1953 annual meeting at Daytona Beach, FL, "It was voted to establish a special committee to consider problems of professional engineers in industry".²⁹ The committee was formed to assess the various problems of industrially employed engineers and to develop satisfactory solutions to meet the needs of this large segment of our society. This committee was referred to as a (Special) Committee on Engineers in Industry.

At the November 7, 1953 Fall Meeting in Indianapolis, IN, the committee gave a preliminary report to the Board of Directors and received the endorsement of the Board to mobilize the Society's programs behind studying and attempting to resolve some of the perplexing problems. This committee, of course, has only begun its work. One of its first jobs was to review carefully the scope of the problem, as well as activities in which the Society was engaged which might be adapted to be of greater assistance to engineers in industry.³⁰

November 6-7, 1953, the new committee met with the Employment Practices Committee and two areas that were reviewed for the benefit of those from industry:

- 1) The committee reviewed the extent and nature of the *Gentlemen's Agreement* between industries that make it impossible for an engineer to discuss employment with any of the industries that are a party to the agreement prior to termination of his previous employment.
- 2) Reviewed the Society's activities in combating the unionization of engineers.

At Albuquerque in February 19-20, 1954 the Committee met defining the extent of the problems of the "Engineers in Industry" and the full facet of the problems the committee faced.

In Milwaukee, Wisconsin on June 9-12, 1954, the Committee had its first meeting with those from industry. The main topic of discussion was the proposed statement to the NSPE Board of Directors on the *Gentlemen's Agreement*. Subsequently, at the Board Meeting October 15-16, 1954 in Omaha, NE, the Engineer-in-Industry presented its first rules of procedure to the NSPE Board and the first committee was appointed.

The committee at the NSPE Board meeting in February 1955 issued its first publication "A Professional Look at Engineers in Industry." The committee had worked on this brochure for one year. At the Spring Meeting held February 18-19, 1955 in Charlotte, NC, Engineer-In-Industry

²⁹ "Important Decisions Made in Daytona", The American Engineer, July 1953, pages 24-25.

³⁰ Robbins, Paul, "NSPE Believes...The Professional Engineer in Industry", The American Engineer, December 1953, page 35

Chair, Robert A. Blackburn reported on the following. The first phase of the Engineer-in-Industry Committee program has been completed. This step of the program, first announced a year ago at the Albuquerque, NM meeting, comprised the preparation and publication of a book devoted to an analysis of the problems of the industrially employed engineer together with suggested methods of resolving these problems.³¹



Robert A. Blackburn, the first Chair of the Engineers-In-Industry Committee. (Photo from *The American Engineer*, March 1955).

The committee felt that this work has been highly productive. In order for its work to have the maximum benefits for engineers in industry, every effort must be expended in the distribution of the book "A Professional Look at the Engineer in Industry". Its distribution should be widespread with a particular stress on its availability to industrial managements.³²

The book *Professional Look at the Engineer in Industry* authored by the Engineer-in-Industry Committee received a lot of praise inside and outside of NSPE. It was published by NSPE and distributed on February 19, 1955 as a 128-page study of the engineer-industry relationships and recommendations for improving those relationships and sold to members for \$1 and non-members for \$2. Many laudatory comments on the work were received from prominent industrial leaders, educators, individual members, labor relations experts and others. Complimentary copies of the book were sent to all deans of engineering, associations in the engineering field and key government offices. Several deans indicated interest in using it as a textbook for students. The publication was reviewed in major publications, such as the *New York Times*, *Daily Labor Report*, *Engineering News Record* and *Industrial Relations News*.³³ By May 1955, over 2600 copies of the book were sold and 1500 copies distributed on a complimentary basis.³⁴

As part the annual meeting in Philadelphia on June 2, 1955, a conference on "Professional Development – The Responsibility of Industry and the Engineer" was presented as a full-day event. The keynote speaker was Representative Carroll D. Kearns who spoke on "Privilege of a Profession". There was a morning sessions which featured five leading industrial engineering figures. Then an afternoon session was a panel discussion that revolved around the new book "Professional Look at the Engineer in Industry". A complete transcript of the proceedings of the conference was published.³⁵

³¹ The First Thirty Years, page 5.

³² "Variety of Professional Topics Considered by NSPE Board at Spring Meeting", *The American Engineer*, March 1955, pages 19-22.

³³ "Industry, Educators, P.E.'s Hail New NSPE Book", *The American Engineer*, April, 1955, page 24.

³⁴ "Full Professional, Social Program at Philadelphia Meeting", *The American Engineer*, July 1955, pages 20-25, 48.

³⁵ "Philadelphia Meeting Features Full-Day Engineer – Industry Conference", *The American Engineer*, May 1955, page 12-13.

At the fall meeting in 1955, the birth of a PEI periodical was discussed. The Engineer-In-Industry Committee recommended at the October 13-15, 1955 fall meeting in Memphis, TN that a publication be prepared by NSPE each month for the dissemination of information of interest to employed engineers and employers of engineers. Distribution will be to industry, other employers of engineers, interested persons and organizations, and to NSPE members. The NSPE BOD agreed to ask the Executive Committee to consider this action. This publication eventually became the "Engineering Employment Practices Newsletter".

A second topic at the fall 1955 meeting was the Committee's presentation of a policy statement "Professional Status under Wage-Hour Law" for approval by the NSPE BOD. The purpose of the policy and recommended action was for the basis for scheduled hearings before Congressional Committee in late 1955 or early 1956, in connection with pending bills to revise the Wage-Hour Law. It was also to be used as a basic NSPE policy for further cooperative activity with industry in seeking to constantly improve the professional treatment of professional engineers. The NSPE BOD approved the following statement³⁶:

The Federal Wage-Hour Law has, from its inception, excluded professional employees from the minimum wage and overtime provisions. The theory of the exclusion has been based on a recognition of the unique nature of professional services, in that professional duties require flexibility in terms of hours worked and that such circumstances it is not practical or equitable to bring professional employees into the same rigidity of employment conditions which may apply to those working under conditions susceptible of standardization of hours of employment. The theory of the exclusion has also been based on the flexible working conditions of professional employees which permit professional personnel greater freedom and latitude in hours worked and in outside professional activities.

The National Society of Professional Engineers believes that such recognition of the essential differences between professional and non-professional employment is sound and should be continued in a revision of the Wage-Hour Law. The Society therefore is opposed to any revision of the law as applied to professional employees who would establish minimum earnings tests to qualify for professional status.

The National Society of Professional Engineers further believes that cooperative efforts should be continued and expanded to bring about a greater recognition of professional status of professional engineers, both in terms of remuneration and in employment conditions. Employers should be encouraged to accord their professional engineer employees professional status in the fullest sense; in terms of improved economic position, allowance of working time for outside professional activities, registration under the state engineering registration laws, advanced education, and in all other possible ways to encourage the true spirit of professional-employer relationships.

³⁶ "Tennessee SPE Hosts NSPE Board at Fall Meeting in Memphis", *The American Engineer*, November 1955, page 31.

Lastly, in Memphis 1955, the Committee suggested that NSPE should develop criteria of a professional treatment of employed engineers, indicating those standards which are considered proper professional treatment. It was further proposed that should criteria be used to rate companies and that such rating be made known to graduating engineers and others.

The Subcommittee determined that the first step in such a program must be the development of the criteria. Each member of the Committee drew up suggestions for further preparation of a document that could be created along these characteristics. It was indicated that final NSPE BOD approval will be sought prior to a publication. The publication that eventually led to this suggestion was the "Criteria for Professional Employment of Engineers"³⁷

In February 1956, the Engineer-in-Industry Committee held a conference in Washington D.C. to add to the highly successful publication "A Professional Look at the Engineer in Industry". The Subcommittee developed an outline for "Criteria for Professional Employment of Engineers which was subsequently approved by the NSPE BOD. "Criteria..." was a 23-page brochure developed for both employers and employees and was initially priced at \$2 per year for a subscription.



John Coleman, Chair of the PECBI Committee. (Photo from The American Engineer, Oct 1952).

The Subcommittee lists four basic principles as the foundation for the proposed standards:

- 1) The only satisfactory method of dealing with engineer-employer relationships is on a co-operative common-interest basis.
- 2) The engineer shares and equal responsibility with the employer in elevating his professional status.
- 3) Management should regard the engineer as one who is identified with the "management team," whether the engineer is in a supervisory or non-supervisory position.

³⁷ "Tennessee SPE Hosts NSPE Board at Fall Meeting in Memphis", The American Engineer, November 1955, pages 30-35.

- 4) The engineer must be “company minded” and think in terms of company’s problems and growth, as well as his own.

Topics included in the criteria are recruitment; indoctrination; technical, administrative, personality and professional development of the individual; salaries; engineering titles; personnel practices; and termination policies.³⁸

The new “Engineering Employment Practices Newsletter” debuted in April 1956 as monthly periodical on employment and industrial relations affecting NSPE. News, such as unionism activities, collective bargaining among engineers, strikes, and National Labor Board rulings were all found in the new publication with significant input from Milton Lunch, NSPE Legislative Analyst. The articles were predominantly related to industry. The Newsletter wasn’t meant to be a mechanism to cover the news of Engineer-In-Industry, as that role was primarily relegated to *The American Engineer*. The Newsletter was a 4-page publication and initially it was distributed on a requested basis. Later, it was sent on a larger basis to members that fit a certain practice section.

The NSPE Annual Meeting May 23-26, 1956 in Atlantic City, NJ featured a day-long conference presented by Engineer-In-Industry Subcommittee. The session dealt with management-professional employee relations, and government group considered professional status of engineers in government at Federal, state and local levels. The session provided a transcript of the conference proceedings available upon request.³⁹

The NSPE Board of Directors authorized all Practice Committees to be subcommittees to the Employment Practices Committee at the September 29 - 30, 1956 meeting in Washington, D.C. The Engineer-in-Industry Committee operated the first year as a Subcommittee with the same officers and committee chairman. The NSPE Board also authorized at the same time the formation of Practice Functional Sections. The first section to be formed was Private Practice in October 1956. White Sulphur Springs, WV meeting in October 1956 was the location where the Committee reviewed many of the engineer employee problems and the need for professional concepts. The Westinghouse decertification case reviewed earlier was brought up again and a similar case was reviewed - Buffalo Section, Westinghouse Electric Engineers Association versus the Engineers and Scientists of America. It was also recommended that a special committee be formed for the development of a formal textbook and course work to be used for the professional indoctrination of the engineering undergraduate.⁴⁰



Paul Robbins, the longest serving Executive Director of NSPE and advocate for Industry during his tenure. (Photo from NSPE 75th Anniversary Slides).

³⁸ “Criteria for Professional Employment of Engineers”, *Engineering Employment Practices Newsletter*, July 1956, page 1.

³⁹ “Industry & Government Employment Problems for Engineers”, *Engineering Employment Practices Newsletter*, July 1956, page 2.

⁴⁰ *The First Thirty Years*, page 6.



Head table of panel guests for the First Annual Industry Conference in Philadelphia, PA, June 2, 1955. From left to right: N.W. Dougherty, Dean of Engineering, Univ of Tenn; E.L. Yates, GM executive; NSPE President C.T. Shoch; John D. Coleman, Chair, Professional Engineers Conference Board for Industry; D.S. Roberts, GE executive; Dr. G. Brooks Earnest, Chair, Committee on Employment Conditions, EJC; C.A. Frische, Sperry Gyroscope executive; and Robert A. Blackburn, Chair, Engineer-in-Industry Committee, NSPE. (Photo from American Engineer, July 1955).

The NSPE Annual Meeting in Dallas, TX, June 6-8, 1957, at the Statler-Hilton Hotel, featured a series of all-day conferences Friday, June 7th, on the professional development of engineers in industry under the central theme, "Professional Development of Young Engineers." The event featured four speakers from Industry and a panel discussion.⁴¹

At the Bismarck, ND meeting in October 1957, the NSPE Board of Directors made policy decisions affecting the Professional Engineers in Industry committee. One was a statement of NSPE policy concerning Engineering titles which was approved by the NSPE Board. The Subcommittee also recommended the Board adopt a position on the need for "Sounding Board Organizations."

⁴¹ "Professional Development Panels at Dallas Meeting", Engineering Employment Practices Newsletter, May 1957, page 1.

At the East Lansing, MI meeting in February 1958 the Subcommittee received compliments from the deans of engineering schools for the professional engineering brochures that were sent to engineering seniors for the second year. The policy of "Sounding Boards" was also discussed. It was agreed such "Sounding Boards" should be at the local levels of NSPE. Such a board would be most helpful for the engineers in industry.⁴²

The Engineer-in-Industry Subcommittee in June 1958 at the Annual Meeting in St. Louis recommended (1) that the Board approve the general outline of a 250-300 page engineering professional textbook and authorize the Subcommittee to proceed with the preparation and publication of such a textbook, subject to final review and approval of publication arrangements by the Executive Committee, and (2) to further stimulate cooperative professional relations between employed engineers and management, the Committee recommended that the Board approve the creation of an appropriately-named NSPE award given once each year, at the annual meeting, to the industrial organization deemed to have made the most significant contribution toward this end during the preceding year. The first recommendation was approved by the Board, and the second was approved in principle and referred back to the Committee for further study. It was also at this meeting that the Subcommittee received approval for the development of criteria for a new Industry Professional Development Award.⁴³



The first in a series of five (5) Executive Surveys published by the Professional Engineers Conference Board for Industry in the 1950's and 1960's.

October 15, 1958 saw NSPE entered the video age with the release of a 16mm file "Building for Professional Growth" at 20 minutes in duration. The file was assembled at NSPE headquarters and was rolled out at the Fall Meeting October 23-25 the same year. The file was to be used for public relations and distributed to Chapters and State Societies. Rental fee was set for \$10. There was narration of a script and scenes from the East Lansing and St. Louis meeting from the same year.⁴⁴

The NSPE Committee on Society Income arrived at the conclusion in 1958 that the Society needed to increase dues from \$10 to \$13. The dues had been \$10 for members since the Constitution was approved in late 1948. Chair John D. Coleman enumerated several items that would be earmarked for the increase. The Professional Engineers Conference Board for Industry (PECBI) was designated \$20,000 and an additional \$2000 was for Employment Practices Activities. The PECBI would use the money for resumption of the research on the engineering profession, what it does, how it does it, and the conditions under which engineers are most effective. The

⁴² The First Thirty Years, pages 6-7.

⁴³ The American Engineer, July 1958, page 481

⁴⁴ "Building for Professional Growth", The American Engineer, September 1958, page 26-27, 49.

Employment Practices increase would be help with release of the publication "Criteria for Professional Employment of Engineers" and to combat unionism.⁴⁵

On the recommendation of the Engineer-in-Industry Subcommittee, the NSPE Board of Directors approved a plan to select an industrial firm each year which has contributed more than



Mr. T. A. Boyd (L), General Motors research executive receives the NSPE Award for Charles Kettering, GM Vice President, who was unable to attend. NSPE President John Coleman ® makes the presentation. (Photo from American Engineer, July 1954).

any other toward the advancement and improvement of the engineering profession through its employment practices. This was approved at the fall meeting, October 1958. The selected firm is to receive the Industrial Professional Development Award at the annual meeting of the Society. The first presentation was awarded June 1960, in Boston.

Also, the Fall 1958 meeting saw discussion from the Engineer-in-Industry Subcommittee on the need for State and Chapter PEI committees. It was felt that local committees are needed to assist those engineers who wish to escape representation by a union and local engineers are the best method to contact engineering students.⁴⁶

A list of libraries of engineering schools that were to receive the "Engineering Employment Practices Newsletter" was given to NSPE by the Subcommittee. A report was made to the Engineer-in-Industry Subcommittee of the Industrial Union Conference AFL-CIO meeting on June 1959 in Washington, D.C. At this Union Conference, NSPE was roundly criticized for supplying professional material and other professional influences among engineering students and insisted this mailing should be stopped. The Subcommittee reviewed the complaints and after review agreed to continue the program of sending such material to the engineering school libraries and to senior engineering students. There was much discussion concerning the implementation of the Supreme Court decision on Professional Voting Rights (Taft-Hartley).⁴⁷

⁴⁵ Coleman, John, "Dues Increase Necessary to Finance Society Activities", The American Engineer, December 1958, pages 31-33.

⁴⁶ "Industrial Award", Engineering Employment Practice Newsletter, November 1958, page 2.

⁴⁷ The First Thirty Years, page 7.

At the annual meeting in New York City June 17-20, 1959 the Engineer-in-Industry Subcommittee announced that an outline of a professionalism course will be ready to be distributed to interested engineering schools before the start of the next school year. The outline is based on materials gathered for a comprehensive textbook which the Subcommittee planned to publish on the subject. The 1959 Annual Meeting was the 25th Anniversary of NSPE.⁴⁸

During the winter meeting in Wichita, KS, February 18-20, 1960 the NSPE BOD adopted several policy statements concerning collective bargaining by engineers and engineering technicians, and the professional provisions of labor legislation.

The highlights of the three policy statements follow:

- a) Past experience and experimentation have shown that the principles of unionism and professionalism conflict to an extent making unionization of professionals inconsistent with the best interests of either the profession or the general public.
- b) Professional provisions of labor legislation should be governed by the following considerations. The new policy statement also favored an amendment of the present labor law to prohibit “union” or “agency” shop requirements for professional employees.
 - i. No professional employee should be forced to join a labor union against his will;
 - ii. Professionals should retain the right to separate votes in collective bargaining determinations;
 - iii. Professionals should be able to vote separately in decertification proceedings; and
 - iv. The right to form non-bargaining associations with other professionals in the same employment should be guaranteed.
- c) Because the unionization of engineering technicians could hinder the professional activities of engineers, aid should be given to engineering technicians in opposing unionization attempts in cases threatening the performance of professional employees.⁴⁹

During the annual meeting in Boston, June 8-11, 1960, the Engineer-in-Industry Subcommittee presented the first Industrial Professional Development Award to Phillips Petroleum Company.⁵⁰

⁴⁸ “Past Presidents Honored at 25th Anniversary; Steinman Speaks”, *The American Engineer*, July 1959, pages 39-40, 42-44.

⁴⁹ “NSPE Board Approves Employment Practices Policies”, *Engineering Employment Practices Newsletter*, March 1960, page 1.

⁵⁰ *Engineering Employment Practices Newsletter*, May 1960, page 1.

The annual meeting also featured an industry conference of speakers and a panel on June 10th of the annual meeting with the theme “The Meaning of Professionalism in Industry”.⁵¹



At NSPE’s 25th anniversary dinner in 1959, Society founder David Steinman said, “For those of us who have known the struggles and hardships of engineering in the lean and difficult years, there is a deep satisfaction in knowing that we have done our part in making engineering a finer, nobler, and more satisfying profession for those who come after us.”. (Photo from NSPE 75th Anniversary Slide Show).

In October 1960 in Denver, Colorado a first study on a proposed Engineer-in-Industry Functional Section was presented to the subcommittee. The Chair and many of the members of the Subcommittee worried that the nine member Executive Board of NSPE would pay less attention to a Functional Section than they do to an NSPE Committee. There was also concern that the Functional section would not be as effective as the present subcommittee. After much discussion it was recommended by a narrow vote to change Bylaw No. 29 to allow for an Industry Functional Section. This action took most of the entire meeting.

In February 1961 at Des Moines, Iowa saw further action concerning rules and regulations for the proposed Industry Functional Section. In addition, the members were presented with a new publication concerning engineer-management relations. Much of the meeting was spent reviewing the various unionization and decertification meetings. Among those were unionization of engineers - Sperry Gyroscope (NY), Westinghouse Electric (X-ray and Industrial Electronics Division), Baltimore and Foster Wheeler Corp. (NY). It was also reported that the union group Engineering

⁵¹ Engineering Employment Practices Newsletter, May 1960, page 5.

and Scientists of America was no longer a viable institution. R.G. Hoft gave reports on Unionization Development and a progress report on the preparation of a new publication "Engineering and Management Relations - Unionization Developments."⁵²

In the spring 1961, the Engineer-in-Industry Committee published "Industrial Professional Development Policies", a collection of 155 different company policies affecting the employment of engineers. The publication was a 25-page booklet that quotes descriptions of company policies on recruiting, salaries, registration, educational assistance, and professional society membership, preparation of technical papers, patents, working conditions, engineer-management communications, and use of engineering titles.⁵³



Paul Endacott (L), president of the Phillips Petroleum Company, accepts the first annual Industrial Professional Develop Award (IPDA) offered by NSPE, from President Moshier (R). (Photo from American Engineer, July 1960).

Also, at the 1961 Annual Meeting in Seattle, the NSPE Board of Directors approved a plan to form a new functional section within the Society for engineers in industry. The new functional section was proposed by the Engineer-in-Industry Committee to permit a broader range of activities on behalf of employed engineers.⁵⁴

Industry Committeeman William L. Crowder, of the Western Electric Company, brought out the aims and possible areas of action of the planned functional section. Speaking before industry engineers attending the meeting; Crowder described the advantages of the functional section type of organization, and outlined a suggested program of action. Among his proposed activities were periodic meetings of state functional section chairmen, forums for representatives of all non-bargaining engineering organizations, and a plan to provide a workshop of mutual respect and harmony between practice engineers and managing engineers. Under Board authorization, the

⁵² The First Thirty Years, pages 7-8.

⁵³ "Two New NSPE Publications Announced", Engineering Employment Practices Newsletter, May 1961, page 4.

⁵⁴ "New NSPE Book Gives Complete Program for Engineer in Industry", Engineering Employment Practices Newsletter, July 1961, page 1.

Engineer-in-Industry Committee planned to meet within a month to begin drawing up organization plans and procedures for the new functional section.⁵⁵

In keeping with the past annual meetings, a day-long industry program was on agenda in Seattle. The morning session emphasized “Engineering Professionalism in the Aircraft Industry”, which included several speakers from that industry. The afternoon program was “Professional Organization for Engineers in Industry”.⁵⁶



Members of the Professional Engineers Conference Board for Industry listen to NSPE Executive Director Paul Robbins during the board’s annual meeting. (Photo from American Engineer, July 1960).

Lastly, another notable item from Seattle included the recommendation of a policy statement by Engineer-in-Industry Committee and Richard Hoft. The request was referred to as “Recommendation No 2”, whereas “Recommendation No 1” was the Engineers-in-Industry request of the NSPE Board to establish an Industry Functional Section. The Policy was adopted by NSPE Board and read as follows:

“The engineer is ethically obligated to protect the public; therefore, he may properly assume the duties of non-professional workers involved in labor disputes in those cases where the assumption of such duties is for the protection of the safety of the public or the security of the nation.”⁵⁷

Following up an earlier plan to form a functional section for engineers in industry, the NSPE Board of Directors approved rules of procedures and operations for the new organization drawn up by the Engineer-in-Industry Committee. The action was taken at the fall professional meeting of the NSPE Board in Roanoke, VA, October 21, 1961. Permission to go ahead with the plan had been given when the Board met in Seattle in July of the same year.

⁵⁵ “NSPE Plans Step-Up in Programs for Engineers in Industry”, Engineering Employment Practices Newsletter, April 1961, page 1.

⁵⁶ “Speakers Examine Aircraft Industry”, Engineering Employment Practices Newsletter, April 1961, page 1.

⁵⁷ The First Thirty Years, page 9.

The new group was officially defined as “Professional Engineers in Industry,” and it was referred to as a “functional section”. The broad objectives were “to promote cooperative relations between engineers and management in furtherance of high standards of professional service and employment”, and “to advance the professional development and economic interests of the industrially employed engineer.” Although only NSPE members may vote or hold office, engineers who belong to sounding board groups affiliated with NSPE state societies or chapters may also participate.

Officers of the new functional section will consist of a chair, immediate past chair, and four vice chairs. They will be elected annually at a general meeting to be held at the time of the annual meeting of NSPE. The NSPE Board voted to allow the present Engineer-in-Industry Committee members to serve as “ad hoc” executive board until elections can be held at the next annual meeting in French Lick, IN, in June 1962. The chairman will be a non-voting representative to the NSPE Board of Directors and will present a report to the Board at each meeting. The officers will serve as chairmen of section committees covering areas of ethics, employment practices and standards, professional employee responsibilities, publications, and state and chapter section coordination.

Summary of NSPE Presidents Originating from PEI and Members from Industry		
Year	Name	Employer
1952 - 1953	John D. Coleman, P.E.	General Motors (Frigidaire Div)
1954 - 1955	Clarence T. Shoch, P.E.	Pennsylvania Power and Light Co
1955 - 1956	Allison C. Neff, P.E.	Armco Drainage and Metal Products
1956 - 1957	Robert J. Rhinehart, P.E.	Arkansas Power & Light Co
1957 - 1958	Garvin H. Dyer, P.E.	Missouri Water Company
1959 - 1960	Harold A. Mosher, P.E.	Eastman Kodak Company
1960 - 1961	Noah E. Hull, P.E.	Hughes Gun Company
1966 - 1967	Thomas M. Linville, P.E.	General Electric
1973 - 1974	Robert L. Reitingger, P.E.	Rohm & Haas Co.
1975 - 1976	Harry E. Bovay, Jr., P.E., F.NSPE	Mid-South Telecommunications Co
1976 - 1977	Edward E. Slowter, P.E., F.NSPE	Battelle Memorial Institute
1978 - 1979	Robert L. Nichols, P.E., F.NSPE	Freese & Nichols
1981 - 1982	Otto A. Tennant, P.E., F.NSPE	Iowa Power
1990 - 1991	Neil A. Norman, P.E., F.NSPE, D.E.E.	Bechtel National, Inc.
1995 - 1996	Clyde R. Tipton Jr., P.E., F.NSPE	Battelle Memorial Institute
1996 - 1997	Jack D. Hinton, P.E., F.NSPE	Southwestern Bell
2003 - 2004	Teresa A. Helmlinger, Ph.D, P.E., F.NSPE	Carolina Power & Light
2009 - 2010	Samuel W. Grossman, P.E., F.NSPE	Chevron

Engineer-in-Industry Committee Chair Richard Hoft, of the General Electric Company, stressed to the NSPE Board that the new section “will permit individual engineers in industry to achieve a closer identification and participation in NSPE activities of particular concern to their special

interests than is possible at the present time with a committee structure.” In addition, the structure of the new group will allow a broader range of activities, including greater action at the local level.⁵⁸

At the Fall Meeting in Roanoke, October 19-21, 1961, NPSE premiered the showing of the new NSPE film “George Spelvin, P.E.”. This was a 25-minute color film on professionalism for young engineers represents the first phase of the Public Relations Committee’s long range program directed toward various segments of the “public”. The other five segments are NSPE members, engineering management, PE non-members, non-registered engineers, and the general public. The film was developed in order to reach engineering school juniors, seniors and graduate engineers.⁵⁹

Initial Officers from 1962-1963 Professional Engineers in Industry Functional Section		
Chair	Richard G Hoft (NY)	General Electric Co.
Alternate Chair	William Crowder (NC)	Western Electric Co.
Chair – Midwest Region	Lowell Bernhardt (MI)	Ford Motor Co.
Chair – Western Region	J.R. Thayer (CA)	General Dynamics
Chair – Southeast Region	William Crowder (NC)	Western Electric Co.
Chair – Northeast Region	H. Carl Bauman (NJ)	American Cyanamid

In line with the aims to encourage the activities of affiliated chapter and state functional sections and sounding boards, the NSPE Board approved at Roanoke an addition to NSPE policy recommended by the Engineer-in-Industry Committee. The new statement, embodying in principle a proposal from the New York State Society of Professional Engineers, adds the following language to NSPE Administrative Policy No. 35, cover the actions of affiliated groups:

Affiliated sections are encouraged to communicate with engineers and management in order to improve the professional service of individual engineers, to promote high standards of professional engineering employment policies and practices, to advance the economic interests of professional engineers, and to consider other matters of mutual interests. Such activities, when carried out in a professional atmosphere and on a professional plane, reflect the highest ideals of engineering profession and the National Society and at the same time provide a practical solution to a problem which exists on the modern industrial scene.⁶⁰

After using the January 1962 meeting in Jackson, MS as a planning session for the interim officer of the Executive Board, the first annual meeting of the Professional Engineers in Industry

⁵⁸ “NSPE Board Approves Rules for New Industry Section”, Engineering Employment Practices Newsletter, November 1961, page 1.

⁵⁹ “New NSPE Film To Be Premiered at the Fall Meeting”, The American Engineer, September 1961, page 48.

⁶⁰ “Role of Sounding Boards Broadened in New NSPE Policy”, Engineering Employment Practice Newsletter, November 1961, page 3.

Functional Section occurred at French Lick, IN, June 16, 1962. New officers were elected for the 1962-1963 administrative year. There was a roll call of the states and each state reported on the status of the engineers in industry. Twenty nine states and 53 members attended. The rest of the morning was reporting on the rules and regulations of the PEI Functional Section and various committees that will be a part of this group. After lunch, there was a forum with the following subjects covered⁶¹.

- *A Sounding Board View* - W.A. Sollecito, President, General Electric Engineers Council
- *The State Engineer in Industry View* - H. Carl Bauman, Vice Chair N.E. Region
- *The State Functional Section View* - W. G. George, Past Chair, Michigan PEI Section
- *Individual Contracts for Engineers in Industry* - Elmer J. Taugeman, Editor, Product Engineering Magazine

The winter meeting in San Antonio, TX, January 1963, eight committees were appointed and asked to report to the PEI Functional Section meeting at the annual meeting in June 1963. The eight (8) committees included: PEI Meetings, Employment Practices and Standards, Evaluation of Engineer Performance, Government Salary Control, Federal Industrial Security Program, Industry Patent Procedures, Coordination with State and local PEI committees, and Nominating committee.⁶²

In June 1963, at the NSPE Annual Meeting, bylaw No. 4 of the PEI rules and regulations were amended and presented to the NSPE Board of Directors and was approved. The new bylaw stated officers shall consist of a chair, immediate past chair and six vice chairs (one from each NSPE administration area), one of whom shall also serve as secretary. The Chair reported on the first year of the Functional Section which was complicated due to initial organizational problems and advised that the present committees will be continue through next year. The PEI Functional Section also announced that there will be an Aerospace conference at Long Beach, CA October 10-11, 1963.⁶³

During the 1960's, the Executive Board held a series of PEI Conferences. The last years of the Engineering Conferences were not well attended. The Executive Board elected to skip the 1968 meeting and defer until 1969. In 1969, the Executive Board decided to drop the annual conferences. As an alternate, PEI planned to make a conscious effort to have such conferences at the regional, state or chapter level.⁶⁴ The Conferences were usually two full days with an assortment of speakers from industry, which included management and technical. These Conferences usually provided an opportunity for the Executive Board to also conduct official

⁶¹ The First Thirty Years, pages 9-10.

⁶² The First Thirty Years, pages 10-11.

⁶³ The First Thirty 30 Years, page 11.

⁶⁴ The First 30 Years, page 13.

business. Proceedings were also published and made available to members and nonmembers after the conference.

A new NSPE publication entitled “Evaluating Engineering Performance” presents specific programs for both individual and group evaluation. The booklet is the result of an extensive study of the day-to-day problems encountered by modern industry and the professional engineers in arriving at an accurate and equitable appraisal of engineering performance. The study was conducted by a special committee of the Professional Engineer in Industry functional section under the chairmanship of W.L. Crowder, P.E., an industrial engineer, and presented as a paper at the section’s Aerospace Conference in Long Beach, CA. A “how to” publication containing sample forms and charts, the booklet states that “Fair evaluation and frank discussions provide a means for contained professional improvement and circumvent the universal pitfall – lack of engineer-management communications.”⁶⁵

Annual National Conference of Professional Engineers in Industry (PEI)				
Conference	Theme	Location	Date	Chair
1st Annual	Engineering Brainpower for the Aerospace Industry	Long Beach, CA	Oct. 10-11, 1963	J. R. Thayer
2nd Annual	Engineers and Management Look to the Future	Detroit, MI	Dec 4-5, 1964	L. Bernhardt
3rd Annual	Management and the Engineer in Industry	Oklahoma City, OK	Oct. 15-16, 1965	W. Crowder
4th Annual	Utilization of Engineers for Greater Productivity	St. Louis MO	Oct. 14-15, 1966	A. Kaspar
5th Annual	The Engineer’s Responsibility for Profit (or Loss)	Cherry Hill, NJ	Oct. 12-13, 1967	J. Crooks

A continuing education study was conducted in the early part of 1965 by PEI to determine what engineers have been doing to keep themselves up-to-date with today’s rapid technological advances, and in part, to relate this question to the problem posed by reconversion of defense-oriented industry to civilian-oriented industry. A successful test run of 200 engineers was implemented in St. Louis, MO, by PEI. Subsequently, the PEI Section mailed out 5000 questionnaires to NSPE members on the subject of Continuing Education of Professional Engineers.

The PEI Continuing Education Committee was responsible for the survey and had hoped that through the questionnaire, it may be in a position to offer some objective and constructive suggestions for improving present conditions in the area of continuing education. Questionnaire respondents have been asked to supply such information as: educational background; type of employment and position; type and length of continuing education programs participated in over the past five years; and reason for participating or not participating in special study courses which have been made available. The findings were to be published in a follow-up report.⁶⁶

⁶⁵ “Evaluation Engineering Performance”, Engineering Employment Practices Newsletter, October 1963, page 1.

⁶⁶ “Continuing Education of Engineers Studied by NSPE-PEI”, Engineering Employment Practices Newsletter, April 1965, page 2.

The 1964 winter meeting in Phoenix, AZ reported on the excellent Aerospace Conference of which 150 -175 persons attended and were pleased with the meeting. The NSPE Executive Committee advised that an employment practices conference for a particular industry such as the Aerospace was excellent and recommended further conferences of this kind. The PEI Executive Board started immediate plans for an Automation Employment Practices Conference in Detroit in October 1964. A new publication the *PEI Reporter* was inaugurated to improve communication between the Chapter, State and National PEI. It was announced there would be the first state PEI officer's workshop March 6-7, 1964. To improve attendance at meetings, the PEI Executive Board authorized reimbursement for half of the travel expenses for one officer from each state.

The NSPE annual meeting at Asheville, N.C., July 1964 found many topics discussed. For example, National Electrical Manufacturers Association (NEMA) opposed the elimination of the industrial exemption for engineers in industry. This was communicated to the NSPE Executive Committee. NEMA felt the industrial exemption is needed in all states. This topic was discussed by the PEI Executive Board and they advised the industrial exemption for engineers in industry is contrary to the welfare of the public and the engineering profession. A special report was sent the NSPE Board of Directors. At this meeting the first long range plan for the PEI Functional Section was presented by the chair. The tentative program was to have a membership in NSPE of 120,000 by 1970. In addition, the patent survey was to be reviewed by the staff for content and to be reported at the next meeting. Other standing committees gave short reports on their progress.⁶⁷



W.M Batchelor (Left) becomes the first PEI Chair of the new Board of Governors at the March 1967 Meeting. K.K. McDaniel represents the outgoing Chair (Center). (Photo from PEI Newsletter, April 1967).

The PEI Executive Board met April 29, 1965 in Youngstown, OH. The meeting was conducted by Keith McDaniel, Acting Chair, and PEI Vice Chair, Western Region. The one day meeting was very productive and the officers reviewed and acted on many issues. During the three hour meeting they took up the following business: (1) the request of NSPE for the Division's view of the proposed Federal policy on National Economic Conversion and Diversification Commission, (2) the final planning for the Third Annual National Conference of Professional Engineers in Industry in Oklahoma City, OK on Oct. 15-16, 1965, (3) advised the report of the Second Annual Conference of Professional Engineers in industry held in Detroit, MI Dec. 4-5, 1964 was ready by the NSPE annual meeting and (4) the Division's view concerning NSPE Policy No. 61 - concerning "SEAL-PROFESSIONAL ENGINEER - USE OF" was reviewed. On this last subject a letter was to be sent to

⁶⁷ The First Thirty Years, page 11.

NSPE Vice President L.M. Van Doren stating the view of PEI members is that engineering and industrial firms can place their designations on plans, drawings, specifications, etc., since a company name is not a seal.

The Board of Directors of the National Society of Professional Engineers approved a recommendation made by the PEI section to establish a committee to further study the development of continuing education programs for engineers. The PEI recommendation, made to the Board during the Winter Meeting in Miami Beach, FL, January 5-8, 1966, also contained a provision urging NSPE to “use its vast resources, facilities and capabilities to encourage greater participation by engineers in continuing education programs, whether sponsored and conducted by colleges, companies or engineering societies.



The Kodak Park Works Engineering Division of the Eastman Kodak Company was presented the Industrial Professional Development Award on July 8, 1967 at the Annual Meeting in Hartford, CT. Kodak employee Norman F. Beach (2nd from left), Vice President and General Manager of Kodak Park Works is holding the award. Also, Harold Mosher (Right), Director of Engineering of Kodak Park Works is on hand. (Photo from PEI Newsletter, August 1967).

The recently completed PEI Survey of the “Continuing Education of Professional Engineers” formed the basis for the recommendation to the Board. In that Survey, PEI found that of the 2528 engineers who returned usable questionnaires, only 34% participated in educational programs conducted by colleges or universities, 35% participated in company sponsored programs, and 14% participated in engineering society-sponsored programs. Keith K. McDaniel, P.E., Chairman of the PEI section pointed out to the Board that “greater availability and participation

in continuing education programs is a must if we are to stem the tide of technical obsolescence which has been occurring more and more rapidly within our profession.”⁶⁸

The Executive Board felt that those attending the meetings were primarily those in supervisory positions. There was a concerted effort to find a place for the “working engineer.” The PEI Executive Board also wished to reach the engineering executives. An Annual Industry Executive Workshop was first rolled out June 3-4, 1966 at in Chicago, IL. The attendance was to be limited to 20 and covered areas of concern such as “Proper Utilization of Engineers.” The workshops ended after the 1968 meetings on the National level, but were continued and encouraged to take place on the regional level. California (Western), Texas (Southwest), Florida (Southeast) and Massachusetts (Northeast) held a workshop in 1969. Six regional workshops were held in 1970 – one in each of

⁶⁸ “PEI Survey Forms Basis for NSPE Action”, Engineering Employment Practices Newsletter, February 1966, page 3.

the six NSPE regions. These continued at the regional level until the early 1980's. Attendance for the regional workshops was considered good to very good when they began.⁶⁹

From July 6-9, 1966, NSPE held its Annual Meeting in Minneapolis, MN. The PEI Executive Board presented two major proposals at the Meeting. The new Rules of Government and Operations that PEI Executive Board recommended and were approved by the NSPE BOD and summarized, herein:

- Provide for the creation of a Board of Governors to administer the affairs of the section.
- Establish two year terms for those elected to the PEI Executive Board with the exception of the chairman who would be elected annually.
- Specify that PEI Executive Board members will be nominated and elected by the PEI membership.

Industry Executive Workshops			
Workshop	Theme	Location	Date
1st Annual	Communications	Chicago, IL	April 28-29, 1965
2nd Annual	Proper Utilization of Engineers	Chicago, IL	Jun 3-4, 1966
3rd Annual	Motivation of Engineers	Chicago, IL	April 28-29, 1967
4th Annual	Do Engineers Need Effective Communication Channels - Why?	Chicago, IL	April 25-26, 1968

A secondary proposal that was approved in Minneapolis was PEI recommendations on the subject of portable pensions for engineers which were referred to a special committee for further study. The committee was established to have equal representation from all the functional sections.⁷⁰

PEI Section scheduled its first Board of Governors meeting March 10-11, 1967 in Chicago, IL. One representative from each state will be represented as the new governing body for NSPE PEI. A workshop entitled "Organizing for Effective Action" was also scheduled coincident with the Meeting.⁷¹

While the last of the Executive Research Surveys was presented in 1960, the PECBI continued to remain involved. However, after this last Survey, funds started to run down and their activity slowed up to the point where they decided to go into "stand by" mode in 1968. The PECBI never reformed.⁷²

⁶⁹ The First Thirty Years, page 12.

⁷⁰ "NSPE Annual Meeting has Full Attendance", Engineer Employment Practices Newsletter, August 1966, page 1.

⁷¹ "PEI Board of Governors To Meet", Engineer Employment Practices Newsletter, March 1967, page 3.

⁷² Robbins, Building for Professional Growth, page 269-271.

EARLY PRACTICE DIVISION YEARS

1967 - 1980

By far, PEI is most well-known for the activities that have occurred while it was defined as a Practice Division. Some 40 years of PEI's history occurred during this time period, or more than half of PEI's existence. PEI was a growing and robust entity that just adopted a Board of Governors structure and was still technically a Practice Section.

The first meeting of the Board of Governors of PEI was held March 11, 1967 at the O'Hare Inn in Chicago, IL. The meeting was called to order by Keith McDaniel, Chairman at 8:30 A.M. The 1966-



K.K. McDaniel presides over 50 delegates from 32 states during PEI's first Board of Governors meeting in Chicago March 1967. (Photo from PEI Newsletter, April 1967).

1967 Executive Board and nominees for the 1967-1968 Executive Board attended. There were 32 states (39 persons) present. The 1967 budget was reviewed (\$30,000) and discussed with the members. The Rules of Government and Operation were approved. The Rules would be reviewed again at the 1968 meeting of the Board of Governors. The meeting adjourned at 12:15 P.M.

At the meeting, the PEI Board of Governors was initially composed of one elected or designated representative from each NSPE-affiliated state society. After two years, representation of the Board was expected to be reapportioned on the basis of state section membership. The PEI Executive Board assumed the function of advisors to the Board of Governors. This new structure was approved

by the NSPE BOD July 1966 according to Article XII, Bylaw 8(b)(1), of the NSPE Constitution. Furthermore, Board of Governors and Executive Board members are to be elected for two years with the Chair being a one year term.⁷³

The second meeting of the Board of Governors was held July 5, 1967 in Hartford, CT. This was in conjunction with the annual meeting of NSPE. The Board of Governors approved the Rules of Government of PEI as outlined by Chair E. E. Slowter. The Board of Governors approved the plan and it was sent to the NSPE Board of Directors. This meeting lasted twice as long as the first governor's meeting. The meeting opened at 9:15 A.M. and adjourned at 4:30 P.M. A *Seven Wonders of Engineering Award* was selected to be presented to the state sections for promotion on a state level. The award was presented to national recipients as well and eventually become the Engineer

⁷³ "PEI Board of Governors Launched", Professional Engineer in Industry Newsletter, April 1967, pages 1-2.

Achievement Award. When the award began, it was predominately recipients from industry, however, over time, the influx of private practice and construction took over in the 80's.⁷⁴

First PEI Board of Governors Attendance			
State	Governor	State	Governor
Arizona	Richard A. Dow, P.E.	Missouri	Floyd P. Keller, P.E.
Arkansas	R.H. Boyd, P.E.	Nevada	C.L. Ryan, P.E.
California	E.D. Hudson, P.E.	New Jersey	Raymond Grew, P.E.
Colorado	H.K. Hinsey, P.E.	New York	Robert G. Holfelder, P.E.
DC	Uriah Allen, P.E.	North Dakota	Arnold Sakshaug, P.E.
Florida	Gordon Tucker, P.E.	Ohio	Arthur Heiberg, P.E.
Georgia	Julian R. Lee, P.E.	Oklahoma	Norman Oliver, P.E.
Idaho	Ruel H. Barrus, P.E.	Puerto Rico	R.F. Maycen, P.E.
Illinois	Glenn Schwendiman, P.E.	South Dakota	J.J. Meyers, P.E.
Indiana	Horst H. Schneider, P.E.	Tennessee	L.G. Ping, Jr., P.E.
Kansas	Bryce B. Miller, P.E.	Texas	David G. Chase, P.E.
Louisiana	M.A. Steele, P.E.	Utah	T. Byron Johnson, P.E.
Maine	Robert E. Chute, P.E.	Virginia	Robert J. Evans, P.E.
Maryland	Warren Williams, P.E.	Washington	George E. Hoke, P.E.
Minnesota	Curt Motchenbacher, P.E.	West Virginia	Arther J. Sharkey, P.E.
Michigan	John W. Dietrich, P.E.	Wyoming	Robert A. Schultz, P.E.

The third PEI Board of Governors met on January 10, 1968 in Washington, D.C. Thirty (30) NSPE-affiliated state societies were attendance. Some of the notable actions was recommending to the NSPE BOD to approve Society membership in the Joint Engineering Management Conference (JEMC), a federation type of organization formed for the purpose of sponsoring the annual conference on engineering management topics. Other organizations involved included IEEE, ASME, ISA, AIEE and ASCE.

Two other items that were also part of the agenda included a recommendation for all states to adopt a program to encourage industries to endorse specified engineering employment policies. A suggested format was to be developed for use by states. Additionally, following a special address by Dr. William Torpey, Office of Emergency Planning, Executive Office of the President, a special committee was appointed to investigate possible NSPE assistance in development of a national policy relation to engineering manpower utilization in connection with defense cutbacks.⁷⁵

⁷⁴ "PEI Board of Governors Meet", Professional Engineers in Industry Newsletter, August 1967, page 3.

⁷⁵ "PEI Board of Governors Holds Third Meeting in Washington", Professional Engineers in Industry Newsletter, January 1968, page 1.

Initial Committee Positions					
Standing Committees		Information Committees		Action Committees	
Position	Name	Position	Name	Position	Name
Annual Meeting	W. Vermeulen	Membership	Gene Widner	Standards Program	K.K. Daniel
Annual Conference	J.G. Crooks	Ethics	W. Krewatch	Publications	Gene Widner
Long Range Planning	W.M. Batchelor	Legislative	Norman Pliner	Problems Study	E.L. Misegades
Budget	L.D. Chipman	Registration	Horace Lehneis	Reg. Laws & Exams	Horace Lehneis
Nominating	K.K. Daniel	Public Relations	G.V. Williamson	Invention Rewards	R.W. Decker
Rules of Governance	E.E. Slowter			Industrial Award	H.B. Moyer

Based on action after the NSPE Winter Meeting in 1968, a National Committee on Patent Rights and Invention Rewards was appointed by NSPE to study the relationship between employer and employee with regard to ownership of inventions. The Committee, which was recommended by PEI upon suggestion from the California Society of Professional Engineers, was asked to report back to NSPE in July. One major question to be researched by the Committee is the practice of requiring engineers to pre-assign patent rights as a condition for employment.⁷⁶

Joint Engineering Management Conferences (JEMC)				
Conference	Theme	Host	Location	Date
17 th Annual	Engineering Manager: Survival in the Seventies	EIC	Montreal, QC	Oct 9-10, 1969
18 th Annual	The Engineering Manager and the Progress-Profit Dilemma	AIEE	Chicago, IL	Oct 29-30, 1970
19 th Annual	New Realities for Engineering Managers	IEEE	Los Angeles, CA	Oct 4-5, 1971
20 th Annual	Managing for Improved Engineering Effectiveness	ASME	Atlanta, GA	Oct 30-31, 1972
21 st Annual	The Impact of Competitive Technology on Engineering Management	ASQC	St. Petersburg, FL	Oct 25-26, 1973
22 nd Annual	International Patterns of Engineering Management – A Constructive Analysis	ASME	Mexico City	Oct 28-29, 1974
23 rd Annual	Effective Management of Engineering Resources	NSPE	Washington, D.C.	Oct 9-10, 1975
24 th Annual	Engineering Management in Radically Changing Times	EIC	Toronto, ON	Oct 25-26, 1976
25 th Annual	Engineering Management – The Key to Productivity	AIEE	Cincinnati, OH	Oct 31 – Nov 1, 1977

In early 1968, a PEI opinion survey was conducted by the Professional Engineers in Industry and released as a report entitled “1967-68 PEI Opinion Survey”. The survey was part of a continuing effort to observe trends and note problem areas in order that NSPE can properly service the needs of the engineer in industry. Forty eight hundred questionnaires were sent out and 2200 returned⁷⁷. Some of the notable responses:

⁷⁶ “NSPE to Study Patent Policies”, Professional Engineer in Industry Newsletter, January 1968, page 2.

⁷⁷ “Preliminary Results of PEI Opinion Survey”, Professional Engineers in Industry Newsletter, February 1968, page 1.

- 1) Do you feel that engineers, for the most part, are properly utilized? Yes - 1228, No - 912.
- 2) Do you think that, because of restricted assignments and specialization, engineers tend to become obsolete in all but a limited field? Yes - 1619, No - 501.
- 3) Do you think engineering unions threaten professionalism? Yes - 1670, No - 498.
- 4) Do you think collective bargaining and professionalism are compatible? Yes - 431, No - 1624.
- 5) Do you think NSPE should actively oppose engineering unions? Yes - 1718, No - 404.

NSPE BOD proposed to issue a Draft Policy to amend the National Draft policy changes made in February 1967. While the policy was under review, NSPE asked PEI to review along with all the practice sections. The change, if adopted by the Society's Board of Directors at its January 1969 meeting, would amount to a complete reversal from present policy, which recommends deferments for all undergraduate students and for graduate students in engineering and other critical-skills areas. Specifically, the proposed policy recommends against designation of any particular field of study as more critical to the nation's well-being than any others. Instead, a random selection of those to be inducted would be made upon graduation from high school so that potential college students could plan their education careers with greater certainty. Induction of those thus selected would occur during the student's nineteenth year, or prior to the beginning of his junior year of college, on the assumption that it is better to interrupt the education process after one or two years of college than it is after the bachelor's degree. Those student not inducted during their nineteenth year would be free to complete their immediate degree objective. NSPE became the first major professional society to recommend against student deferments, as a result of this policy.⁷⁸

In January 1968, a PEI Special Committee on Layoff Studies was formed. Included on the Committee was Dr. William Torpey, Office of Emergency Planning, and Executive Office of the President. The Committee was to study and define the problem of future defense cutback in relation to engineering manpower. Their first report was done at the March 1968 PEI Executive Board Meeting in New Orleans, LA.⁷⁹

At the November 1968 Executive Board meeting the Board heard a report from the committee on "Lay Off Studies" which indicated there would be massive layoffs of engineers, scientists and technicians in the near future. This "lay off" would affect not only those in the aerospace industry but other industries as well. PEI understood that the time was proper to set policies so the problem could be solved when it arrived. PEI recommended policies to NSPE that were adopted and carried out for professional engineers in all areas. Most of the activity in this area from start to finish was

⁷⁸ "NSPE Draft Policy Under Review", Professional Engineers in Industry Newsletter, November 1968, page 3.

⁷⁹ "Layoff Studies Committee Reports in March", Professional Engineers in Industry Newsletter, February 1968, page 2.

headed by Don Ledbetter, then Vice-Chairman, Western region, and later two year chairman of PEI. Further information is in the Appendix – Western Region.⁸⁰



Representatives of thirty state PEI sections consider a point during a Board of Governor's meeting in Washington, D.C. on Jan 10, 1968. (Photo from PEI Newsletter, January 1968).

The Executive Board and the Board of Governors of PEI decided in 1970 to hold their meetings before the NSPE Executive Committee and Board of Director's meetings and at the same location. The NSPE Executive Committee as a standard procedure asked each of the Practice Divisions to review and recommend action on the various policies and resolutions that came to them. The Executive Board and Board of Directors of PEI reviewed these requests and the Chair reported to the NSPE Board of Directors.⁸¹

The NSPE Board of Directors at Kansas City July 1969 approved modification of Professional Policy 85, to incorporate recommendations for Federal Government planning relative to manpower utilization in defense contracts. Plans for a National Conversion and Diversification Commission are being explored by the Congress and President. The statement, which was a recommendation's of PEI, included guidelines for the Commission. The approved policy:

The National Society of Professional Engineers favors legislation establishing a National Economic Conversion and Diversification Commission, composed of the heads of the appropriate Federal departments and agencies, to encourage and assist industries and communities to plan for and meet, on a voluntary basis, economic and employment problems resulting from cutbacks or shifts in defense activities and other major programs of the Federal Government.

Such legislation should insure that the engineering profession is adequately represented on any sub-groups or advisory committees established by the Commission.

⁸⁰ The First Thirty Years, page 22.

⁸¹ The First Thirty Years, page 11.

The Nation Society of Professional Engineers further believes that pending such legislation, current conditions warrant interim action to avoid a recurrence of the nation's past experience in the layoff of large numbers of engineers in defense oriented industry. Such corrective and preventive planning by the Federal Government should include:

- 1) A review of the limitations placed by the Federal Government on professional employers of engineers that are associated with the government contracts, and action to remedy deficiencies which could contribute to the loss of a segment of the nation's engineering manpower.
- 2) Development of plans for the productive utilization of engineers who may be affected by a reduction in defense needs.
- 3) Provisions for coordinating the resources of government agencies, employers, professional and technical societies, and educational institutions to meet the needs of engineers affected by reduced defense requirements.
- 4) A procedure to alert engineers to the need for flexibility in regaining employment⁸².

In early 1970, PEI Chair E.E. Slower formed a PEI Long Range Planning Committee (LRPC). The committee was charged with the following items for consideration. A formal report was to be prepared in time for the Portland Meeting: salary studies, improved status of the engineer, attack on environmental problems, and more effective way of utilizing PEI funds and members. The members invited to serve include: D.L. Ledbetter (CA), Chair; R.L. Bidwell (VA); F. Byron Johnson (UT); W.W. Stevens (OH); and W.M. Batchelor (NC). Based on the initial report, the Committee would address the following: industry workshops, industrial professional development award, guidelines for professional engineer-management relationships, and engineering employment.⁸³

Horace Lehneis, Chair of PEI's Layoff Study Committee and the Staff Director of PEI met with Robert J. Brown, Associate Manpower Administrator and Finlay Petrie, Chief Division Placement Recruitment Service of the U.S. Department of Labor in Washington, D.C. on April 6, 1970.

The meeting's objective was to brief Department of Labor officials on NSPE's Layoff Policy and to seek implementation of its content; to discuss current and long-range plans of the Labor Department; and to offer PEI's service in any form that might ease the economic impact of layoffs.

⁸² "Layoff Study Policy Statement", Professional Engineers in Industry Newsletter, Aug-Sep 1969, page 1.

⁸³ "New Committee for PEI", Professional Engineers in Industry Newsletter, April 1970, page 3.



PEI in session at a meeting in Las Vegas, NV on Jan 14, 1969. (Photo from PEI Newsletter, February 1969).

The Department of Labor representatives were briefed on NSPE's Policy, National Conversion and Diversification Commission, and furnished backup data to the supplement the policy. "We reiterated our strong support for establishing a National Commission and asked Labor to initiate effective action on this program that seriously concerns professional engineers. Mr. Brown assured us that an answer to our policy recommendations will be provided."⁸⁴

The implementation of a large Board of Governors for PEI began to create some growing pains after a few years. Many members serving in the capacity of the Board of Governor representative felt it difficult or expensive to travel twice a year to meetings. In 1971, PEI amended its Rules of Government and

Operation to reduce to one Board of Governor meeting a year. Additionally, Board of Governors would be asked to serve a 3-year term rather than 2-year. To accommodate the reduction in annual meeting, a focus will be shifted to have more regional activity. The modification was put forth to the NSPE Board of Directors at the annual meeting in January 1971 in Memphis, TN. To help with expenses, PEI agreed to pay half the cost of PEI delegate travel. At the time, it was expected that State organizations would pay the other half.⁸⁵

To step back for a moment, the PEI Executive Board as of the early 1970's began to meet coincident at the NSPE Annual Meetings. Meetings were typically set for two days in duration and had a formal component of the meeting with speakers and then a business component. From the July 6-7, 1971 meeting in Louisville, KY, the following were the formal presentations:

- "Community Involvement" – Address by John W. Koch, Past President of the Indiana Society of Professional Engineers, Director of Engineering, International Steel Company, Evansville, IN.
- "Engineering Unemployment" – Address by E.A. Gustafson, Manager, Lockheed-Georgia Company, Marietta, GA.

⁸⁴ "Layoff Action Discussed", Professional Engineers in Industry Newsletter, May 1970, page 2.

⁸⁵ "PEI Checklist 1970-1971", Professional Engineers in Industry Newsletter, September 1970, page 3.

- “Product Liability” – Address by William R. Mackey, Division Counsel, Aircraft Engineer Business Group, General Electric Company, Evendale, OH.

The business or governance portion of the PEI Executive Board meeting can be summarized by the enumeration of the Committee reports provided⁸⁶:

- Industrial Professional Development Award
- Standards (Guidelines) of Professional Engineer-Management Relationships
- Industry Workshops
- Utilization of Engineers
- Professional Union Activity
- Joint Engineering Management Conference
- Long Range Planning
- Professional Engineers Employment Referral Services (PEERS)
- National Registry for Engineers
- Metric System of Measurements

The Professional Engineers in Construction (PEC) practice section began to gain interest in early 1972. Recognizing the importance of the practice section, PEI promoted the idea in several ways that allowed PEC to be created by NSPE. At the January 1972 PEI Executive Board Meeting, PEI approved the concept of a PEC practice section and recommended that a committee be appointed to determine the interest in such a section and to develop the Rules of Government and Operation. At the same NSPE BOD meeting, the Florida Engineering Society submitted a resolution to authorize the establishment of PEC. The NSPE BOD approved the resolution with minor modification in line with PEI’s and the NSPE Executive Committee’s recommendations.⁸⁷

At the July 1972 PEI Board of Governors meeting, PEI amended its Rules of Government and Operation to permit authorized voting by any State with a recognized PEI section. This replaces the previous rule that required State to have an approved PEI section through NSPE PEI.⁸⁸

⁸⁶ “PEI Board of Governors Meeting – Louisville, KY”, Professional Engineers in Industry Newsletter, May 1971, page 1.

⁸⁷ “Highlights of the PEI Executive Board Meeting”, Professional Engineers in Industry Newsletter, February 1972, page 2-3.

⁸⁸ “PEI Board of Governors Meeting – Denver”, Professional Engineers in Industry Newsletter, August 1972, page 1.

At the January 1973 NSPE BOD Meeting, the NSPE BOD made the transition of practice section to practice division. Practice divisions were approved for common notation to represent PEI, PEE, PEG, PEPP, and PEC.⁸⁹ Later in the year, at the July 1973 NSPE BOD Meeting in Chicago, PEI amended its Rules of Government and Operation to weight voting of each state. Each PEI Board of Governor will now have one vote for every 500 NSPE members residing in their state identified on Society roles as industrial employees. Prior to this, each state had one vote regardless.⁹⁰



New PEI Sections in five states were recognized at the Jul 11, 1972 meeting in Denver: Arizona, Massachusetts, New Jersey, Colorado, and Missouri. Pictured above are the delegates from the five new PEI sections: (Left to Right) Arthur B. Heiberg, AZ; David S. Goldman, MA; David S. Campbell, NJ; B.M Machman, CO; R.C. Spears, PEI Staff Director; and Howard C. Browne, MO. (Photo from PEI Newsletter, September 1972).



Utah, Oklahoma, New Hampshire and Connecticut became the 34th, 35th, 36th and 37th states to join the national PEI organization. Formal recognition of these states was made at the PEI Board of Governors meeting in Salt Lake City, Utah on Jan 9, 1973: (Left to Right) David Moore, UT; Norman Oliver, OK; Dmytro Odryna, CT; and R.G. Despathy, NH. (Photo from PEI Newsletter, March 1973).

The NSPE Executive Committee in 1973 asked all Practice Divisions to revise their Rules and Regulations so they would be uniform and yet correct for their Division. This was done by PEI, and the Executive Board took this opportunity to add the position of Chairman-elect. This was adopted in 1974. With this change, the position of Chairman went from a two year term to one year. With the title change to practice division, the Chair of the Section became a Vice Presidents of NSPE and voting members of the NSPE Executive Committee and the NSPE Board of Directors. Those who wished to be members of PEI were now required to pay PEI dues. The dues card of NSPE listed the mandatory dues and the appropriate Practice Divisions dues. This changed the financial structure for many of PEI. The requirement of members to pay dues made a dramatic increase in revenue for the next decade for PEI. This allowed the 1973 budget to be \$80,900. From 1961, when PEI became a functional section, until 1973 the average budget was \$35,000. The low point was in 1970 when the budget was limited to \$30,100.

⁸⁹ Professional Engineers in Industry Newsletter, February 1973, page 1.

⁹⁰ Professional Engineers in Industry Newsletter, August 1973, page 1.



The first PEI Distinguished Service Award is presented to Robert L. Stedfeld (Left), former editor of *Machine Desig* and publisher of *Automation* magazine, by PEI Chair Ledbetter in 1973. (Photo from PEI Newsletter, August 1973).

Over the years additional changes were approved for the improvement of the Division. In 1973, the Secretary became an appointment made by the Chair. The first Secretary was L.D. Chipman from New York. In 1974 the PEI Board of Governors sent a plan to the NSPE Board of Directors adding the office of Chair-elect, which was approved. This was requested so three officers could work as a team. In this way any project or program that was started, had the approval of all three. Thus there was an assurance that those proposed programs or policies would have continuity. Likewise, the PEI Executive Board requested in 1982-83 the addition to the Executive Board the office of 2nd Past Chair. This allowed the Executive Board to assign those projects that had a

specific goal to an experienced person. This proposal was accepted by the Board of Governors and the NSPE Board of Directors. It is an excellent method of keeping outstanding persons active in PEI.⁹¹

Once practice divisions were created by NSPE, it became simpler to maintain membership statistics across practices since dues were collected and members were required to select a practice division. Early on, PEI was the larger of the five practice divisions. From official NSPE numbers in 1975, membership breakdown included 20,917 (Industry), 15,296 (Private Practice), 10,243 (Government), 2,062 (Construction), 1,800 (Education), 20,000 (Unclassified). The total count was 50,315.

Work began in the mid 1970's on a second edition of "Guidelines to Professional Employment for Engineers and Scientists". At the April 24-25, 1978 PEI EB in Columbus, OH, the PEI Board of Governors recommended endorsement of this new edition.⁹² At the same time, the Professional Engineer reported on a NSPE Survey that indicated that PEI members broadly support NSPE efforts to remove the industry exemption from state engineering registration laws, regardless of supervisory or management level.⁹³

PEI began the practice in the 1980's of its members wearing a "Blue Blazer" at NSPE and PEI meetings. Former Past Chair, Barry Rist, created the idea along with a PEI emblem identifying the

⁹¹ The First Thirty Years, page 14.

⁹² NSPE News, Professional Engineer, March 1978, page 44.

⁹³ NSPE News, Professional Engineer, April 1978, page 40.

Professional Engineers in Industry members. The Blazer was worn by the Executive Board and Governors well into the 1990's at meetings.⁹⁴



To celebrate its 50th anniversary in 1984, NSPE presented walkways on the grounds of the Washington Monument as a gift from the Society and the engineering community to the people of the U.S. (Photo from NSPE 75th Anniversary Slide Show).

IN. This was a two-hour presentation on July 15. The speakers featured included a few from the insurance industry. Many key topics were enumerated that were of interest to the PE and especially those in Industry⁹⁷:

- Does the insurance company offer “hold harmless” clauses for engineers and does this protection, if any, cover an ex-employee whose design is being produced by the original employer?

At the 1983-1984 Annual Meeting in Dayton, OH, the PEI Board of Governors approved an increase in PEI dues from \$5 to \$10. This placed them at the same level as two other Practice Divisions. This increase had two (2) benefits. One benefit was to balance the budget for the July 1, 1983 – June 30, 1984 Administrative Year at \$125,747. Secondly, it permitted a reserve of \$45,000. Part of the budget for the year included a \$10,000 contribution to the NSPE 50th Anniversary Event held in Washington, D.C. in 1984.⁹⁵

The 50 year Celebration for NSPE began July 8, 1984 and concluded on July 14 with cornerstone of the new NSPE headquarters building. PEI played a very important role in the celebration with a contribution to Mount Vernon. PEI helped financially in the procurement for Mount Vernon of a document that dated back to December 10, 1754 which divided the estate of George Washington's older half-brother Lawrence, and which permitted Washington to assume ownership of Mt. Vernon. The document became part of a Mt. Vernon collection.⁹⁶

PEI had decided to host a Liability Insurance Crisis Seminar in conjunction with its July 14-16, 1986 Board of Governors meeting in Indianapolis,

⁹⁴ “PEI Industry Forum, Fall 1983/Winter 1984, page 2.

⁹⁵ “PEI Board Approves 1983-84 Programs; Dues Increase Accepted”, PEI Industry Forum, Summer/Fall 1983, pages 1,4.

⁹⁶ “Summer Annual Meeting”, PEI Industry Forum, Spring/Summer 1984, page 3.

⁹⁷ “PEI Board of Governors to Host Liability Insurance Crisis Seminar”, PEI Industry Forum, June/July 1986, page 1.

- What is the insurance company's attitude towards a registered engineer's liability versus a non-registered engineer's?
- Is it recommended that engineers and managers carry personal liability insurance, if any is available?
- How can an engineer working for a corporation, determine if his company has protection for him?

PEI disbanded the Board of Governors around 1999 and resulted in a new Rules of Governance (Bylaws). The driving force behind this was the elimination of travel expenses for the large Board. Participation by the Board was also dwindling as State PEI organizations slowly dissolved or ceased to operate. It is estimated that the last Board of Governors met July 2000 in Norfolk, VA.

PRACTICE DIVISION PROJECTS

1980 - 2013

The 1980's saw enough revenue coming in and the development of adequate reserves. These funds were enough to promote new programs that were not only a benefit to those in NSPE- PEI, but also industry, NSPE membership, and the engineering community.

The downturn in the economy in the early eighties saw a reduction in membership. By the middle eighties many companies, as an economic measure, quit paying the professional dues for their engineers. In other companies those in accounting and non-engineering supervisors felt the NSPE dues might qualify to be paid but indicated the Practice Division dues should not be paid by the company. If the individual wanted to pay these dues that was up to the individual employee. The argument of these bookkeepers was they could not see how a Practice Division gave their company any benefit. These factors reduced income for all Practice Divisions. PEI was not immune. The financial picture deteriorated to the point that many worthwhile and successful programs had to be dropped. In 1989, the PEI Executive Board became convinced that the solution for the Practice Divisions financial problem was to have a unified dues structure. This proposal was presented by all Practice Divisions to the NSPE Executive Committee and the Board of Directors. This was approved and since it required a constitutional change the resolution was sent to the NSPE membership for a vote. The NSPE membership turned down the unified dues proposal in the late 1980's.

AMERICAN QUALITY AND PRODUCTIVITY INSTITUTE

When Marvin Specter was NSPE President in 1982-1983, he contacted Myron Tribus, P.E., Director of the MIT Center for Advanced Engineering Studies. He asked Dr. Tribus to head a committee to determine what the engineering profession should do to assist industry in the United States to become effective in the world market.

The committee determined that industries in the United States in order to be competitive in the world market needed to improve the quality and productivity of its products and services. Myron Tribus explained the needs at the NSPE-PEI Board of Governor's meetings the following year. In addition, he represented NSPE at Congressional hearings concerning the ways the nation could stay competitive in a global market.

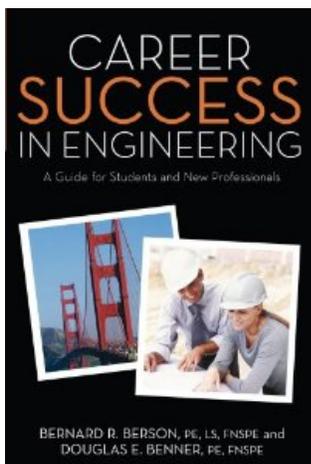
In 1984 Dr. Tribus presented a concept to the PEI Board of Governors where NSPE would form the *American Quality and Productivity Institute*. This *Institute* would inform management about the need for quality control concepts and increased productivity. These were the tools that Dr. Deming had introduced in the United States. Since U.S. industry after World War II was the only functioning industrial machine in the world, management could see little application for his concepts. However, Japan in its recovery mode accepted his successful concepts.

After careful review of this problem the PEI Board of Governors voted to recommend to the NSPE Board of Directors to have Don Weinert, Executive Director, negotiate with interested parties to plan such an Institute. The *Institute* became a separate affiliate in 1985. Since this institute was primarily for the industrial market, PEI authorized funding. The amount was \$5,000 in 1985 and \$10,000 in 1986.

The rest of the 1980's saw this program become very important to PEI and industry. In 1990 the program was still and helpful to the profession⁹⁸.

CAREER ASSET MANAGER

The Career Asset Manager (CAM) was developed and published by the Institute of Electrical and Electronics Engineers (IEEE). It was a planning guide that provided a framework for engineers to proactively manage their careers.



Career Success in Engineering: A Guide for Students and New Professionals by Douglas Benner and Bernie Berson. (Photo from amazon.com).

CAM provided the framework by detailing how to establish goals, practice professionalism, develop career strategies, use available resources, prepare for change, prepare a resume, and develop professionally.

PEI was licensed by IEEE to market the product. It was developed in the mid 90's and marketed to members of PEI and NSPE through the subsequent decade. Eventually, the manual became outdated since it was not electronic based nor assisted the engineer in the Internet environment. The cost of the manual was \$35 for members. Eventually, IEEE released a revised version which PEI did not market.⁹⁹

PEI announced that during the 1999-2000 administrative year that a series of workshops aimed at the mid-career engineer would take place. This would be an effort referred to as *Employee Mid-Career Transitioning*. The CAM would become a critical component of the workshops. The idea is to assist engineers in the midpoint of their career to be prepared to make the move to a new employer, new career or self-promoter in order to gain promotions.¹⁰⁰

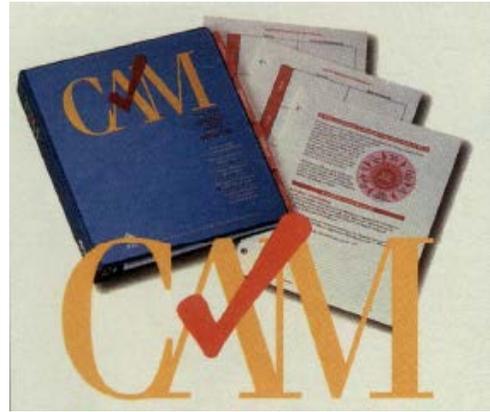
⁹⁸ The First Thirty Years, page 28.

⁹⁹ Industry Engineer, Aug/Sep 1996, page 1-2.

¹⁰⁰ Engineering Times, October 1999, page 18.

In 2001, PEI created a partnership with Lee Hecht Harrison (LHH), a nationally recognized leader in career management consulting. This relationship enabled PEI to offer a suite of career transitioning services to engineers in seminars located in different parts of the country. In 2001, the scheduled seminars were in Washington, DC; Boston, Chicago, Atlanta and Houston.

Conducted by LHH instructors, “Managing Your Career” seminars provide engineering professionals with a variety of tools to prepare for any type of career change and gain an edge in today’s competitive job market. The two-day program focuses on evaluation and preparation, resume development, job search strategies, interview training, campaign management, and networking skills. PEI’s partnership with LEE also provided access to personalized career counseling.¹⁰¹



The Career Asset Manager (CAM).

Clyde Nagata was a long time project manager for this effort and continued to promote it until he became Chair of PEI. Since the document continued to have a lot of useful information, it was digitized and made available to NSPE members free of charge from the PEI website¹⁰².

The concepts that were found in the CAM later appeared in a well-written book for engineers by a couple of NSPE members. Past PEI Chair Douglas Benner and Past NSPE President Bernie Berson authored Career Success in Engineering: A Guide for Students and New Professionals¹⁰³. The book was written for an audience of younger engineers and was a comprehensive guide that would be useful for any discipline of engineering. Further, the book provides wisdom on what young engineers need to know as they transition from an academic environment to the professional world.

College engineering programs focused primarily on the technical skills and requirements of a career in engineering, devoting little time to real-world matters of employment, on-the-job performance, project management, leadership, ethics, licensure, project delivery systems, and professional liability.¹⁰⁴

¹⁰¹ Engineering Times, August/September 2001, page 21.

¹⁰² Becnel, Bob Notes and past emails.

¹⁰³ Benner, Douglas and Bernie, Bernard, Career Success in Engineering: A Guide for Students and New Professionals, Jan 5, 2007, Kaplan Publishing, 336 pages.

¹⁰⁴ “New Book Provides Practical Wisdom for Engineering Grads”, PEI E-news, August 2007.

CONGRESSIONAL FELLOW

The Legislative and Government Affairs (LG&A) committee saw other technical and professional associations finance a Congressional Fellow for one year. This Congressional Fellow was a person with experience that could bring facts to the Congressional staff that was badly needed. This Fellowship was considered beneficial to the association that sponsored such a grant.

Summary of Congressional Fellows			
Year	Congressional Fellow	Company	Service
1981	Rogers F. Starr, Jr., P.E.	Sverdrup Technology	Representative Albert Gore, Jr. (TN)
1982	Howard C. 'Skip' Harclerode, P.E.	W. R. Grace & Company	Senator Pete V. Domenici (NM)
1983	David E. Bouchard, P.E.		Representative Don Fuqua (FL)
1984	Stephen B. Kuznetsov, Ph.D., P.E.	Westinghouse Electric Corp	Senator Pete V. Domenici (NM)
1985	None		
1986	J. Christopher Wilt, P.E.	LTV Aerospace & Defense Co	Representative Mac Sweeney (TX)
1987	Herbert P. Weisse, P.E.	Lockheed Martin	Representative Don Ritter (PA)
1988	Brenda Myers-Bohlke, P.E.	Parsons Brinckerhoff	Senator Patrick Moynihan (NY)
1989	None		
1990	None		
1991	None		
1992	None		
1993	None		
1994	Ricardo Sierra, P.E.	Enron	Representative Philip Sharp (IN)
1995	Alex Kelly, P.E.	Northern Telecom	Representative Fields (TX)
1996	None		

For several years LG&A asked NSPE for funding for a Congressional Fellow, but money was never available. NSPE-PEI Executive Board envisioned such a program would be a benefit to PEI, industry and the engineering profession.

A Committee was appointed in 1978 to review the feasibility and determine the exact amount of funds needed for the Congressional Fellow. The following year the committee developed a program that appeared workable. The program envisioned that a Fellow would be from industry. The individual would be one who was in mid-career. The person, in addition, would be one that was interested in such a program. The person's company would be one who could see benefit not only for the year, but for the future. The year as Congressional Fellow should help the person advance in the company and not hinder. The finances were to be approximately 50% from NSPE-PEI and the rest from the company. In later years the funding formula evolved to the point the Fellow's company paid his salary and benefits. PEI provided a stipend of up to \$10,000 to offset other costs for the Congressional Fellow. By the time, the 1983-1984 PEI budget passed, the cost of the program was estimated at \$30,000.

The qualifications laid out for the program included the following:

- Engineer employed in industry
- NSPE member of good standing for one year
- Willingness of employer to cover half of the salary during leave of absence
- Sufficient career experience to work on Capitol Hill

The first person to be accepted as a Congressional Fellow was Rogers F. Starr, P.E. for 1981. Mr. Starr visited the Board of Governors and advised the Board of how valuable this activity was to the Representative as well as to the Profession.

The Congressional Fellow Program was discontinued in 1997¹⁰⁵.

DERGULATIONS OF UTILITIES

This project was developed in the 1990's and had its primary interest in addressing the latest developments in the evolving deregulation of utilities, continues to present panel discussions as an information resource to NSPE members and state societies. Several of these programs were sponsored as *NPSE Professional Edge* continuing education sessions during various annual conventions including July 1999 in Spokane, WA.

Generally, these panel discussions allowed members – who are either employed by utilities or are customers – to learn firsthand about utilities deregulation initiatives in other regions of the U.S. and offer networking opportunities for those directly involved in the restricting process.¹⁰⁶

This project was discontinued during the 2001 – 2002 year.

EDUCATION ASSISTANCE, LTD. (EAL)

In 1983-1984, PEI began discussing ways to utilize an equipment clearinghouse for the purpose of matching surplus engineering equipment with schools of engineering. As a result, the PEI Executive Board felt the goal could be met with Assistance Ltd. Prior to this, PEI established an Equipment Clearinghouse Committee led by Richard Collier, P.E.

¹⁰⁵ The First Thirty Years, page 26.

¹⁰⁶ Engineering Times, December 1999, page 19.

At the 1985 Board of Governor's meeting R.V. "Swede" Roskam, President, Education Assistance, Ltd. presented to the Executive Board a concept that his organization had been using to furnish scholarships to private universities and colleges for underprivileged students. On September 1, 1985, the program became known as "Education Assistance Ltd" and moved its offices to Chicago.

The program used a tax advantage under IRS rules concerning corporation surplus assets. These assets could include inventory, equipment, furnishings etc. The company received credits from the colleges that are tax deductible. These amounts are used by the universities and colleges to award scholarships to deserving underprivileged students. For example, from 1982-1985, W.W. Grainger in Chicago generated over \$90,000 in scholarships by donating pumps and motors to run the physical plan of a college. Likewise, Monsanto of St. Louis donated over \$150,000 in materials.¹⁰⁷



V.R. "Swede" Roskam, EAL President (Left) and Mark Brumbach, PEI EAL Project Manager. (Photo from NSPE/PEI Industry Forum, Feb/Mar 1989).

The operation of the program works in the following fashion:

- 1) Assistance Ltd. contacts corporations for possible donations of equipment and/or goods.
- 2) The corporation agrees to donate goods to Assistance Ltd.
- 3) Assistance Ltd. locates colleges and universities willing to exchange scholarships for donations.
- 4) Assistance Ltd. gives a receipt for a tax-deductible contribution to the corporation.
- 5) Participating colleges and universities receive equipment and/or goods and issues scholarship tuition credits to Assistance Ltd.
- 6) A student applies to Assistance Ltd. for financial aid. After a brief screening, the student is encouraged to apply to a participating college.
- 7) Upon meeting admission requirements of participating college or university, the student is accepted for admission.
- 8) After coordinating awards with school financial aid department, needy students are identified and selected.

¹⁰⁷ "PEI Seeks Tie with Assistance Ltd.," PEI Industry Forum, Winter/Spring 1985, page 1.

- 9) The student receives a scholarship in the name of corporation donating the equipment and goods.
- 10) Another program participant at the time, Allied Van Lines, agreed to cover transportation costs in exchange for scholarship tuition credits which Assistance Ltd. also administered. Thus even more tuition credits are available to assist needy students.
- 11) The graduating student goes into the work force.

Shortly after Swede Roskam's presentation, PEI became a partner with Education Assistance, Ltd. PEI's contribution is to make contacts to industry at the National and State level. The informal arrangement provides a program for PEI to contact industry and assist as the clearinghouse for EAL. Mark Brumbach, P.E. became the national project manager for the equipment clearinghouse project in the summer of 1985. Mark led this effort and provided countless hours from 1985 through 1990 to make this program a huge success. This program is one that PEI has been proud to have initiated and carried forward under the NSPE banner. It has been so successful that it NSPE and Educational Assistance received the 1988 "C-Flag" which represented the President's Citation Program for Private Sector Initiatives. The flag was received by NSPE for supporting over 150 colleges and 500 students in their quest to obtain further education. Mark Brumbach was recognized for meritorious service of supporting the EAL project.¹⁰⁸ The C-Flag was also won in 1989 by NSPE.

By early 1989, EAL reached \$3.2 million in money raised since its inception, over 500 students and 150 colleges involved. PEI, which already exceeded its 1990 goals, raised \$1.05 million, over 167 students and 71 colleges involved.¹⁰⁹

The program is a benefit to all -PEI, Education Assistance, Ltd., the companies, the profession, but most importantly the disadvantaged students. These students could not attend school without these scholarships.

Mark Brumbach, P.E. was invited to deliver a presentation on the program's corporate success in volunteer service at the Ninth Annual National Symposium on Partnerships in Education in November 1992 in Washington, D.C. Nationally recognized teachers and educators from the United States, United Kingdom and other areas of Europe joined him. At this stage, EAL was in its ninth year as a not-for-profit organization. Since its founding in 1983, EAL had generated over \$10 million worth of tuition credits nationwide. More than 1,350 students have used EAL scholarships to attend college.¹¹⁰

A new proposal by EAL was brought forth to the PEI Board of Governors at the January 25-27, 1993 meeting for a pilot college opportunity program (COP). The program sought to guide

¹⁰⁸ "NSPE Wins Presidential C-Flag Through EAL Program Initiatives", PEI Industry Forum, June/July 1988, page 1.

¹⁰⁹ "PEI Exceeds Tuition Credit Goal for EAL", PEI Industry Forum, April/May 1989, page 2.

¹¹⁰ Industry Engineer, December 1992/January 1993, page 1.

financially disadvantaged students toward careers in mathematics and science. The program was again discussed at the July 19-21, 1993 Board of Governors meeting. The idea is that a coalition of companies within NSPE would develop a long term plan to provide college scholarships to students in the Midwest. Companies would provide EAL excess inventory and EAL in turn placed inventory with Midwest colleges in exchange for scholarships.¹¹¹



Proudly displaying the Presidential "C-Flag" Award presented to NSPE, May 31, 1988 in Chicago, IL (Left to right): Congressman Henry Hyde (6th Dist - IL); Irwin Smiley, ISPE President; Mark Brumbach, NSPE coordinator for EAL, Ltd; and Charles Karelis, U.S. Department of Education, Improvement of Post-Secondary Education, director of funding.. (Photo from PEI Industry Forum, June/July 1988).

This project was discontinued during the 2001 - 2002 year.

ENGINEERING EMPLOYMENT SERVICES

During the early 1970's, a significant number of defense cuts affected industry engineers in aerospace and related employers. PEI and the NSPE leadership were aggressive in seeking to mitigate unemployment among members and nonmember engineers in industry. Several programs

¹¹¹ PEI Industry Engineer, April/May 1993, page 1.

were rolled out, many of which were novel for a professional organization. Moreover, in December 1971 the NSPE Executive Committee agreed to defer dues of unemployed engineers based on the respective member's State Society providing circumstances to the NSPE HQ.

PEI Inaugurated its employment referral service in October 1970:

Professional Engineers Employment Referral Service (PEERS), a development of the Professional Engineers in Industry was inaugurated in October 1970 as a "pilot" program. Unemployed members may complete a short resume form that is to be published in the October and November 1971 issues of the *Professional Engineer* magazine and send it to NSPE. Each form will be assigned a code number to be used instead of a name and address on a list compiled periodically and sent to the mailing list of approximately 900 employers of engineers. Prospective employers will be asked to correspond with NSPE for further information about any applicant in whom they are interested. At that time, the member's name and address will be sent to the employer and the member will be notified of the employer's interest. Any further communications will be between the member and the prospective employer.

To be eligible for the PEERS program, an engineer must be a member of NSPE and unemployed or have been notified of a date when his employment will terminate. Unfortunately, limited resources at NSPE prohibit extend the service to members who wish to change employers. There is no fee for the service.

This is a "pilot" program and if the initiate experiment is effective in helping our members, the service will be continued and improved; if it is not effective, it will be dropped¹¹².

Meanwhile, U.S. Secretary of Labor, J.D. Hodgson announced on October 9, 1970 the establishment of a national registry for unemployed engineers, to become operative November 1, 1970. The registry, a central file of engineering job opportunities and job applicants, was being set up by the Labor Department with the cooperation of the National Society of Professional Engineers and the California Department of Human Resources.

Engineer employment applicants secured forms from either the local office of their State Employment Service or through the facilities of the National Society of Professional Engineers. Engineer employers may use the same channels. No fees were charged for these services.¹¹³

At the PEI Winter Meeting in 1971, the PEI Executive Board recommended the continuation of the PEERS program, the National Registry for Engineers and more involvement in this area. Horace Lehneis, Committee Chair, emphasized the need for NSPE to do everything possible to assist the estimated total of 65,000 unemployed engineers in the nation, which included some 300 NSPE members.¹¹⁴ After one year in existence, the PEERS program was able to provide 72% success of at

¹¹² Professional Engineers in Industry Newsletter, October 1970, page 1.

¹¹³ "Labor Department Sets up National Registry for Unemployed Engineers", Professional Engineers in Industry, November 1970, page 1.

¹¹⁴ "PEI Executive Board Meeting", Professional Engineers in Industry, February 1971, page 1.

least one referral for unemployed engineers within the program. Industry made up approximately 75% of the unemployed engineers.¹¹⁵

In May 1971, the Labor Department announced a \$42 million program to put jobless aerospace and defense scientists, engineers and technicians back to work. The Technology Mobilization and Reemployment Program (TMRP) announced in April at the San Clemente White House will provide job-finding assistance, retraining, mobility provision and skill transferability studies.

The \$42 million fund allocation was to finance four activities¹¹⁶:

- 1) \$25 million for job retraining
- 2) \$10 million for relocation grants
- 3) \$5 million for job search grants
- 4) \$2 million for skill conversion studies involving professionals from the affected industries.

“In 1969, NSPE met with the Founder Societies and AIAA to determine the proper procedure to handle the conditions brought about by the layoff of engineers. The presidents of the societies appealed to President Nixon to allocate funds to be used specifically for engineers, scientists and technicians. On April 1, 1971 money was funded. NSPE acted as the contracting agent for the seven societies which were granted \$750,755 to develop a Skills Conversion Study. This was completed in April 1972 with the help of PEI members. The study showed a small amount of money could convert many of the above group to other areas of employment. Consequently the Department of Labor contracted in April 1972 \$498,000 to ensure employment of the group. The contract was completed in June 1973. Of the 329 persons enrolled in the engineering and technology program, 302 had obtained employment, most of them in occupations for which they had been trained.¹¹⁷

The success of the program was attested in the U.S. Comptroller General’s Report to Congress on December 5, 1973, which noted that skills conversion studies and resulting programs were worthwhile, successful, and offered valuable lessons to government agencies and the private sector



Final Report of the Skills Conversion Project for the Department of Labor. (Photo from First 30 Years).

¹¹⁵ “One Year Status Report of PEERS”, Professional Engineers in Industry Newsletter, November 1971, page 1.

¹¹⁶ “Labor Department Launches \$42 Million Job Effort for Engineers, Scientists”, Professional Engineers in Industry, May 1971, page 3.

¹¹⁷ Robbins, Paul, Building for Professional Growth, pages 211-212.

pursuing skills conversion initiatives. The NSPE team was disbanded in the 1970's as the economy improved.¹¹⁸

A nationwide program to prepare unemployed aerospace/defense engineers for new careers in selected industrial and public areas was announced on June 16, 1972 by the National Society of Professional Engineers. The seven-month program, funded by the U.S. Department of Labor, was follow-on to the *Skills Conversion Research Project* that was previously completed by NSPE.

The new program involved placement for job-terminated aerospace/defense engineers in non-aerospace/defense positions through specialized on-the-job and academic training. Participation required prior commitments from employers for specific jobs at the end of the training period.

The *Technology Utilization Project* established several pilot programs throughout the country and involves various government agencies, university, and employers. Where required, training programs augmented the education background of the engineers so they could be rapidly and effectively converted from one occupation to another.

Twelve specialized reemployment programs had been undertaken in the pilot phase of the new project. They were¹¹⁹:

- Heavy Construction Engineer
- Residential Construction Engineer
- Consulting Engineer
- Environmental Systems Engineer
- Food Technology and Food Engineer
- Forestry Engineer
- Medical Engineer
- Power Utility Engineer
- Industrial Safety Engineer
- Transportation Planning Engineer
- Criminal Justice and Systems Analysis Engineer
- Traffic Engineer

¹¹⁸ Industry Engineer, April/May 1993, page 1.

¹¹⁹ "Technology Utilization Project" Professional Engineers in Industry Newsletter, August 1972, page 4.

In March 1974, the NSPE BOD decided to expand the PEERS program to employed NSPE members. For over a year, PEI discussed this action and approved it prior to the NSPE BOD taking the position up for consideration. The concern was the negative impact this would have on competition for employment with unemployed members.¹²⁰

The first five years the project was a real service to the unemployed engineers and it was very successful. The program paid for itself. After a downturn in 1976-1977, an ad was placed in PE magazine which yielded an increase in activity in 1978.

In January 1984, NSPE made available to members a new employment referral service called Professional Engineering Employment Registry (PEER). The service maintained confidentiality and was administered through JobNet, Inc. out of Bedford, MA. JobNet specialized in the placement of technical professionals. In addition to NSPE, JobNet was sponsored by a total of 15 engineering societies including IEEE.¹²¹

In the 1990's, NSPE reactivated the NSPE Skills Conversion Task Group to cope with a downturn in the labor market for engineers at the start of the decade. The NSPE President assigned a number of objectives to the task group that identified future growth areas for engineer employment and determining the unemployed engineer population. Based on previous work by NSPE in the 1970's and the skills conversion concept, the Los Angeles County Private Industry Council developed a program starting in September 1992 funded by the California Employment Training Panel. Subsequently, NSPE was invited to be part of the steering group and asked to provide the needed certification of continuing education units for graduate of the approved program.¹²²

ENGINEERING MANAGEMENT

The middle 1980's saw many engineering positions of supervisory type being filled by business graduates. The premise of personnel managers is that in these positions it was more important for a person to know how to manage any area in the company or bureau than to know engineering. Engineering information could be obtained from any engineer at a much lower cost. The fact that many heads of large successful technical companies were engineers had no influence with the personnel manager in their decision.

A new award titled "Engineer in Management" was proposed by Jordan J. Correia, of Connecticut. It was intended to reward engineers who have advanced in management, with

¹²⁰ "PEERService Expands", Professional Engineers in Industry Newsletter, March 1974, page 2.

¹²¹ "NSPE Implements New Employment Referral Service", PEI Industry Forum, Winter/Spring 1984, page 8.

¹²² Industry Engineer, April/May 1993, pages 1,3.

recognized standing in their profession and who have provided opportunity and guidance for other engineers to advance. After review, the awards committee has recommended that this award program be presented to the NSPE Board of Directors in San Francisco as a chapter and state award program. It could be considered as a national award when state participation warrants that need.

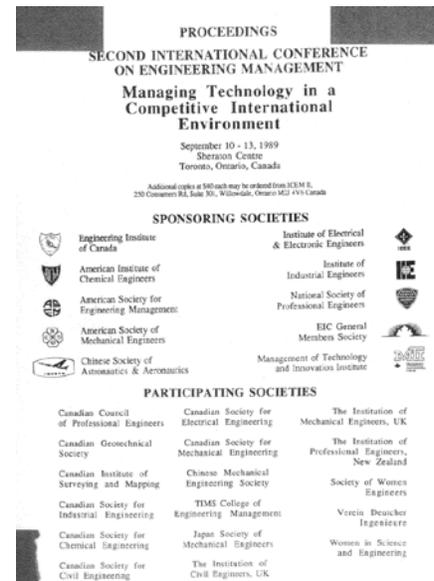
Chapters and states would be encouraged to make this an annual award each year at that level.¹²³ The proposed “Engineer in Management” award never received support from the NSPE Board of Directors. PEI Awards Chair Calvin Ochs, PE surmised that the Board felt the award category was already served by the Distinguished Service Award.¹²⁴

On September 22-24, 1986, NSPE-PEI sponsored the 1st International Conference on Engineering Management held in Crystal City, VA. Frank Woodbury, P.E. headed the activity and promoted attendance. The conference theme was “Engineering Management – The Issues, The Challenge and The Promise”. There was a technical program as well that included panel sessions and workshops.¹²⁵

The 2nd International Conference on Engineering Management was held September 10 – 13, 1989 in Toronto, Ontario, CA. The theme of the Conference was “Managing Technology in a Competitive International Environment”.

In 1987, one of the Midwest states sent to the NSPE Board of Directors a resolution that NSPE should set up a certifying program for *Engineering Management*. This program would be one where engineers could take a series of courses in engineering management. When they had completed the minimum requirement of hours an examination would be conducted by a third party such as NICET. The certificate would acknowledge the engineer had met the minimum amount of course work and had taken an examination to properly be a *Certified Professional Engineering Manager*. This resolution was not accepted by the NSPE Board of Directors.

Many areas of the United States and the locations of many companies were such that management courses could be taught at local schools and community colleges. Often, time constraints would not allow an engineer to be able to take a university management curriculum leading to a business management degree. Once they were *Certified Professional Engineering Managers* they could point out to personnel that they retained the same management exposure as a business graduate.



2nd International Conference on Engineering Management where NSPE was a sponsoring society.

¹²³ “A Review of Industry Recognition Programs”, PEI Industry Forum, Summer/Fall 1983, page 7.

¹²⁴ PEI Industry Forum, Winter/Spring 1984, page 2.

¹²⁵ PEI Industry Forum, January/February 1986, page 1.

It was apparent that the rejection by the NSPE Board of Directors was primarily because it would be trespassing in the area reserved for educational institutions. Many members of the NSPE Board of Directors also felt strongly that third parties other than educational institutions must not be in the business of awarding certificates or degrees. Some reasoned it was not right for a Technician group to be certifying Engineers.

The 1987-1988 NSPE President-elect Charles H. Samson, PE proposed a committee to study the feasibility of a Management Institute. The following year the *Engineering Management Institute* was authorized. This was to be an affiliate but still a part of NSPE. The Institute was in desperate need for seed money. NSPE-PEI authorized \$4,000 for this purpose. This was welcomed and the Institute is now a functioning body and of value to the engineering profession. PEI has assisted a committee to work with this Institute and help in the many Management Seminars held by the Institute.

While *National Institute for Engineering Management and Systems* (NIEMS) was providing many excellent seminars, workshops, and papers, they had not addressed the issue of the practicing engineer requiring a "piece of paper" that will satisfy the personnel department indicating that he/she was capable of engineering management. PEI appointed a new committee to look into this problem which was led by M.C. Lunsford, PE.

GUIDELINES TO PROFESSIONAL EMPLOYMENT

In the late 1960's a PEI committee developed *Guidelines for Professional Development*. Some of the Board wanted the brochure not to be guidelines but "standards." This committee report in 1970 was given to the Professional Employment Committee of NSPE. At the time they were negotiating with twenty-four engineering and scientific societies for a comprehensive guideline for companies to endorse for their technical employees.

Societies Endorsing "Guidelines", First Edition	
American Association of Cost Engineers	Engineers Joint Council
American Institute of Chemical Engineers (AIChE)	Institute of Electrical and Electronics Engineers (IEEE)
American Institute of Industrial Engineers	Instrument Society of America (ISA)
American Nuclear Society	Institute of Traffic Engineers
American Society for Quality Control (ASQC)	National Institute of Ceramic Engineers
American Society of Civil Engineers (ASCE)	National Society of Professional Engineers (NSPE)
American Society of Mechanical Engineers (ASME)	Society of Fire Protection Engineers
Engineers' Council for Professional Development	Society of Women Engineers (SWE)

These first guidelines were adopted and approved by NSPE in May 1973 and titled "Guidelines to Professional Employment for Engineers and Scientists". NSPE sponsored an intersociety meeting to present the paper and the 16 sponsoring organizations in Chicago, May 7-9, 1973. PEI had the

responsibility of going to the various industrial firms to explain the Guidelines and encourage the companies to endorse them. In the first three years many companies did this. This brochure, with the Guidelines and endorsing companies, was sent to all engineers and scientists so they could approach their own companies.¹²⁶

A second revision of the guidelines was endorsed August 1, 1978. This revision was sent to all members of PEI for review. They were also encouraged to go to their employer and recommend endorsement of the guidelines. This was not effective since many in management and personnel departments suspected it was a ruse for collective bargaining. So PEI asked the State officers and State PEI officers to contact management of the companies and ask for endorsement. Many State Societies set up their own listing of endorsement companies to supplement those at the National level. Some companies approved the Guidelines and requested to be on both the State and National endorsement list.

Societies Endorsing "Guidelines", Second Edition	
American Society for Engineering Education	Institute of Industrial Engineers
American Association of Cost Engineers	Institute of Transportation Engineers
American Institute of Aeronautics and Astronautics	National Association of Corrosion Engineers
American Institute of Chemical Engineers (AIChE)	National Institute of Ceramic Engineers
American Society of Agricultural Engineers	National Society of Professional Engineers (NSPE)
American Society of Civil Engineers (ASCE)	Society for the Advancement of Materials and Process Engineering
American Society of Mechanical Engineers (ASME)	Society for Experimental Stress Analysis
Association for Systems Management	Society for Technical Communications
Association of Professional Geological Scientists	Society of Fire Protection Engineers
Data Processing Management Association	Society of Manufacturing Engineers
Engineering Societies of New England, Inc.	Society of Packaging and Handling Engineers
Engineers' Council for Professional Development	Society of Plastics Engineers
Institute of Electrical and Electronics Engineers	

Until the 1980s, PEI had a committee to encourage this program. The program was very successful in pointing out to management of companies there was another solution for their technical staff other than collective bargaining.

The third edition was produced and issued on October 31, 1989. It was supported and endorsed by 33 organizations¹²⁷.

¹²⁶ "Sixteen Societies Endorse Employment Guidelines", Professional Engineers in Industry Newsletter, August 1973, page 3.

¹²⁷ PEI Handbook, July 1992, page 181.

Societies Endorsing "Guidelines", Third Edition	
American Association of Cost Engineers	Instrument Society of America
American Association of Engineering Societies	The Minerals, Metals and Materials Society
American Council of Independent Laboratories	Mycological Society of America
American Institute of Chemical Engineers	National Council of Teachers of Mathematics
American Institute of Chemists	National Institute of Ceramic Engineers
American Institute of Plant Engineers	National Society of Professional Engineers
American Microscopical Society	Policy Studies Organization
American Nuclear Society	Sigma Xi, The Scientific Research Society
American Society of Agricultural Engineers	Society for the Advancement of Material and Profess Engineering
American Society of Civil Engineers	Society for Economic Botany
American Society of Mechanical Engineers	Society of Fire Protection Engineers
American Society of Naval Engineers	Society of Packaging Professionals
Board of Certified Safety Professionals	Society of Women Engineers
Institute of Electrical and Electronics Engineers	System Safety Society
Institute of Industrial Engineers	U.S. Metric Association
Institute of Transportation Engineers	

A fourth edition was published in June 10, 2006 for the sake of updating the context of the purpose of the document with that of the advancement of industry. Glenn K. Landguth, P.E. was the author who led the 2006 effort. Unlike the other editions, this was exclusively approved by the PEI Executive Board.

INDUSTRY ADVISORY GROUP

During the period when the PEI Practice Division was a Committee the only interchange with industry management was when one of the officers of NSPE happened to be an executive from industry. NSPE's founders felt that all graduate engineers should be registered regardless of the area they worked in. Many of the original enabling acts for registration had phrases that exempted industry and the Federal government employees. Industry and associations such as the National Electrical Manufacturers Association (NEMA) claimed they did not want mandatory laws for registration of the engineers in their company. They felt the state was interfering in their business. In like manner the Federal Government argued that they did not have to be concerned with State laws when action was on Federal resources.

PEI had committees that supplemented NSPE committees that were charged to review and recommend changes in the various States engineering laws among which were to remove the industrial exemption clauses. There was much activity in the 1960s and early 1970s to have this industrial exemption removed. Whenever a State Professional Engineering Society had a legislator

submit a bill in the legislature to have the industrial exemption removed, the lobbyists from industry were so powerful that such a bill was buried or defeated.

In 1975 a PEI committee on Industrial Exemption developed a position paper entitled "Position Paper on the Industrial Exemption in Registration Laws for Professional Engineers"¹²⁸. The paper recommended 42 changes in the NSPE By-laws on registration including removing the industrial exemption clause. The Executive Committee commended the committee on an excellent paper. Both PEI and NSPE became encouraged that the state of Montana had changed the engineering law to require registration to cover products or equipment involved in public health and safety.

The same year Marvin Kolhoff, a staff person in the engineering headquarters of General Electric, attended the meeting as NSPE member from Connecticut. He contacted officers and other members of PEI to present concerns of industry about the position of NSPE policy concerning industrial exemption. The Executive Board appointed Louis Schindler to review the various State laws on industrial exemption and presented his report in 1976. At this time Lloyd Piper, Vice Chairman, was the PEI representative on the NSPE Registration Committee. He reported the PEI position paper (white paper) should be presented to the NSPE Board of Directors and recommends reconfirming the present position. However, because of the recent controversy NSPE recommended to set up an ad hoc task force to review the present policy.

From this date until 1978, Marvin Kolhoff of General Electric; Harold Johnson of Honeywell; George Hupman, VP, General Electric; and Dr. Stanley Winkler of IBM came to the various meetings of PEI and NSPE to address their concerns about the industrial exemption clause in NSPE's registration policy. This ad hoc industrial committee indicated that if the NSPE policy of mandatory registration for those in industry was modified they would push for voluntary registration of engineers in their industries as well as encourage the same for others in the industrial community.

Members of the Industry Advisory Group, 1990-1991			
Member	Company	Member	Company
Thomas H. Lafferre, Chair	Monsanto Co.	Richard J. Redpath	Johnson & Johnson
J. E. Scalf	Florida Power & Light	Richard M. Glover	Proctor & Gamble
RP. Caren	Lockheed Corporation	Ronald J. Woodward	Kodak -Tennessee
Thomas L Carter	Aluminum Co. of America	Robert M. Hermann	Bethlehem Steel
Gary W. Dickinson	General Motors Corp.	Richard Case	IBM Corporation
Paul F. Ohman	Deere and Co.	Robert L Cattoi	Rockwell International
Joseph W. Keating	Merck & Co., Inc	Edward M. Petrushka	General Dynamics
Leonard A. Morgan	General Electric	Harold F. Faught	Emerson Electric Co.
Dr. Issac Barpal	Westinghouse	Laurence C. Seifert	AT&T
Richard R Johnson	3-M Div Industry & Elec	Dr. Leslie A. Benmark	E I DuPont

¹²⁸ "Position Paper on the Industrial Exemption in Registration Laws for Professional Engineers", PEI, December 8, 1975.

Bob Nichols, 1978-1979 NSPE President, felt this avenue should be pursued. A committee reported a modification of the NSPE registration policy and it was passed by the NSPE Board of Directors. A first meeting was called and was known as the *Industry Advisory Group (IAG)*. This group was established by the NSPE President to serve in an advisory capacity and to act as a forum to foster the exchange of views between NSPE's leadership and senior executives in industry employing many engineers. After Bob Nichol's year in office, the Industrial Advisory Committee has been renewed by each NSPE president to date (1991 - 1992).

The IAG typically met twice a year and the Chair of the IAG was selected among its members. The NSPE Executive Director, as staff coordinator; the NSPE President; President-elect; and after the first four years the PEI Vice President all represented NSPE. The forum had been so successful that later Presidents of NSPE set up similar advisory groups in education and government. Many of the concerns of PEI committees concerning professional schools, college education, and ABET criteria have received valuable input from the Industrial Advisory Group¹²⁹.

The Industry Advisory Group had indicated to PEI and NSPE that side benefits of these meetings was having a forum that existed nowhere else. Discussion with other engineering industry leaders about the problems and concerns of the employed engineers in their companies were all very important to PEI and NSPE. In 1979, NSPE President Lee with the concurrence of NSPE Past President Nichols started a visitation to the various companies that were members of the Advisory group. These were conducted for three years and their team contacted many of the Industry Advisory Group member's companies. The meetings were very successful - in one company, for example, the chief engineer had such a dislike for NSPE he would not pay any NSPE dues for his employees and indicated it would not be to a person's advantage to join NSPE. That changed and now many of the company's engineers are now active in NSPE and PEI.

Members of the Industry Advisory Group, 2004-2005			
Member	Company	Member	Company
William D. Hill, Chair	UltraCell	Kathryn Gray, President	NSPE
Douglas Bowman, Ph.D., P.E.	Lockheed Martin Information Systems	John Konik	Eastman Kodak Company
Darren Dasburg	Self-employed	Wendell Leimbach	American Express
Clifford Davis	Self-employed	William Lhota	American Electric Power
Paul DiPerna, P.E.	Baxter International	Mike McEvoy	Baxter Healthcare Corp
Gary A. Fitzmire	The Boeing Company	James Porter, Jr.	DuPont Engineering
Donald Goodwin	DaimlerChrysler Corp	Kolar Seshasai, Ph.D.	Textron Fastening Systems
Al Gray, Executive Director	NSPE	Dr. Otto Szentesi	Corning Cable Systems

¹²⁹ The First 30 Years, NSPE, pages 23-25.

There was some dissatisfaction at the start of the program because engineers in some of the companies felt they should have a representative on the visitation team. It was pointed out; they were excluded so their management would not look upon NSPE as a bargaining unit. This was the last thing that NSPE leadership wanted to happen. The calls were dropped for some years. In 1988-1989, the PEI leadership asked Bob Nichols, to once again head up a task force to make calls on companies. The program was re-implemented in 1991. Its focus was a state-level program with NSPE officers assisting in the industry visits. The visitation portion of the program was then moved under the purview of the NSPE Industry Relations Committee.

The first meeting of the IAG was scheduled for November 9-10 in 1978. Approximately a dozen industrial representatives discussed government regulations, man power, education of engineers for the future, and qualifications for continuing practices. A series of such meetings was highly anticipated¹³⁰.

Over the years, the IAG's advice and input had a significant impact on the development of NSPE policy and on NSPE lobbying actions in Congress, e.g., K-12 Education in Math and Science that includes better pay and compensation for math and science teachers, continuing professional competency, research and development tax credit, CO₂ emissions and global warming, education tax credits, Clean and Safe Water legislation, women in engineering, and the role of engineering in Homeland Security.

In the course of meetings in the 1990's, lengthy discussion was devoted to major recent changes affecting the industrial employment environment for engineers, how it had changed, and how engineers, their societies and educational institutions, should prepare for the future. The group concluded that a report on consensus of the group would be of value to NSPE and its members, and that such a distillation should be prepared and made available. A report was prepared and published in October 1996, and a second edition in 1997. Because of continuing changes since then, the group felt that a third edition should be published in 1998. While the participants have reviewed the resulting revised report, specific endorsements have not been sought, and none of the statements or conclusions should be construed as representing the views of any individual involved in the IAG or of the organizations they represent, but rather as a consensus arrived at through informal discussion.

The development of the IAG White Paper entitled "The Changing Face of Engineering Employment in Industry" addressed the following¹³¹:

- Increased competition
- The pace of change
- Past employment patterns
- Upheaval

¹³⁰ NSPE News, Nov 1978, page 51.

¹³¹ "The Changing Face of Engineering Employment in Industry", PEI Industrial Advisory Group, 3rd edition, July 6, 1998.

- Patterns for the future
- Performance-based competition
- Engineering education
- On the job education
- Professional activities
- How engineers can prepare and what industry will seek, i.e., communications and interpersonal skills, commitment to lifelong learning, continuing advanced competency in information technology, licensure, ethical standards, career planning.

The IAG was discontinued after the 2004-2005 budget year due to NSPE's decision to not fund the program in the 2005-2006 budgets. Poor response, lack of attendance and input from the members was on a downward trend for several years leading up to the budget cut, hence was a contributor to its termination. Several years later, Stephen Hutti, PE as Chair-Elect expressed a desire to renew the group, but funding was not available from the NSPE budget.

If the termination wasn't done in 2005-2006, it would have been the following year after adoption of the Future Directions Task Force restructuring proposal. The desire to understand or communicate with Industry by NSPE was not considered a priority by both the volunteers and staff leadership.

INDUSTRY RELATIONS PROGRAM

The state-level PEI Industry Relations Program was designed to open and maintain a constructive dialogue between the National Society of Professional Engineers (NSPE) and industry at the same level and to foster cooperative action on programs and issues of mutual interest. A new thrust for a state-level Industry Relations Program was approved at the July 1985 Annual Meeting by the PEI Board of Governors based upon a recommendation report from Billy R. Rentrop, P.E.

The PEI Industry Relations Program grew out of visits on the national level between leaders of industry and NSPE. Subsequent meetings were held to resolve certain differences, and in particular, the issue of registration of engineers. From these meetings and discussions of viewpoints evolved a new voluntary approach to the registration of engineers in industry.¹³²

¹³² "Overview of PEI's Industry Relations Program", PEI Industry Forum, Fall/Winter 1985, page 3.



Industry visitation at Freightliner Large Track Assembly in Cleveland, NC. (Left to right): Ken Roy; Nick Wright, PEI staff manager; Freightliner Manufacturing Engineer; Mark Brumbach. (Photo from Mark Brumbach).

Specific Program Goals were:

- 1) To familiarize industry management with NSPE and the Professional Engineers in Industry (PEI) practice division.
- 2) To obtain top-level industry management viewpoints in the formulation of NSPE policies and programs.
- 3) To assist industry in promoting high levels of professionalism and competence among its engineers.
- 4) To increase participation by engineers in industry in NSPE and its programs.

For several years in the late 1980's and early 1990's, the Chair for the Industrial Relations Committee was served by Teresa Helmlinger, P.E. In July 1993, Mark Brumbach, P.E. took over the Committee and served it well into the 1990's for PEI. Jack Frost, P.E. replaced Brumbach as Chair of the EAL Committee so that Brumbach could focus on industry visitations. Visits and tours continued for many years and were a popular activity at the NSPE Annual Meetings. Often, the local Chapter would be involved to arrange for the visit by the National PEI organization.

The Tours slowed up after 2000 and were nonexistent for many years. In 2006 – 2007, Chair Bob Becnel re-established the *Industry Visitation Project*, briefly. The 2006 visit to Deer Island at the annual meeting in Boston, MA was the outcome of the project led by Andy Russo, P.E. The following year in Denver, CO, PEI co-sponsored a tour of the Coors facility with NSPE. There were

discussions by Chair Stephen A. Hutti, P.E. for a tour at the annual meeting in 2013 in Minneapolis, but local support was unavailable.



Representatives from NSPE and the Missouri Society of Professional Engineers (MSPE) in September 1998 conducted an employer visit to AlliedSignal, Inc., Federal Manufacturing and Technologies, Kansas City. Participants included: (Standing, left to right): Mike Meyers, MSPE Western Chapter president; Chris Herrera, Missouri PEI chair; LaRoux Gillespie, engineering projects manager; Leonard Carr, engineering projects manager; Ed Wenski, staff engineer; Bob Powell, company manager; Greg Enserro, staff engineer; (Seated, left to right): Jim Jeffries, quality engineering manager; NSPE President Kenneth Walch; and Ron Hill, Missouri PEI Chair-elect. (Photo from Engineering Times, March 1998).

Summary of Industrial Visitations and Tours by PEI					
Year	Company	Location	Year	Company	Location
1991	General Electric Acft. Engines	Cincinnati, OH	1995	Marion Merrill Dow	Kansas City, MO
1991	W. W. Grainger	Kansas City, MO	1995	Elk River Concrete Products	Shakopee, MN
1991	3M Company	St. Paul, MN	1995	Medtronics, Inc.	Fridley, MN
1991	The Boeing Company	Seattle, WA	1995	IBM Corporation	Rochester, MN
1991	County of LA Pvt. Ind. Council	Los Angeles, CA	1995	A.P. Green Industries	Mexico, MN
1991	U.S. Dept. of Energy Contractors	Seattle, WA	1995	ConAgra Frozen Foods	Omaha, NE
1991	Westinghouse Savannah Riv. Co.	Aiken, SC	1995	Metropolitan Utilities Dist.	Omaha, NE
1992	Appalachian Power Co	Charleston, WV	1995	3M Company	Valley, NE
1992	3M Company	St. Paul, MN	1995	Thomas J. Lipton, Co	Independence, MO
1992	Tennant	Minneapolis, MN	1995	Sega, Inc.	Overland Park, KS
1992	Honeywell, Inc.	Minneapolis, MN	1995	Tinker Air Force Base	Oklahoma City, OK
1992	Northern States Power Co.	Minneapolis, MN	1995	Exxon Co USA	Houston, TX
1992	General Mills	Plymouth, MN	1995	Industrial Advisory Cmte. of LA - Board of Registration	Baton Rouge, LA

Summary of Industrial Visitations and Tours by PEI					
Year	Company	Location	Year	Company	Location
1992	Dow Chemical USA	Plaquemine, LA	1995	Enron Engineering & Const.	Houston, TX
1992	Jacobs Engineering Group, Inc.	Pasadena, CA	1995	CURE, Inc	Monterey Park, CA
1992	Johnson & Johnson	Dayton, NJ	1995	Orange Cty. CA Dept of Edu.	Costa Mesa, CA
1992	New Jersey Bell	Linden, NJ	1995	Coors Ceramics	Denver, CO
1992	Glaxco	Raleigh, NC	1995	South Dakota Cement Co	Rapid City, SD
1993	Hoechst Celanese Corp	Charlotte, NC	1996	Lantech, Inc	Louisville, KY
1993	Virginia Power Co	Richmond, VA	1996	W. W. Grainger	Kansas City, MO
1993	Caribbean Refrescos	Puerto Rico	1996	3M Company	St. Paul, MN
1993	Smith, Klein, Beckman Pharm.	Puerto Rico	1996	Kansas City Power & Light	Kansas City, MO
1993	Whirlpool Corp	Benton Harbor, MI	1996	A.P. Green Industries	Mexico, MN
1993	Ohio Edison Co	Akron, OH	1996	Draper Laboratory, Inc.	Cambridge, MA
1993	General Mills	Plymouth, MN	1996	The Mitre Corporation	Bedford, MA
1993	DuPont Engineering Center	Wilmington, DE	1996	GTE	Waltham, MA
1994	Chrysler	Newark, DE	1996	The Boeing Company	Wichita, KS
1994	Florida Power & Light Co	Juno Beach, FL	1996	Wilcox Electric, Inc	Kansas City, MO
1994	Libbey Owens Ford	Toledo, OH	1996	Water Services Department	Kansas City, MO
1994	3M Company	St. Paul, MN	1996	ATC Environmental	Ames, IA
1994	HEMCO Corporation	Independence, MO	1996	Butler Manufacturing	Kansas City, MO
1994	Kansas City Power & Light	Kansas City, MO	1996	Black & Veatch	Kansas City, MO
1994	A.P. Green Industries	Mexico, MO	1996	Burns & McDonnell	Kansas City, MO
1994	ISCO	Lincoln, NE	1996	NPPD	Columbus, NE
1994	McDonnell Douglas	St. Louis, MO	1996	Honda of America	Marysville, OH
1994	W. W. Grainger	Kansas City, MO	1996	Boise-Cascade Co.	St. Helens, OR
1994	Dow Chemical USA	Plaquemine, LA	1996	Harley Davidson	York, PA
1994	Oklahoma Natural Gas	Tulsa, OK	1997	SD School of Mines & Tech.	Rapid City, SD
1994	Public Service Co	Tulsa, OK	1997	Dakotah Cement	Rapid City, SD
1994	Occidental	Tulsa, OK	1997	Phillips 66	Tulsa, OK
1994	Sooner Pipe & Supply	Tulsa, OK	1997	Burlington Industries	Burlington, NC
1994	Nova Engineering	Tulsa, OK	1997	Sara Lee	Durham, NC
1994	John Brown Engr. and Const.	Tulsa, OK	1997	R. J. Reynolds	Winston Salem, NC
1994	McElroy Manufacturing	Tulsa, OK	1997	Freightliner	Cleveland, NC
1994	McDonnell Douglas	Tulsa, OK	1997	IBM	Geneva, NY
1994	Coopers & Lybrand	Oklahoma City, OK	1997	Eastman Chemical	Rochester, NY
1994	Kerr McGee	Oklahoma City, OK	1997	Nevada Power	Las Vegas, NV
1994	Conoco	Ponca City, OK	1997	Converse Professional Grp.	
1994	Louisiana Chemical Association	Baton Rouge, LA	1997	Phoenix International	Phoenix, AZ
1994	AR Dept of Transportation	Little Rock, AR	1997	Federal Machine	
1994	Ingalls Shipbuilding	Pascagoula, MS	1997	GPK Products	Fargo, ND
1994	Entergy	Baton Rouge, LA	1997	Case Intl. Harvester	

Summary of Industrial Visitations and Tours by PEI					
Year	Company	Location	Year	Company	Location
1994	Tinker Air Force Base	Oklahoma City, OK	1997	Obermiller Nelson Engr.	Fargo, ND
1994	Bear Creek Operations	Medford, OR	1997	Ulteig Engineers	Fargo, ND
1994	Chevron Oil	Salt Lake City, UT	1997	Mallinckrodt Chemical	St. Louis, MO
1994	Ford, Bacon & Davis Tech.	Salt Lake City, UT	1997	Re/Spec Inc.	Las Vegas, NV
1995	Virginia Power Co	Richmond, VA	1997	Continental Eagle Corp	Birmingham, AL
1995	Lantech, Inc	Louisville, KY	1997	Southern Nuclear Co	Birmingham, AL
1995	Chevron USA	Pascagoula, MS	1997	Draper	Boston, MA
1995	Bristol Compressors, Inc.	Bristol, VA	1998	Allied Signal, Inc	Kansas City, MO
1995	EIT Inc.	Sterling, VA	1998	Harley Davidson	Kansas City, MO
1995	Bimba Manufacturing	Monee, IL	2000	Dairy Farms of America	Springfield, MO
1995	3M Company	St. Paul, MN	2000	Tenneco	Detroit, MI
1995	Kansas City Power & Light	Kansas City, MO	2006	Deer Island	Boston Harbor, MA
1995	MES Bioremediation Svcs.	Des Moines, IA	2007	Coors	Denver, CO

INNOVATIVE ENGINEERING AWARD

In late 2002, the PEI Executive Board voted to sponsor an award at 400 local engineering and science fairs. The idea originated from Mike Vinarcik, P.E., who served as the first YEAC Chair for PEI. The awards would be distributed through the Intel International Engineering and Science Fair (ISEF). PEI arranged for distribution of a lapel pin and certificate along with NSPE promotional material to all award winners at each Regional Intel ISEF Competition. The NSPE-PEI awards were presented to students in grades 7-12 and given to recognize the most outstanding engineering project at the regional fair.

As part of the program, NSPE would receive the names of the winning students. To help with future recruitment and increase awareness of the value of engineering, PEI worked on a proposal to have the winners receive NSPE publications and student membership entitlements for one year. The PEI EB became a working partner with the membership committee on this recruiting effort.

The response to this award by high schools was very good. At least 25% of the winners went on to request the Engineering Times. It is unclear if these members have gone on to become members, but it was an inexpensive and successful method of promoting engineering.



Intel International Engineering and Science Fair (ISEF).

PEI attempted to rejuvenate and slightly modify the award at the start of the 2009 – 2010 year. The new award would offer a \$1000 national prize by NSPE PEI for the top student/project from the pool of Regional Intel ISEF Competition winners. The award criteria that would be considered include:

- 1) Demonstrated technical competence
- 2) Superior verbal and written presentation of project
- 3) Professional appearance and demeanor (personal and project)
- 4) Awareness of ethical implications
- 5) Preference given to projects in the Engineering category; if a project from another category is considered, it must demonstrate applied engineering principles

Summary of Innovative Engineering Award Winners		
Year	Name(s)	Project
2009	Landon Eisen	Organic waste to make biogas
2010	Kelles Gordge	Take a Deep Breath
2011	Shane Barys	Vibration Revelation: Developing and Alternative to Conventional Wind Turbines
2012	Walter Menke, Joseph Marino, Daniel Foster	All Aboard Cardboard
2013	None	None

METRIC CONVERSION

For several years, NSPE promoted the use and migration towards the Metric System within the United States. Committee studies and Board proclamations made their way into NSPE's governance for at least two decades prior. References to NSPE promoting metric are found to date back to at least 1944. However, in the late 1970's, PEI established a committee for the purpose of promoting Metric Conversion.

Dr. Theodore O. Wright, P.E., PEI Metric Project Leader, presented highlights of a "white paper" during the NSPE 1983 Annual Summer Meeting in Dayton. Wright served for many years and had a strong interest, personally and professionally, in the subject.¹³³ During the same year, PEI recommended to the American National Metric Council (ANMC) that Dr. Wright, P.E., be nominated to serve a three-year term on the ANMC Board.

Wright's paper, "Metric System Conversion Status in the U.S.A.: 1982-83" was summarized in the PEI Industry Forum for all members to read. The paper provided both a history of the metric

¹³³ "PEI Legislative and Government Affairs Committee Activities", PEI Industry Forum, Summer/Fall 1983, page 1.

system in the United States as well as a status of where it stood before Congress and its implementation in industry.¹³⁴

Wright formally presented a report at the July 1984 PEI Board of Governors Meeting. He noted that the automobile industry, the electronics industry, chemical industry and the production and packaging of liquor did a good job of coordinating metrification activities, but most other industries failed this effort. He pointed out that within the federal government, the U.S. Department of Defense and the General Services Administration (GSA) embarked on a plan of conversion to be completed by 1990 as a target date.

In conclusion, Wright said that NSPE Professional Policy 102C on “Conversion to the Metric System” was a valid policy and should be continued and supported. Further, he recommended that PEI should continue to be the focal point for metric activity, both within NSPE and for outside contacts and/or sources.¹³⁵

PATENT INVENTION PROTECTION

Occasionally PEI studied the interest in providing support to engineers in industry involved with the patent process or inventions. In the years prior to the 1980’s, this topic was studied at the NSPE level, but no consistent committee was stood up. In the 1980’s, PEI did create a small subcommittee the under its PEI Legislative and Government Affairs Committee.

Bud Lunsford, P.E., prepared a paper entitled “Employee Invention Contracts and the Inducement of Invention” in response to Tom Darling’s draft paper on the same subject. The PEI Legislative & Government Affairs Committee recommended that Lunsford’s paper be adopted as the official PEI position.¹³⁶ The position paper was reprinted in the PEI Industry Forum along with an Appendix Bill.¹³⁷

A report representing NSPE and the National Institute of Standards and Technology (NIST) was developed to provide generic definitions of the engineering stages of new product development. The report was entitled “Engineering Stages of New Product Development”. In addition to aiding inventors, the definition assisted the engineers in determining the development status of projects and the necessary engineering activity needed at each stage. These definitions provided a valuable

¹³⁴ “Metric System Conversion Status in America”, PEI Industry Forum, Fall 1983/Winter 1984, page 8.

¹³⁵ “Metric Measurement System Report Given to PEI BOG”, PEI Industry Forum, Summer/Fall 1984, page 3.

¹³⁶ PEI Industry Forum, Summer/Fall 1983, page 6.

¹³⁷ “Employee Invention Contracts and the Rights of Professional Employed Inventors”, PEI Industry Forum, Fall 1983/Winter 1984, page 3, 7.

tool for wiring with customers and suppliers alike as emphasis was placed on shortening the product development cycle and improvement of quality. The report was released in 1990¹³⁸.

At the annual meeting in July 1995 in Louisville, KY, the PEI Board of Governors approved the “Recommended Intellectual Property Agreement” as a template for members and engineers to protect their intellectual property. The Agreement was printed in its entirety in the PEI Industry Engineer several times and was included in many of the PEI Handbooks through the years. Without much fanfare or reason, PEI stopped promoting the Agreement. It continued to be reprinted in the PEI Handbook up until the 2006 edition.

PEI HANDBOOK

This project has been recurring since at least 1989. The mission with this task was to provide an annual update for the Practice Division in the form of an operational manual. The document was typically captured as the previous administration wound down in spring and would be used to hand off to new Officers, Governors, and other PEI members¹³⁹. The annual response was not entirely consistent over the years.

Summary of Published PEI Handbooks		
Issue	Primary Author	Format
Jan 1, 1989		Paper version
Jul 1992		Paper version
Jul 1996		Paper version
Jun 1998	Milt Tiede, P.E.	Paper version
Jan 2000		Paper version
Jan 2001	Doug Benner, P.E.	Web (html) version
Jul 3, 2006	Bob Becnel, P.E.	Microsoft Word version

PEI HISTORY

Over the years, there have been three (3) comprehensive histories prepared for its membership. In each instance, several years in the development has gone into each publication. Most often in the creation of the history, the Executive Board would appoint a PEI History Committee to work on the project on an annual basis. However, it was only after a passionate and goal driven member on the Committee took it upon himself to spearhead the effort to publish a new document. Due to the time commitment and the necessity to have a Past Chair involved, it is a

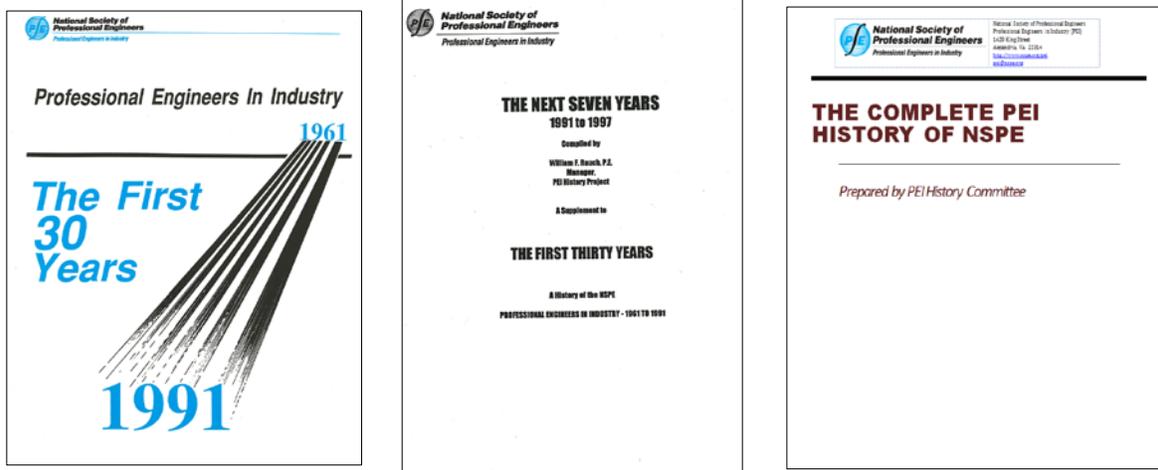
¹³⁸ PEI Industry Forum, October/November 1990, page 1.

¹³⁹ PEI Handbook 2006-2007 Edition, July 3, 2006.

difficult project to complete. PEI has done a wonderful job in retaining its history and only PEC has made a limited effort to do something similar.

As the history grows older, some records become harder to retrieve from various sources. It also became a burden to track down information from each respective state PEI organization. As such, gaps usually occurred in the collected data. The following describes the three comprehensive histories that have been developed.

- Professional Engineers in Industry: The First 30 Years was published in June 1991 (NSPE Pub 1430) and contained histories of NSPE/PEI as well as several state PEI organizations. Otto Tennant, P.E. served as editor. The document predominantly included the history of PEI from 1961-1991 and resulted in a 100 page volume.
- Professional Engineers in Industry: The Next 7 Years was published in June 1997 and contained histories of NSPE/PEI as well as several state PEI organizations. William Rauch, P.E. served as editor. The document predominantly included the history of PEI from 1991-1997 and resulted in a 50 page volume.
- Professional Engineers in Industry: The Complete PEI History of NSPE was published in August 2013 and contained a comprehensive history of the entire NSPE/PEI family, industry in NSPE, and State PEI organizations of NSPE/PEI. Bob Becnel, P.E. served as editor. The document predominantly included the history of PEI from 1934-2013 and resulted in a 300 page volume.



The three PEI History Volumes to date (Left to Right): The First 30 Years, The Next Seven Years, The Complete PEI History of NSPE.

Various state PEI organizations have developed histories along the way, but not with any level of consistency. These documents are always a perfect keepsake of many fine contributions to both the NSPE family and Professional Engineering in Industry.

PROFESSIONAL EDGE

For several years in the mid to late 1990's, NSPE held a Professional Edge Conference at the annual winter and summer meetings. The purpose of was to deliver relevant and diverse continuing education conference material for attendees at the meeting. Professional Development Hour (PDH) credit was issued for attendance. The First Annual Professional Edge Conference was held in Houston, TX, January 16-18, 1995. The Conference was delivered over 3 days and featured more than 20 interactive sessions for engineers in a number of topics. The Conference sessions attempted to diversify among all practice divisions. After July 1997, the Conferences occurred during the summer meetings only.



Session titles that were aligned with PEI during the First Annual Conference included:

- CADD Management and Geographic Information Systems: Opportunities in the Engineering Environment
- Doing Business in Mexico: The "Ins and Outs"
- Workforce 2000: How to Manage and Motivate Your Changing Workforce
- Leadership Skills for Engineers
- Total Quality Management and Statistical Process Control
- Continuing Professional Competency: Panel Discussion
- Teamwork and Team play: Uniting to Build Profits and Productivity
- Persuasive Technical Presentations: Design and Delivery
- Management Skills and Leadership Styles for Technical Managers

Professional Edge Series ran from 1995 through 2001 providing educational opportunities for members.

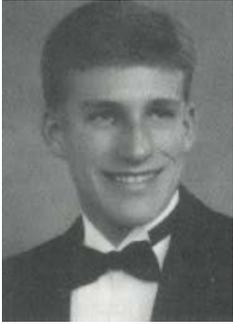
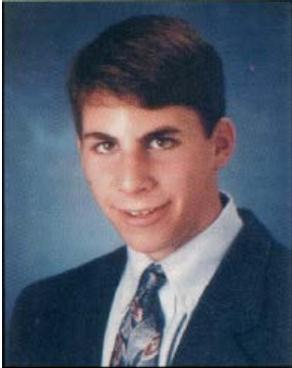
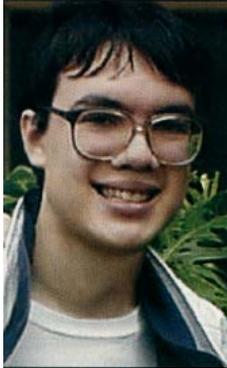
It appeared that after 2001, while the Professional Edge Series continued, sponsorships by the Practice Divisions ended. The Series continued at least through 2005. Quite often the topics of the Professional Edge were Industry related and NSPE's Annual Meeting staff provided a nice balance for all members.

Summary Professional Edge Conference PEI Topics		
Date	Location	PEI Co-Sponsored Topic
Jan 1995	Houston	<ul style="list-style-type: none"> - CADD Management and Geographic Information Systems - Doing Business in Mexico: The "Ins and Outs" - Workforce 2000: How to Manage and Motivate Your Changing Workforce - Leadership Skills for Engineers - Total Quality Management and Statistical Process Control - Teamwork and Teamplay: Uniting to Build Profits and Productivity - Persuasive Technical Presentations: Design and Delivery - Management Skills and Leadership Styles for Technical Managers
Jul 1995	Louisville	<ul style="list-style-type: none"> - Internet Quickstart - Advanced Internet for Engineers
Jan 1996	Portland	<ul style="list-style-type: none"> - Effective Communication Styles
Jul 1996	Boston	<ul style="list-style-type: none"> - Keeping the Lights On: The Reshaping of the Electric Industry
Jan 1997	Charlotte	<ul style="list-style-type: none"> - Ethical Dilemmas: Awareness and Consequences - Learn from My Mistakes: How to Start Your Own Business - The IEEE Career Asset Manager: A Practical Guide to Career Success - Roundtable discussions on NSPE product development designed to help shape the future direction of the society, particularly in the area of engineering career development
Jul 1997	Rapid City	<ul style="list-style-type: none"> - Life as an Independent Economic Unit - Opportunities in the Deregulated Utilities Industry
Jul 1998	Tulsa	<ul style="list-style-type: none"> - Restructuring the Utilities Industry - Motivating the Highly Technical Employee - Career Asset Manager: A Practical Guide to Career Success
Jul 1999	Spokane	<ul style="list-style-type: none"> - Restructuring the Utilities Industry - Activity-Based Management - Virtual Universities: Your Online Options - Keynote Presentation by Phil Condit, Boeing CEO - Career Asset Manager: A Practical Guide to Career Success
Jul 2000	Norfolk	<ul style="list-style-type: none"> - Applications of the Toyota Production System - Internet 2 - Beyond Basics - Deregulating the Utility Industry
Jul 2001	Detroit	<ul style="list-style-type: none"> - Navigating Your Changing Career - Software/Computer Engineering Registration - Utilities Deregulation

SCHOLARSHIPS

In the mid-1980's, the NSPE Educational Foundation asked PEI to consider the possibility of a scholarship funded by NSPE-PEI. The scholarship committee of PEI in 1983 recommended that a scholarship be set up and sponsored by the Division with an initial contribution of \$10,000. The

first award was presented in 1984 to Ronald J. Schroeder, Mt. Vernon, Indiana, and a mechanical engineering major at the University of Evansville.

PEI Scholarship Recipients			
 <p>Dael Quiram 1990 - 1991</p>	 <p>Donald L. Chamberlain 1991 - 1992</p>	 <p>Christopher Bonino 1999 - 2000</p>	 <p>Orion Crisafulli 2000 - 2001</p>
 <p>Michael Geruso 2001 - 2002</p>	 <p>Emily Snyder 2002 - 2003</p>	 <p>Catherine Barnes 2004 - 2005</p>	 <p>Kevin Eichinger 2007 - 2008</p>
 <p>Travis White 2009 - 2010</p>	 <p>Gretchen Heberling 2010 - 2011</p>	 <p>Cheryl Dilks 2011 - 2012</p>	 <p>Nick Brandis 2012 - 2013</p>

After PEI awarded its initial recipient in 1984, no other recipients were declared after 1984 under PEI's direct management. In 1989, PEI's scholarship program was assimilated by the NSPE Engineering Foundation but the program still retained the name of "PEI Scholarship." In 1991, the "first" recipient was again declared under NSPE's management. The initial scholarship in 1990 -

1991 was \$2,000, the 1991 - 1992 recipient was \$2,000. The award amount was changed, henceforth, in 1992 - 1993 to \$2500¹⁴⁰.

The objectives of the Professional Engineers in Industry were to support the aims of the National Society of Professional Engineers, advance the public welfare, promote the professional, social and economic interest of the engineer in industry, and to encourage and develop a professional attitude among all engineers in industry. The mission of the NSPE-PEI scholarship was to foster awareness and promote further interest of students in the engineering profession at the junior and senior year level through the establishment of scholarships funded by the NSPE-PEI. The scholarship, awarded to a rising junior or senior, was to be used at a school with accreditation by the Engineering Accreditation Commission of ABET.

PEI Scholarship Recipients		
Year	Student	School
1990 - 1991	Daniel J. Quiram	University of Virginia - Charlottesville
1991 - 1992	Donald Chamberlain	University of Illinois - Champaign/Urbana
1992 - 1993	Jeffery J. Gray	University of Michigan - Ann Arbor
1993 - 1994	Bryan Lee Pellon	Purdue University
1994 - 1995	David Harman	University of Delaware
1995 - 1996	None	
1996 - 1997	Amy Fetter	Oral Roberts University
1997 - 1998	Todd E. Heger	Michigan State University
1998 - 1999	Gina LaRossa	Yale University
1999 - 2000	Christopher Bonino	University of Rochester
2000 - 2001	Orion Crisafulli	Princeton University
2001 - 2002	Michael Geruso	Virginia Tech
2002 - 2003	Emily Snyder	Cedarville University
2003 - 2004	Andrew Stark	University of Texas - Dallas
2004 - 2005	Catherine Pemble Barnes	Virginia Commonwealth University
2005 - 2006	Lisa Burton	Duke University
2006 - 2007	Jeremy B. Dreiling	Kansas State University
2007 - 2008	Kevin Eichinger	University of Wisconsin - Madison
2008 - 2009	Caleb Sieck	University of Arkansas - Fayetteville
2009 - 2010	Travis White	Michigan Technological University
2010 - 2011	Gretchen Heberling	University of Wyoming
2011 - 2012	Cherly Dilks	Northern Arizona University
2012 - 2013	Nick Brandis	Northwestern University

¹⁴⁰ Stortz, Steven, E-mail, Feb 9, 2012.

SOFTWARE ENGINEERING

A Software Engineering project was established 2001 – 2002 by Doug Benner. It was becoming clear that Software Engineering was playing a prominent role in U.S. industry and in many facets, life safety concerns arose. Benner had wanted to establish a Software Engineering task force to consider what PEI's role should be and what it could do to promote licensure of Software Engineering.

Prior to this time, various articles in Engineering Times and a few presentations in the Professional Edge Series were conducted. However, it was the establishment of the Task Force that moved Software Engineering to a more prominent place in PEI and subsequently, NSPE. Doug Benner asked Bob Becnel to serve as Task Force Chair. Becnel was an engineer with Lucent Technologies at the time.



Dan Wittliff, NSPE President 2012 – 2013 was instrumental in forming the Software Engineering Licensure Consortium and promoting Software Engineering Licensure. Wittliff was an Environmental Engineering from Texas (Photo PE Magazine, Aug/Sep 2012).

The Task Force continued through recurring reappointments from 2002 – 2003 through 2012. Bob Becnel chaired the Task Force until 2009 - 2010. At this time, Bob worked with Frank Fong to transition the Task Force over to him and represent PEI on the Software Engineering Licensure Consortium (SELC) Committee. Becnel wanted to focus on the PEI History at the time and so Frank agreed to serve.

Approximately 2003, the Task Force agreed to change its name from “Software Engineering Task Force” to “Computer and Software Engineering Task Force”. The purpose was to be able to better embrace embedded systems, networking and communications firmware which quite often were not considered true

software systems. At the time, Becnel's reasoning was to pick up where the Computer Engineering NCEES “depth” specification left off. Becnel was involved in late 1990's promoting a Computer Engineering exam and worked on exam question writing and a Professional Activities and Knowledge Study (PAKS) for National Council of Examiners for Engineering and Surveying (NCEES).

On August 10, 2006, the Task Force finished a paper entitled “Task Force Report and Recommendation for Computer and Software Engineering Licensure Path”. The paper was submitted to the Licensure & Qualifications for Practice (L&QP) Committee of NSPE. The paper led with three recommendations:

Summary of PEI Recommendations

- 1) Recommendation #1: PEI urges NSPE Board of Directors (BOD) to approve the position in this Recommendation, and request NCEES to develop a Computer and Software Engineering Principles & Practice Exam. Note: PEI felt that the NSPE Licensure & Qualifications for Practice Committee review the Recommendation and draft the language

to be used in the formal request made to both the NSPE BOD and the communications to NCEES.

- 2) Recommendation #2: PEI urges NSPE to lobby at least 10 State Licensing Boards to collectively request NCEES to begin the process of developing a licensure path. We would expect that an NSPE Program Manager be designated to coordinate the timing between Recommendation #1 and Recommendation #2.
- 3) Recommendation #3: PEI suggests that the NSPE BOD's issue a vote of approval for the finalized Software Engineering licensure path being developed by the State of Texas Licensing Board.

At the time, the Task Force was informed that the State of Texas Licensing Board was developing a paper on the licensure path for Software Engineering. While the Task Force had a notional framework of the Texas paper, it never saw a formal document. The Task Force agreed to support the framework which was coincident with the PEI tenants in many aspects, hence the forthcoming position paper.

For over a year, PEI was left uninformed of the L&QP's position which was never discussed with PEI. NSPE member from Texas, Dan Whitliff, who supported Software Engineering and was aware of the Texas initiative and the PEI paper, suggested that a Summit be held to hash out common positions. IEEE-USA, IEEE Communications Society, NSPE PEI and the State of Texas were invited. Initially, the Summit was awkward in that NSPE L&QP never supported the PEI position through Committee inaction and Texas never had a formal paper. It was left for PEI to set the baseline of the discussion.



Dr. Philip A. Laplante, P.E. of Penn State University, Chair of the Software Engineering development effort. (Photo from PSU website).

The outcome produced the workings of 3 or 4 key positions to continue. Going forward, the SELC met as the Summit. Dan Whitliff assumed the role of facilitator and PEI played a key role for the first 2 years. The first two tasks were to build a business plan to secure a technical society and secure 10 state boards that would support the agreement. These were 2 requirements necessary to satisfy the NCEES model.

Bob Becnel of PEI, Lance Kinney of Texas Board of Licensure and Dan Whitliff all worked on securing the ten states over the first 2 years. While Kinney was an NSPE member, he was not active with PEI. This was done through personal visits and direct contact made. Through persistence and a re-visit, Becnel was able to encourage Missouri to change its initial rejection and clinch the 10th state. During this time, PEI continued to support SELC which included Clyde Nagata's pivotal role as the NSPE Interest Group Board of Director's primary "cheerleader" for the effort. Nagata supplied motions for key endorsements and requests for funding in order to keep the SELC moving forward.

A Software Engineering Summit continued to occur at the NSPE annual meeting and was open to all SELC members. Once NCEES saw the 10th state approve the need for a Software Engineering exam, the SELC moved toward exam development. Exam development required significant funding which was being negotiated with IEEE USA as lead technical society. Eventually, IEEE USA agreed to pick up the primary funding to develop the PAKS and further development of the exam. Dr. Phillip Laplante, Professor at Penn State University, was asked to lead the exam development phase which moved into high gear after the July 2010 SELC meeting. Frank Fong became the PEI representative at this point.

At this stage, Frank Fong has taken on a more active role for PEI and continued with the exam development and PAK study. Andy Russo, past PEI Chair, was also an active member on the SELC. PEI Staff Manager, Erin Garcia, served as the NSPE staff representative. The first exam to be available for the Software Engineering NCEES exam was expected to be Spring 2013.

In addition to direct engagement on a Software Engineering exam, the Task Force made presentations and wrote articles over the years to bolster the discipline. Quite often, members in other disciplines supported Software Engineering, but lacked the understanding of regulatory direction that software would lead to with respective State Boards.

Year	Student
July 27, 2007	Denver
July 25, 2008	Portland
July 19, 2009	St. Louis
July 16, 2010	Orlando
July 15, 2011	Las Vegas
July 13, 2012	San Diego

SUSTAINING SPONSOR PROGRAM

In June 1999, the PEI Sustaining Sponsor initiative was unveiled. This was an initiative that expanded the industrial relations program and allowed monetary support for many PEI activities. In 1999, there were 113 charter participants of which many continued to renew for several years. For the charter contribution of \$150, the organization received a wall plaque, publicity in the Engineering Times and other advantages. The program was promoted as an annual contribution for those organizations participating. In 2001, the contribution level was increased to \$175 which greatly increased the amount.

National PEI Chairman Ralph K. Leidy, P.E., of North Canton, OH, points out, "American industry and the engineering profession face enormous challenges, including ever-sharper competition, rapid organization changes, shorter product development time, and the increased pace of communications and technological transition. Engineers and the companies they represent need all the help they can get to keep up. That is why PEI is seeking to leverage its programs by mobilizing a select group of companies and individuals to provide support for its goals and objectives."¹⁴¹

¹⁴¹ "Sustaining Sponsor Program Off to Good Start", Engineering Times, June 1999, p. 19.

Summary of Revenue from Sustaining Sponsorships				
Year	Sustaining Sponsor	Sustaining Firm	Individual Sponsor	Total
1999	\$ 16,950.00			\$ 16,950.00
2000	\$ 12,300.00			\$ 12,300.00
2001	\$ 21,115.00			\$ 21,115.00
2002	\$ 5,285.00			\$ 5,285.00
2003	\$ 175.00			\$ 175.00
2004		\$ 3,588.00	\$ 1,550.00	\$ 5,138.00
2005		\$ 3,259.00	\$ 3,025.00	\$ 6,284.00
2006		\$ 4,950.00	\$ 2,175.00	\$ 7,125.00
2007		\$ 3,975.00	\$ 1,400.00	\$ 5,375.00
2008		\$ 5,285.00	\$ 2,020.00	\$ 7,305.00
2009		\$ 3,900.00		\$ 3,900.00
2010		\$ 745.00		\$ 745.00
2011		\$ 2,861.50		\$ 2,861.50
2012				
2013				

The Sustaining Sponsor Program has continued into 2012. However, it has taken on different format. In 2004, the program was broken into a “Sustaining Sponsor” and “Individual Sponsor” approach. Within the “Sustaining Sponsor”, three levels of support were established: platinum (\$300), gold (\$175) and silver (\$150). The “Sustaining Sponsor” was generally reserved for companies¹⁴². Eventually, the gold level was increased to (\$225). The “Individual Sponsor” was established for non-companies and those retirees that wanted to support PEI. In its charter year of 2004, a drawing to win a handheld GPS unit was created as an incentive for charter members to the Individual Sponsorship¹⁴³. The winner was Fred Abdula, P.E. of Illinois¹⁴⁴. In 2005, another drawing was for an NSPE membership which went to Donald Henderson of Texas¹⁴⁵.

The program was known as the “PEI Fund for Professional Development”. This was likely the NSPE account given to the program. The program has been very successful in fundraising for PEI and much of the credit has to do with Erin Garcia and her tireless promotion of the program in the various NSPE publications. As the Engineering Times reduced space for PEI, the website and PEI E-news became the predominate medium for promoting the program. The sponsors that have

¹⁴² “New PEI Sponsorship Program Offers Options for Companies to Participate”, *Engineering Times*, May 2004, p. 21.

¹⁴³ “PEI Invites Support of Individual Members”, *Engineering Times*, May 2004, p. 21.

¹⁴⁴ “PEI Thanks Supporters of Development Fund”, August/September 2004, p. 20.

¹⁴⁵ “PEI Says Thanks to Individual Sponsors”, *Engineering Times*, August/September 2005, p. 21.

continued through the years have been very loyal to PEI. Many of the sponsoring firms even support PEI by encouraging employees to be active in NSPE nationally and locally.

Considering that this is non-dues revenue, the Sponsorship is a highly successful program and helps fund the scholarships, the Young Engineers Advisory Council (YEAC) and other PEI programs.

PEI Sustaining Sponsors, 1999 – 2003 (CH) Charter Member					
Sponsor	State	Sponsor	State	Sponsor	State
A. T. & T. Corp. (CH)	IL	Chevron Overseas	TX	Francis T. Laurin, P.E.	MA
A. Finkl & Sons Company (CH)	IL	Clayburn C. Curtis	OK	Frank M. Niernsee, Jr.	TN
A. L. Hickerson	TX	Cleco Corporation	LA	Frederick Harris, Inc. (CH)	NY
Air Con Refgn. & Heating, Inc.	IL	Coastal Oil Corporation (CH)	TX	Freeberg Ind. Fabrication	CA
Air Cruisers Company (CH)	NJ	Copeland Corporation	NC	Fuller Bulk Handling Corp.	PA
AirTouch Communications (CH)	CA	Cray L. Foley, P.E. (CH)	CA	Gantrex Corporation (CH)	PA
Ajinomoto USA Inc.	NC	Crescent Technology Inc.	LA	Gary R. Keesecker, P.E. (CH)	VA
Alan Hechtman, P.E.	NY	CSR Hydro Conduit (CH)	TX	Gary Richard White	HI
Albert J. Gerritz	KY	CV Engineering	PA	GECO Engineering Corp	MO
Albert W. Spitz & Assoc.	PA	D & J Oil Company, Inc. (CH)	OK	Generac Corporation (CH)	WI
Alfonso J. Lugo	CA	Daniel L. Green, P.E. (CH)	OR	General Electric (CH)	CT, NY
Allan Gardiner	CA	DARcor & Associates, Inc. (CH)	AZ	General Mechanics Corp.	PR
Alliant Energy (CH)	WI	David Crawford, P.E. (CH)	TX	Genrad	OR
Aloysius J. Pietrzak	FL	David W. Malm, P.E. (CH)	PA	Geo. Blankmann, P.E. (CH)	FL
Alvin L. Young, P.E.	CA	DEB Consulting (CH)	NJ, GA	George Rian Grisemer	TX
Ameren Services Company (CH)	MO	Demar Ltd.	TX	George Stillwagon, Jr. (CH)	OH
American Elec Power Svc (CH)	OH	Dennis M. Danzik (CH)	NM	Gil Langord (CH)	VA
Arctic Foundations Inc.	AK	Designs Services (CH)	CA	Gillespie & Powers, Inc. (CH)	MO
Art Anderson Assoc., Inc. (CH)	WA	Dominico A. Paradiso	NJ	Glacier Engr. Const. Corp.	WI
ASCG Incorporated (CH)	AK	Donald L. Henderson, P.E.	TX	Glasgow Products, Inc. (CH)	NY
Asphalt Institute (CH)	KY	Dr. Aelred J. Kurtenbach, PE	SD	Globe Fire Sprinkler (CH)	MI
Autoclave Engineers (CH)	PA	Dr. Roy H. Beaton, P.E.	WA	Goldrus Producing Co. (CH)	TX
Autoliv ASP, Inc.	UT	Dublin Technical Systems, Inc.	OH	GPU Energy	PA
Aventis Behring LLC	IL	Echandi Guzman & Assoc. (CH)	PR	Gregory Gould, P.E.	NY
Baker Oil Tools (CH)	OK	Edward E. Slowter, P.E. (CH)	OH	H & R Technical Assoc. (CH)	TN
Bruno J. Maciejewski, P.E.	TX	Edward J. Bradley, Jr., P.E.	MO	H. LeRoy & Mary Henderson	TN
C. J. Silas	OK	Edwards & Assoc. Inc. (CH)	KS	Harris Group, Inc. (CH)	CO
C.W. Finkl Foundation, Inc.	IL	Elliott Lewis Corp (CH)	PA	Bradley Lifting Corp.	PA
Calsonic North America, Inc.	TN	Energy Source (CH)	NV	Hawaii Elect. Light Co (CH)	HI
Carl Bergard, P.E. (CH)	CA	Engineered Designs, Inc. (CH)	AZ	HEMCO Corporation	MO
CDS Separation Technologies	TX	Engineering Dev. Co., Inc. (CH)	MS	Hughes Aircraft Co. (CH)	CA
CECO Building Systems (CH)	MS	Fagen Engineering, LLC	MN	IBM (CH)	VT
Central & Southwest Corp (CH)	TX	FirstEnergy Corp. (CH)	OH	Ingersoll-Dresser Pmp. (CH)	FL

PEI Sustaining Sponsors, 1999 – 2003 (CH) Charter Member					
Sponsor	State	Sponsor	State	Sponsor	State
Charles L. Simmons	CA	FJS Research, Inc. (CH)	FL	inOvate Comms. Group	CA
Charles P. Woods	IA	FMB Company, Inc. (CH)	OH	Intl. Bridge & Iron Co.	CT
Chester A. Hardy	TX	Ford Motor Company	MI	ITT Flygt Corporation (CH)	TX
Ivan J. Law	IL	Link Electric & Safety Co. (CH)	TN	PCS Phosphate Company	NC
J W Morris, Ltd.	VA	Linus M. Stoll	WI	PCT Engineered Systems	IA
J. Leland Langston, P.E.	CO	Lionel C. Allmand Jr.	NC	Permian Brine Sales (CH)	TX
J. Robert Stockner	IL	Liquid Metronics, Inc. (CH)	MA	Petroleum Engineers Inc.	LA
Jackson Flexible Products (CH)	MI	Listowel, Inc. (CH)	NY	Phillips Petroleum Co. (CH)	OK
James E. Stephens, P.E. (CH)	IL	Lockheed Martin (CH)	NY	Poole Consulting Services	KS
James L Hanna	MI	Lone Star Industries	TX	Portec Rail Products (CH)	PA
James L. Carroll, P.E. (CH)	TX	Lowell W. Foster Assoc. (CH)	MN	Prof. Mgmt & Investments	NC
James M. Rudiger	VA	Luis A. Ferré	PR	Protherm Services Group	TX
James Otis Chaffin, Jr.	AL	M E C Prof. Designers (CH)	TX	QA Associates, Inc.	AL
JCM Industries Incorporated	TX	Machine Products Corp. (CH)	OH	Rafael Jackson, P.E.	PR
Jim Wilson, P.E. (CH)	MO	Malisko Engineering, Inc.	MO	Rayovac Corporation (CH)	WI
Joe Garrett	GA	Maphis International (CH)	CO	Rentech Boiler Systems (CH)	TX
John A. Cable, P.E.	OH	Mason Industries, Inc.	NY	Research Prod. Corp (CH)	WI
John A. Hawkins, P.E. (CH)	TN	Mass Broken Stone Co.	MA	Rhoades Company Inc.	MS
John C. Fenoglio, P.E.	IN	Master Builders, Inc. (CH)	OH	Richard A. Filippuzzi	CA
John D. Hatchett, P.E.	AZ	McCormick & Company	MD	Richard A. Road	IN
John Deere	TX	McGill Power Sales & Engr.	OH	Richard Filippuzzi (CH)	CA
John Dicky, P.E.	NY	Mecron Engineering Co. (CH)	Mi	Richard K. Reber	PA
John F. Heiss, P.E.	MI	Merck & Company, Inc. (CH)	NJ	Richard Robinson, P.E.	MA
John G. Freeberg, P.E. (CH)	CA	Michael G. Semmens	TX	Robert A. McClevey, Jr.	IL
John G. Heit, P.E. (CH)	TX	Morris & Associates, Inc. (CH)	NC	Robert A. Woodman Jr.	NJ
John J. Ondrejack, P.E.	FL	Motorola (CH)	AZ	Robert E. Bradfield, P.E.	TX
John L. McRae, P.E.	MS	Mr. & Mrs. Brent C. Sisler	OH	Robert F. Langford, P.E.	TX
John W. Russell	MA	MSX International (CH)	MI	Robert G. Ceconi (CH)	OK
Joseph L. Hillerich, Inc. (CH)	KY	Mustang Engineering, Inc. (CH)	TX	Robert G. Hogan	MI
Kasa Industrial Controls Inc.	KS	New Century Energies	TX	Robert V. Waltemeyer (CH)	GA
Kenneth J. Netzel	WI	Newell Porcelain Co. (CH)	OH	Roberto G. Ceconi	OK
KeySpan Energy	NY	Nicholas E. Berkholtz, P.E. (CH)	MN	Ronald K. Jakubas	MI
Krista Kotur	MO	Novartis Pharm. Corp.	NJ	Roy W. Hanson	DE
L. Randol Marzuola	OK	Ocean Farming, Inc. (CH)	VA	RPA Associates, Inc. (CH)	PA
Laplace Engineering, Inc. (CH)	TX	ONEOK Gas Transportation	OK	Samuel B. Ledbetter, P.E.	GA
Laplace Technologies, Inc.	TX	Owens Corning (CH)	OH	Sandoe Hanna Weld. & Rep.	CA
Laurin Publishing Co. (CH)	MA	P. R. Bradley & Assoc. (CH)	GA	Saturn	MI

PEI Sustaining Sponsors, 1999 – 2003 (CH) Charter Member					
Sponsor	State	Sponsor	State	Sponsor	State
Leidy Engineering Sales (CH)	OH	Paige and Johnnie Theriac, P.E.	KY	Service Force Engineering	NY
Lester Lieberman, P.E.	NJ	Park Detroit	MI	Siloam Stone, Inc. (CH)	CO
Liberty Mutual Ins. Group (CH)	MA	Link Electric & Safety Co. (CH)	TN	PCS Phosphate Company	NC
Snorkel Economy (CH)	MO	The Ram Companies	OK	Waldron Batey & Wade (CH)	KY
Southern Company (CH)	GA	Theodore O. Wright, P.E.	WA	Walter F. Johnsey	AL
Spectrum Laboratories (CH)	NJ	Underwriters Lab. (CH)	IL	Warapote Thongsilar	CO
STAT-A-MATRIX (CH)	NJ	US Navy Public Works (CH)	HI	Wesley R. Johnson	KS
Steve W. Laskey	AZ	Vapor Power	PA	Westinghouse Plasma Corp	PA
Steven G. Gauthier P.E.	LA	Accu Cost Const. Consultants	NY	Westpoint Stevens, Inc. (CH)	GA
Stryker Instruments (CH)	MI	Vinyltech Corp.	AZ	Wildcat Const. Co. (CH)	KS
Sunland Engineering	TX	Virginia Air Bal & Cnt. (CH)	VA	Wilfredo Vivoni	PR
Sverdrup Technology, Inc.	TN	Visser Brothers	MI	William J. Kormos	PA
T B Woods, Inc. (CH)	PA	Vladimir L. Goldenshteyn	NY	William J. Wiley	MO
Tal R. Centers, Jr.	TX	Vulcan Materials Co. (CH)	AL		

PEI Sustaining Firms, 2004 - 2013					
Sponsor	State	Sponsor	State	Sponsor	State
ABM Engineering Services	NY	DuPont	DE	McGill Power Sales & Engr	IN
Administrative Controls Mgmt.	MI	EDI-Electrical Design, Inc.	AZ	Mectron Engineering, Co.	MI
Air Con Refgn. & Heating, Inc.	IL	Engineering Software	MD	MLB Engineers, Inc.	TX
Alpha Golf, Inc.	CA	FJS Research , Inc	FL	Numerical Concepts, Inc.	IN
American Electric Power	OH	HEMCO Corporation	MO	ONEOK Gas Transportation	OK
Applied Data Sciences, Inc.	TX	Highley Group PLLC	ID	PCT Engineered Systems	IA
Arctic Foundations, Inc.	AK	ITT Flygt Corporation	TX	Petroleum Consultant	TX
A. T. & T.	IL	Jackson Flexible Products, Inc.	MI	Protherm Services Group	TX
Aventis Behring, LLC	PA	Jacobs Sverdrup	TN	QTEC, Inc.	AL
Big M Constructors, Inc	TX	JEI Metallurgical, Inc	TX	Reitz Consulting, Ltd.	ND
Boyce Consultancy Group, LLC	TX	K & I Consulting LLC	WI	Rentech Boiler Systems, Inc.	TX
CDS Separation Technologies	TX	Lauren Engineering and Cons.	TX	Rocky Mountain Engr.	NE
Cleco Corporation	LA	Leidy Engineering Sales Inc	OH	Theriac Env. Consultants	KY
Continuing Education & Dev.	NY	Lockheed Martin MS2	NY	Vinyltech Corporation	AZ
DEB Consulting	GA	Malisko Engineering, Inc.	MO	W.J. Castle P.E. & Associates	NJ
D'Huy Engineering, Inc.	PA	McAbee Construction	AL	Warren S. Unemori Engr Inc.	HI

PEI Individual Sponsors, 2004 - 2013					
Sponsor	State	Sponsor	State	Sponsor	State
Antoine H. Ayoub	GA	Harvey Bradley, P.E.	PA	L. Randol Marzuola	OK
Bob Becnel, P.E., F.NSPE	MO	J. Kevin Cooper, P.E., F.NSPE	OK, PA	Linus M. Stoll	WI
Brent Corwin Sisler, P.E.	OH	J. Robert Stockner	IL	Linus Stoll	WI
Clyde H. Nagata, P.E., F.NSPE	HI	J. Robert Stockner	IL	Michael Vinarcik, P.E.	MI
Cray L. Foley, P.E.	CA	James L. Carroll, P.E.	TX	Paige & Johnnie Theriac	KY
Cynthia J. Matthews, P.E.	IL	James Otis Chaffin, Jr. P.E.	AL	Randol & Jocelyn Marzuola	OK
David W. Malm, P.E.	NV	Jasper N. Warren, P.E.	TX	Richard Proeschel, P.E.	OH
Donald L. Henderson	WI	John A. Cable	OH	Richard Vinkovich, P.E.	MI
Edward J. Bradley, Jr., P.E.	MO	John Berry	OK	Robert E. Bradfield, P.E.	TX
Fred Abdula, P.E.	IL	John C. Fenoglio, P.E.	IN	Roy H. Beaton, P.E.	WA
Gary R. Keesecker, P.E.	VA	John Dicky, P.E.	NY	Theodore O. Wright, P.E.	WA
Gary R. White	HI	John W. Russell, P.E.	TX	Wesley R. Johnson, P.E.	KS
Gautam Kapadia	TX	Jonn Nebbe, P.E.	IA	William J. Kormos, Sr.	PA
H. LeRoy Henderson, P.E.	TN	Karl F. Southerland	OH	Woodrow A. Erickson, P.E.	CO
Harold C. Schanck	NJ	Kenneth W. Repsher, P.E.	TX	Ronald E. Hill, P.E.	MO
Gordon Feric	MD	Ralph Leidy, P.E., F.NSPE	OH	Ronald K. Jackubas, P.E.	MI
Bruno J. Maciejewski, P.E.	TX				

VALUE ENGINEERING

This was another short-lived project that was considered in the 1990, and early 2000's as part of a seminar for the Professional Edge Series. Value Engineering became a seminar on emerging techniques to reduce costs in engineering contracts. Value Engineering became a proactive tool to evaluate solutions for design, construction and construction management. Value Methodology was to have a number of applications in the industrial sector such as product improvement, reliability of supplier delivery, and (just in time) manufacturing.

The seminar was delivered at the Annual Meeting in Norfolk and Detroit. PEI felt that there was a joint targeted audience for these seminars within the Professional Engineers in Construction (PEC) Practice Division. The two Practice Divisions collaborated on the seminars that were presented.

VIRTUAL UNIVERSITIES

This "stand-alone" product was a 90-minute seminar session that comprised three presentations that addressed currently existing options for earning either professional

certifications or master's degrees from accredited online programs using the Internet. The presentation identified existing programs, described the nature of the virtual classroom, provided contact information, and answered positional questions about how this new medium of education and learning operates.

At the Society's July 1999 annual convention in Spokane, WA, a trial offering of "Virtual Universities: Your Online Options for Earning Professional Certificates and Accredited Master's Degrees" was conducted to show how engineering professionals can use leading online technology to meet evolving education and career development needs.¹⁴⁶

This was a short-lived product partially due to the project manager resigning at the time. PEI elected to sunset this project in 2000-2001.

With the advances in the Internet and faster Internet connections made available to engineers at work and home, online access has taken on much more prominence. While virtual university degrees exist, it will be a matter of time when NSPE affiliates itself with these available programs as a member service. In the meantime, many opportunities continue to exist for online Continuing Education Units and other training for members.

WOMEN IN PEI

The 1970's saw more women entering the engineering field. As they progressed in their work area, many saw a need to be active in the professional field. A few felt they could contribute and attended the Board of Governors meeting as delegates. In March 1984, Richard Collier, PEI Vice Chair for the Central Region created an ad hoc group to look into the subject which he titled "Involvement of Women in NSPE". He submitted a report to the PEI Executive Board and PEI Board of Governors on June 27, 1984 with his findings.

¹⁴⁶ Engineering Times, December 1999, page 19.



Women leaders within PEI have made a significant contribution. From left to right: Gloria Holt, PEI Chair 1995 – 1996; Karen Pedersen, PEI Chair 1999 – 2000; and Teresa Helmlinger, NSPE President 2003 – 2004.

Members serving in the ad hoc group included:

- Richard Collier, P.E.
- Kathy Burns, P.E. – New Jersey PEI Governor
- Robin Steele, P.E. – Maryland PEI Governor
- Sharon Lindquist-Skelley – Society of Women Engineers (SWE)
- Cindy Currey – PEI Member from West Virginia Society of Professional Engineers

The group focused on three primary questions:

- 1) Is there a particular problem with PEI's structure or procedures which discourages the participation of women engineers? If the answer to the question is yes, what can be done to correct the matter?
- 2) Would more attention placed on specific projects or committees generate more interest of women engineers?
- 3) Is public relations (PR) our problem? If the answer to the question is yes, what kinds of PR would help to attract more women engineers?

They determined (1) that women engineers want and need to be taken seriously, (2) promote NSPE to college students, (3) eliminate patronizing remarks toward women engineers and extend no further special treatment to men or women engineers as they are all professional, (4) women engineers want to feel wanted as engineers and not as female engineers, (5) improve NSPE and PEI

image for all engineers, (6) reduce dues for members under 30 years old, and (7) develop relations with SWE to expand women engineers attending events and meetings.¹⁴⁷

Over the years, PEI was never able to get more than one to two female members on the Executive Board at a time. The lack of involvement by female members continues to be a problem for NSPE, PEI and the State Societies. On a much larger basis, recruiting women into engineering careers continues to be a continued effort in the United States.

YOUNG ENGINEERS

The younger members of the industry became a focus for the Society as a whole in early 2000. It was felt that members could provide a key to rejuvenate the culture and energy within the Society as well as help grow membership. NSPE established the YEAC Committee for the under "35" member. Later in the decade NSPE established a Board of Director slot for a young engineer representative.

PEI officially recognized a position for younger members by modifying its bylaws in July 2002 to create a young engineer representative on the PEI Executive Board. Prior to that, PEI Chair, Doug Benner, established the first PEI Young Engineer's Group meeting on July 14, 2002.

The new position that PEI created took office for the first time during the 2003-2004 administrative year by Jonn Nebbe of Iowa. From the start of the NSPE YEAC Committee, the industry members on that Committee became active immediately. Michael J. Vinarcik was one of the first YEAC members to serve on the NSPE YEAC Committee. Vinarcik also served in the PEI YEAC during the interim year of 2002 – 2003 until it was a voting position.

In 2002 – 2003 The Young Engineer Advisory Group (YEAC) named Michael Vinarcik as Chair. The group focused on several projects during the next six months:

- Possibly starting a Young Engineer article in Engineering Times, "Why Am I a PE?" for publication in Engineering Times or technical society publications,
- Help sponsor science fair awards at high school level with NSPE logo/name,
- Develop Young Engineer/Board of Ethical Review Challenge possible at the University level.

¹⁴⁷ "PEI Ad Hoc Committee Examines Active Involvement of Women in NSPE", PEI Industry Forum, Summer/Fall 1984, pages 1-2.

Engineering Times Features of PEI Young Engineers			
 <p>Stacey Lamer, E.I. June 2003</p>	 <p>Jennifer Herrell, E.I. July 2003</p>	 <p>Carlos Garza, E.I. Aug/Sep 2003</p>	 <p>Michael J. Vinarcik, P.E. October 2003</p>
 <p>Jonn Nebbe, P.E. December 2003</p>	 <p>J. Kevin Cooper, P.E. March 2004</p>	 <p>Phyllis Duke, P.E. Aug/Sep 2004</p>	 <p>Todd Smith March 2005</p>

Beginning June 2003, the select Young Engineers were profiled in the Engineering Times. In the 2003 – 2004 time frames, the PEI YEAC took on promoting engineering through science fairs around the country. The annual Intel ISEF Science fairs, which are held in October, and the PEI YEAC agreed to issue a NSPE-PEI sponsored-award at each of the fairs. In addition to the award and certificate, the winner received a free subscription to Engineering Times. About 6 months later in spring 2004, it was reported that students (7th to 12th grade) from more than 400 science fairs were recognized by NSPE-PEI with the giving of “Innovative Engineering Award” for their science projects that year. Over 100 of the recipients registered with NSPE to receive a free one-year subscription to Engineering Times. In addition, they received a certificate and a unique lapel pin.

Also, during the 2003 – 2004 year, NSPE created an alliance with MentorNet through efforts of the PEI YEAC. MentorNet was a one-on-one online mentoring service that addresses the retention and success of women in engineering and science.

In 2003 – 2004, PEI had re-aligned the YEAC to fit regions much like the Executive Board. This was done to give regions a representative on the YEAC and better recruit for future YEAC Vice Chairs.

A few years later, the YEAC under the Chairmanship of James Mathis, began an outreach trial at the Texas A&M to create a PEI student branch. The University of Central Florida was also designated as a possible candidate. The idea was that an existing NSPE Chapter at the school would be in place and student would request NSPE-PEI to help promote industry concepts. Mathis

worked on this from 2005 – 2007 (2 terms). He had success in talking with students at Texas A&M and support of the faculty advisor. This was Mathis’s alma mater, so he already had some knowledge of the student body. This approach was identified as a model for PEI to implement elsewhere.

2002 – 2003 Professional Engineers in Industry YEAC Group	
Position	Name
Chair	Michael J. Vinarcik

2003 – 2004 Professional Engineers in Industry YEAC Group	
Position	Name
Chair	Jonn Nebbe
Chair-Elect/Secretary	Jennifer Harrell
NSPE YEAC Liaison	Michael J. Vinarcik
Immediate Past Chair	Michael J. Vinarcik
Member	J. Kevin Cooper
Member	Phyllis Duke
Member	Carlos Garza
Member	Samuel G. Sudler III
Member	James Mathis
Member	Jennifer Ries
Member	Ray Still
Member	Todd Smith

2004 – 2005 Professional Engineers in Industry YEAC Group	
Position	Name
Chair	Samuel Sudler III
Chair-Elect/Secretary	Vacant
NSPE YEAC Liaison	Michael J. Vinarcik
Immediate Past Chair	Jonn Nebbe
Northeast Vice Chair	Phyllis Duke
Southeast Vice Chair	Vacant
Central Vice Chair	Mike Vinarcik
Central Vice Chair	Ray Still
North Central Vice Chair	Jonn Nebbe
Southwest Vice Chair	James Mathis
Western & Pacific Vice Chair	Kelly Johnson

2005 - 2006 Professional Engineers in Industry YEAC Group	
Position	Name
Chair	James Mathis
Chair-Elect/Secretary	Carlos Garza
NSPE YEAC Liaison	Michael J. Vinarcik
Immediate Past Chair	Samuel G. Sudler III
Northeast Vice Chair	Cullen M Flanders
Southeast Vice Chair	Vacant
Central Vice Chair	Jeffrey Henkle
Central Vice Chair	Ray Still
North Central Vice Chair	Jonn Nebbe
Southwest Vice Chair	Richard Willoughby
Southwest Vice Chair	Greg Brauntz
Western & Pacific Vice Chair	Kelly Johnson

2006 - 2007 Professional Engineers in Industry YEAC Group	
Position	Name
Chair	James Mathis
Chair-Elect/Secretary	Vacant
NSPE YEAC Liaison	Michael J. Vinarcik
Immediate Past Chair	Samuel G. Sudler III
Northeast Vice Chair	Cullen M Flanders
Southeast Vice Chair	Vacant
Central Vice Chair	Jeffrey Henkle
Central Vice Chair	Ray Still
North Central Vice Chair	Jonn Nebbe
Southwest Vice Chair	Richard Willoughby
Southwest Vice Chair	Greg Brauntz
Western & Pacific Vice Chair	Kelly Johnson
Western & Pacific Vice Chair	James McDonald

2007 - 2008 Professional Engineers in Industry YEAC Group	
Position	Name
Chair	James Mathis
Chair-Elect/Secretary	Vacant
NSPE YEAC Liaison	Michael J. Vinarcik
Immediate Past Chair	Samuel G. Sudler III
Northeast Vice Chair	Cullen M Flanders
Southeast Vice Chair	Vacant
Central Vice Chair	Jeffrey Henkle
Central Vice Chair	Ray Still
North Central Vice Chair	Jonh Nebbe
Southwest Vice Chair	Richard Willoughby
Western & Pacific Vice Chair	Kelly Johnson

After the 2007 - 2008 year, the YEAC became less structured and so a formal roster of members by region was not maintained. However, the practice of a young engineer representative on the Executive Board continued.

Young Engineer Representative to PEI Executive Board	
Year	Name
2008 - 2009	Richard Willoughby
2009 - 2010	Austin Lin
2010 - 2011	Austin Lin
2011 - 2012	Peter E Pisasale
2012 - 2013	Peter E Pisasale

INTEREST GROUP YEARS

2005 AND BEYOND

NSPE undertook a significant restructuring of its organization in July 2006. This reorganization had a major impact on PEI and all Practice Divisions and will forever change the concept to Interest Groups as well as move the Society into a pure PE/EI member model.

The Future Directions Task Force (FDTF) was established in January 2004 by NSPE President Bobby Price with agreement from Past President Helmlinger and President-Elect Gray. The Task Force had approximately 16 members and represented a diverse group of members across NSPE. PEI members Bob Becnel and Sam Sudler were on the Task Force. Over the course of 18 months, the Task Force met in Washington DC on a bi-monthly basis.



Members of PEI at the NSPE Annual Meeting in 2005 at Chicago. (Bottom, left to right): Curtis Beck, HI; Rick Buchanan, OH; and Barry Nakamota, HI. (Top, left to right): Bob Becnel, MO; Mike Vinarcik, MI; and Clyde Nagata, HI. (. (Photo from NSPE).

Initially, the Task Force was led by a professional consultant, but then became guided by Task Force member Kevin Cooley (FL). The Task Force considered many relevant structures and services that NSPE ought to be delivering based on member input and survey data. The Winter Meeting in San Diego January 2005 included a presentation and FDTF Summit to further develop and sell key tenants in the proposal. The final report from the FDTF was released June 20, 2005 in time for the Annual Meeting in Chicago. It was subsequently approved by the NSPE Board of Directors.

The following year was spent implementing the roll out of the restructuring. The most notable changes included a 2-body governance structure: House of Delegates and Board of Directors. The theory was to return many of the decisions back to the State Societies. Unfortunately, it became evident that the new structure was not a solution to the ongoing problem for NSPE's loss of membership.

Secondary, Practice Division representation was reduced on the Board of Directors from 5 positions to 2 positions, while each Practice Division was given a position on the House of Delegate. The two positions on the Board of Directors rotates with all 5 Practice Divisions. Practice Divisions were renamed Interest Groups. From the perspective of governance, the Interest Groups took a step closer to being a Committee structure. Budget was also reduced for Interest Group travel. Meeting space on the Annual Meeting agenda for a typical PEI Executive Board Meeting has been generally limited to 2 hours as of 2013, which was traditionally a full day. All of these changes have impacted PEI's face-to-face discussions and project development.

Now that PEI had an official position on the House of Delegate, it became necessary to elect a member each year for this position. By default, PEI opted for the outgoing Past Chair to be House of Delegate member. In 2006, PEI also opted to add this position to the Executive Board as a voting member. Moreover, when the slot for Board of Director was assigned to PEI, this position as well had to be appointed.

During the period of time while the FDTF was deliberating, Kim Granados of the NSPE Staff worked with appointed leaders and strategic thinkers from each of the five Practice Divisions in order to develop further synergies. A worst case scenario was to prepare for a comprehensive Practice Division consolidation and the outcome of this Committee was to provide a rationale against consolidation. Bob Becnel and J. Kevin Cooper represented PEI. Becnel asked Cooper to be the lead for PEI in order for him to prepare for the PEI Chair position the following year.



National PEI Executive Board Member Peter Pisasale was selected as the 2012 NSPE Young Engineer of the Year. Pisasale was an engineer from Raytheon. (Photo PE Magazine, Aug/Sep 2012).

From the Committee's work, PEI established a new Mission, Vision and Strategic Goals¹⁴⁸:

Vision

Professional Engineers in Industry serve as the leading resource group and advocates for encouraging industry-wide recognition and value for licensed engineers and those seeking licensure.

Mission

PEI provides value to NSPE members in industry through the promotion of professional practices and policies, including support of the licensure process for engineers in Industry. Our mission includes offerings of educational and professional development opportunities and actions to increase the public awareness of the contribution of professional engineers in Industry

Strategic Goals of PEI

¹⁴⁸ "Planning for Success 2006-2007: The Five Professional Practice Communities of the National Society of Professional Engineers", NSPE, page 20.

- 1) Elevate the awareness and benefits of licensure for engineers in Industry, and support those that are already licensed.
- 2) Promote professional practices within industry and recognize the contribution of professional engineers in Industry.
- 3) Provide continuing education, leadership training, professional development, networking opportunities and other soft-skill training for engineers in Industry.
- 4) Develop and nurture current and future leaders of Industry and NSPE through their involvement in the activities of the PEI practice division, at the state, regional, and national level, and continue to foster the growth of the YEAC.

During 2007 – 2008 the contentious issue of permitting State Societies to offer State-only membership arose. The issue came to a vote before the House of Delegates. In other words, some States wanted to offer “2 tier” membership: State + Chapter. The notion was that the cost of NSPE’s portion of the membership hurt membership. This issue became such that some states declined to wait for the vote in the House of Delegates. In fact, one year before the vote, the Missouri Board of Directors approved a 2 tier membership at their Board of Director’s Meeting.

When the vote came to being cast in the House of Delegates, PEI Delegate Bob Becnel opposed the issue on grounds of principal. However, acting under guidance of the PEI Executive Board, Becnel supported the measure in the House of Delegates. The overall measure was approved.

As NSPE and PEI began another decade, PEI has remained a voice for those engineers who practice within industry. Steinman and the creators of the early formations of PEI wanted a group to fend off against engineers and collective bargaining. Now, the leaders of PEI are fending off against issues that include employment security and heavy competition for membership from other technical organizations.

COMMUNICATIONS

With the formation of Practice Divisions, each Division wanted to communicate with its members on its various programs. They wanted to impart information that was of particular interest to that Division's type of professional. The PEI established its newsletter in 1963.

The first newsletter of the PEI Committee was sent to the members in 1956. The early newsletters relayed the various committee findings, arguments necessary for a separate division, but little of general information about the profession and industry. These messages went to a limited group of members who were primarily the officers, board members and the visitors who came to the Executive Board or Board of Governors meetings. In fact, one NSPE president asked the



The first dedicated PEI newsletter, The Engineering Employment Practice Newsletter ran from 1956 - 1967 (bottom); and the Professional Engineer in Industry Newsletter followed from 1967 - 1975.

Newsletter was printed on buff color stock with two color (light blue and black) printing. The messages were short and to the point and most active members read the news bulletin with interest. Surveys were performed to be sure members were satisfied with the communication vehicle.

Executive Board if they knew how many members they actually had. No one could give him a definite answer. The Executive Board advised the President of NSPE they hoped the new central billing would correct this situation.

Finances had improved to the point that the PEI officers felt a more attractive newsletter with better edited copy must be sent to all the membership. Beginning in January 1964, a four page Newsletter went out monthly to the members. The

In 1974, there was downturn in revenue and it was necessary to change the PEI Newsletter. The Newsletter went to a bimonthly publication with the use of white book stock rather than the buff. By 1975, all Practice Divisions of NSPE finances were in trouble. One solution was investigated - a Division Newsletter for all Practice Divisions. The decision for one news bulletin for all Practice Divisions was made in 1976. After a few newsletters, each Division felt the common news bulletin was unsatisfactory and each Division decided to return to its own publication.

Newsletters were not sent to the membership from 1977 through 1979. Some brochures were sent to the members as a communication medium but most felt they were ineffective.

However, two of the brochures were well received - "Promote Registration" and "Continuing Education."

In 1979, a 2nd class postage permit was applied for. This allowed the Executive Board to renew the PEI Newsletter for the membership. In order to finance the Newsletter, staff was advised the newsletter or paper would be typewritten and reproduced in the office.

In 1982, many of the technical societies were using newsprint for their method of communicating to their members. For example, the Ohio Society of Engineers and the Professional Engineers in Construction were using newsprint for their publications. The company doing this work proposed the same to the Executive Board and they agreed. The Summer/Fall of 1981 Volume 1, Number 1 was the first issue. The Newsletter title was NSPE-PEI Industry Forum. Each Newsletter was sent to the entire NSPE-PEI family. The format allowed more stories and more pictures. The normal Industry Forum was four page, newsprint. This publication continued in this format through the February/March 1989 issue.

With the June/July 1990 issue of the Industry Forum, the Executive Board decided the newsletter should be printed on better white stock. It was the opinion that the individual members

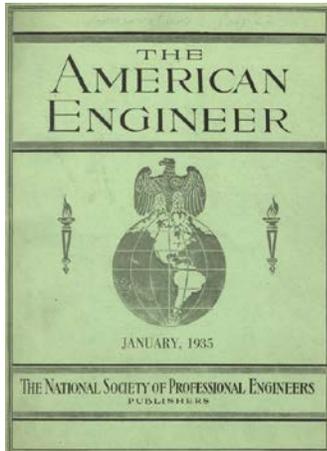


The Industry Forum ran from 1983 - 1992(top); The Industry Engineer ran from 1992 - 1997 (middle); and the PEI E-News is the present PEI publication since 2004 (left).

would be more apt to read the newsletter since so many technical and professional publications were now in newsprint.

The Executive Board believed the best communication to the members is via the Board of Governors delegates. It is the goal of the Executive Board for the Governor to return to the State Society and give to the members of his PEI State Section and the various State Chapters the actions at the Board of Governor's meeting at both the Annual and Winter meetings¹⁴⁹.

In 1992, the PEI Executive Board changed the name from the Industrial Forum to Industry Engineer. It was reported that this change was a directive by the NSPE publications staff and NSPE Communications Committee. The format remained as a tabloid size with the better white stock. However, the frequency increased to six issues per year. This format remained in service through 1997. It was at this point, that drastic reduction in expenses for Practice Division led to the sharing of the Engineering Times. Practice Division was given about 2 pages per issue in the Engineering Times, a glossy tabloid stock.



The American Engineer which was the primary NSPE publication from 1934 until 1968. (Photo from NSPE 75th Anniversary Slides).

The move to the Engineering Times featured less of the Division's governance and highlighted more general articles from industry. With the advent of NSPE migrating to more electronic communications, the PEI E-news picked up the slack. The PEI E-news was prepared for by the PEI Staff Manager and featured more timely material, award winners and governance. When the Engineering Times suspended operations and the PE Magazine began, all Practice Division material was removed as well, other than articles pertaining to all NSPE membership. The PEI E-news has continued to be the official record of PEI.

From the publication of the PEI Industry Forum (later the PEI Industry Engineer) and up until the Engineering Times consolidated the practice division newsletters in 1997, the services of Black Rose Communications was enlisted as the publisher. Black Rose was operated by Steven Storts and located in Dublin, Ohio. For many years, part of PEI's budget was earmarked for Storts to travel to events and meetings to cover PEI activities in greater detail. Storts also photographed many of the important highlights at relevant events. Once the Engineering Times became the primary PEI publication in 1997, Storts' role was relegated to furnishing industry-related articles in the PEI section. After the PE Magazine replaced Engineering Times in 2005, the services of Black Rose and Storts were no longer necessary. However, in 2010, Storts was enlisted to write quarterly articles for the PEI E-News and two other NSPE interest groups' e-news publications. Working today under the business name of The Virtual Freelancer, Storts holds the proud distinction of being presented the NSPE Outstanding Service Award (1995) for his contracted work with several NSPE interest groups, an honor rarely bestowed upon non-engineers at that time.

¹⁴⁹ The First 30 Years, NSPE, pages 15 - 16.

SLIDE SHOWS

Another means of reaching the PEI public were to use slide presentations. These were effective when the local PEI members presented the slide show to the State PEI Section and local State Chapters.

PEI Produced Slide Shows	
Year	Description
1966	NSPE through PEI - this slide program discusses what NSPE does through PEI for engineers in industry and is aimed primarily for the nonmember in industry
1975	PEI Membership - a slide show developed with the emphasis on PEI primarily to be used by state PEI sections.
1976	PEI Membership - an improved slide show of 1975 show.
1976	PEI Slide Presentation, Dun-Donnelly seminars, Management Games, Inc.
1980	PEI Slide Presentation - Meant for state chapters. Slides were sent to each state PEI governor.

BROCHURES

Another method of communication was by brochures. Most of the brochures used by PEI were developed by NSPE. However, some were developed by PEI and used by NSPE.

PEI Produced Brochures	
June 1969	<i>What NSPE does for the Engineer in Industry</i> , which was a concise presentation of the values of PEI to the engineer in industry - a membership pamphlet for introducing new members to PEI.
July 1969	<i>Standard for Professional Engineer - Management Relationships</i> , which was a kit developed by PEI and made available for chapter and group use in promotion of the engineer-management relationships program.
October 1969	<i>A Positive Approach to Good Personnel Relations</i> , which was a guide for engineers and employers of engineers to prevent unionization and to use when faced with unionization tactics. The document was revised in the 1972-1973 time frame.
1970	<i>Economic Welfare of the Engineer</i>
August 1971	<i>Professional Engineers in Industry</i> , which was published as an attempt to answer "critics" who oppose the practice section concepts and "laymen" who ask, "What does PEI do?"
December 1972	<i>PEI Officers and Delegates Handbook</i> , which was a brochure that contained the Rules of Government and Operation; Responsibilities of the Officers of PEI including Chair, Vice Chair, Secretary, Delegate to Board of Governors, State Practice Chair, and Staff Director - PEI; Duties of PEI Committee; PEI Policies; and a Model Rules of Government and Operation for State PEI sections. ¹⁵⁰
May 1973	<i>Guidelines for Professional Engineering Employment</i>

¹⁵⁰ "PEI Officers and Delegates Handbook", Professional Engineers in Industry Newsletter, December 1972, page 2.

PERIODICALS

At every point in its life, PEI, like NSPE has kept its members informed of news and other related information through communications. Traditionally, the formal method of communications has been written. For many years, PEI was fortunate to have a professionally produced, printed document that was sent to members through the US Mail. This has allowed the Practice Division to promote events, recognize outstanding achievements, advertise NSPE and PEI products, and provide official governance results of Board of Governor and of Board of Director Meetings.

Throughout, the years, NSPE has experimented with its publication formats, frequency, and content. This experimentation has also guided the Practice Divisions in similar manner in order that all of them would provide a cohesive end product to its respective members.

The primary publication of the Society was always more general in nature and spoke for all members across Practice Divisions and at-large. Early in the history, the NSPE publication also served the role of Practice Division publication for PEI and others. As the PEI became more active, it was apparent that a dedicated publication was necessary.

Official NSPE Periodicals			
* Official publication of the NY State Society of Professional Engineers/NJ Association of Professional Engineers prior to NSPE			
** PEI/Industry Section in most issues			
Name	Dates	Annual Issues	Format
The American Engineer *	[v. 1, no. 1] Jan 1931 - [v. 4, no. 8] Sept 1934	Monthly	8 ½ x 11, Magazine
The American Engineer **	[v. 1, no. 1] Jan 1935 - [v. 1, no. 10] Oct 1935 [v. 5, no. 11] Nov 1935 - [v. 37, no. 7] Jul 1968	Monthly	8 ½ x 11, Magazine
Professional Engineer (PE) **	[v. 38, no. 8] Aug 1968 - [v. 54, no. 2] Summer 1984	Monthly	8 ½ x 11, Magazine
NSPE News	Sep 1975 - Summer 1984	Monthly	4 page insert in PE
Engineering Times **	[v. 1, no. 1] Sep 1979 - [v. 27, no. 12] Dec 2005	Quarterly, Monthly	11 ¼ x 16 ½, Tabloid
Professional Engineering News **	[v. 1, no. 1] Sep/Oct 1984 - [v. 6, no. 2] Summer 1989	Bi-monthly	8 ½ x 11, Magazine
PE Magazine	[v. 28, no. 1] Jan 2006 - Present	10	8 ½ x 11, Magazine

Official PEI Periodicals			
Name	Dates	Issues	Format
Engineering Employment Practices Newsletter	[v.1, no. 1] Apr 1956 - [v. 12, no. 3] Mar 1967	Monthly	8 ½ x 11, Newsletter
PEI Reporter	Announced Winter 1964		
Professional Engineer in Industry Newsletter	[v. 12, no. 4] Apr 1967 - [v. 20, no. 4] Jun/Jul 1975	Monthly, Bi-monthly	8 ½ x 11, Newsletter
Professional Engineer in Industry Newsletter	[v. 1, no. 1] Spring 1978 - Early 1980's	Quarterly	8 ½ x 11, Newsletter
NSPE PEI Industry Forum	[v. 1, no. 1] Summer/Fall 1983 - [v. 9, no. 3] Feb/Mar 1992	Quarterly	11 ¼ x 14 ½, Tabloid
Industry Engineer	[v. 9, no. 4] Apr/May 1992 - [v. 14, no. 4] Apr/May 1997	Quarterly, Bi-monthly	11 ¼ x 14 ½, Tabloid
PEI E-News	Sep 23, 2004 - Present	Est Monthly	Electronic

PUBLICATIONS

PEI produced many publications beyond just periodicals over its history. In the 1950's and 1960's, there were several "major" publications including a textbook. It was often common for conference proceedings to be generated based on PEI topics presented at Governance meetings of NSPE and PEI. Also, it was customary to make the publications available for sale to members and non-members. They would be advertised in the American Engineer and other subsequent periodicals of NSPE. State organizations were also very supportive of advertising these publications.

A listing of the known major publications is contained, herein. Often, a "NSPE Publication" number was associated with the document. This practice continued into the late 1990's to identify the publication, much like a SKU or part number.

Publications of PEI and Industry from NSPE		
** Listed in References		
Pub	**	Title
0003	**	NSPE Publications & Audiovisual Catalogue (1983)
0013	**	Guidelines to Professional Employment for Engineers and Scientists, 4 th ed (2006)
0014	**	Engineering Manpower - A Dilemma: Report of the Engineering Manpower Supply and Demand TF (1976)
0015		Principles for Performance Evaluation
0016		Analyzing Your Total Compensation
0017		Employer Recognition Program
1201		Functional Section Manual
1401	**	PECBI: How to Improve Engineering-Management Communications, Survey No 1 (1952)

Publications of PEI and Industry from NSPE		
** Listed in References		
Pub	**	Title
1402	**	PECBI: How to Improve the Utilization of Engineering Manpower, Survey No 2 (1952)
1403	**	PECBI: How to Attract and Hold Engineering Talent, Survey No 3 (1954)
1404	**	PECBI: How to Train Engineers in Industry, Survey No 4 (1955)
1405	**	PECBI: Career Satisfaction of Professional Engineers in Industry, Survey No 5 (1957)
1406	**	PECBI: Engineering Professionalism in Industry, Survey No 6 (1960)
1407	**	Criteria for Professional Employment of Engineers (1956)
1408-A		Bibliography of Engineering Employment Practices, Salaries, Manpower and Unionization (1966)
1408-B		Bibliography on Utilization of Engineers (1966)
1409		Engineer – Management Communications: The Sounding Board Approach (1965)
1410	**	Periodical: Engineering Employment Practices Newsletter (1956-1967)
1411	**	Index to NLRB Determinations of Prof and Technical Employee Status Under the Taft-Hartley Act, 1947-1962
1412-A	**	NSPE Employment Practices Policies (1960) 1) Professional Responsibility vs. Collective Bargaining 2) Professional Provisions of Labor Legislation 3) Aid to Engineering Technicians in Opposing Collective Bargaining
1412-B	**	NSPE Employment Practices Policy Statements, “Engineer-Management Communications” (1958)
1412-C	**	NSPE Employment Practices Policy Statements, “Engineering Titles” (1958)
1413	**	Tabulations of Unions Representing Engineering and Technical Employees (1965)
1414	**	NSPE Believes: The Professional Engineer in Industry (1953)
1415		Recommended Grades, Duties, Responsibilities and Qualifications for Pre-professional & Professional Positions
1416	**	DuPont’s Engineers Take A Forward Look at Professional Development (1956)
1417	**	The Engineer in Industry in the 1960’s, A Professional Program (1961)
1418		Industrial Professional Development Policies
1419	**	Professionalism in Industry: The Dow Story (1955)
1420		The Engineer – A Member of Management?
1421		The P.E. at Parke Davis
1422	**	Ten Steps to a Professional Engineer-Management Relationship in Industry (1961)
1423		The Engineering Union – A Dinosaur in the Space Age
1424		The Decline of the Labor Movement
1425		Professional Responsibility vs. Collective Bargaining (1963)
1426	**	Evaluating Engineering Performance (1963)
1427		Federal Security Clearances and the Rights of Employees
1428	**	Proceedings: Engineering Brainpower for the Aerospace Industry, Oct 10-11, 1963 (1963)
1429	**	Proceedings: Engineers and Management Look to the Future, Dec 4-5, 1964 (1964)
1430	**	Proceedings: Management and the Engineer in Industry, Oct 15-16, 1965 (1965)
1432	**	Proceedings: Utilization of Engineers for Greater Productivity, Oct 14-15, 1966 (1966)
1435	**	Proceedings: The Engineer’s Responsibility for Profit or Loss, Oct 12-13, 1967 (1967)
1437		Structuring of Industry Executive Workshops
1440		PEI Officers and Delegates Handbook (1972)

Publications of PEI and Industry from NSPE		
** Listed in References		
Pub	**	Title
1441-A		A Positive Approach to Good Engineering Personnel Relations (1972)
1442		Professional Engineers Employment Referral Services (PEERS)
1443	**	In the Engineers' Interest...Collective Bargaining v. Collective Action (1973)
1445		Job Hunting – The Seven Steps to Success (1973)
1446		Company Policies and Practices to Encourage Registration
1447		Company Policies and Practices to Facilitate Engineering Communication
1448		Company Policies and Practices in Support of Continuing Education
1449		Selecting Your Next Employer: A Checklist
1451		Survey of the Attitudes and Values of the Professional Engineer in Industry
1452		Company Policies and Practices on Physical Work Environment
1453		Company Policies and Practices to Encourage Participation in Engineering Societies
1454		Company Policies and Practices on Recruitment of Engineers
1455		Company Policies and Practices on Merit Reviews and Salary Plans
1456		Company Policies and Practices on Fringe Benefits
1457		Company Policies and Practices to Encourage Participation in Civic Affairs
1458	**	State Officer's Industry Relations Handbook (1981)
1459	**	Quality First by American Quality and Productivity Institute (1988)
1460	**	Professional Engineers in Industry: The First 30 Years (1991)
1711		An Executive Summary of National Energy Legislation (1979)
1809-A	**	What NSPE does for the Engineer in Industry – Take Charge of Your Future (1977)
2001		How a Professional Attitude Can Be Instilled in Engineers
2003	**	Professionalism or Unionism – Facing the Issue (1954)
2004		Whose Job to Teach Professionalism?
2005		Total Professional Development
2006		Obsolescence of Engineering Knowledge and Skills
2007		Assessing Engineers Attitudes Toward Professionalism
2008		Engineering College: Instruction in Professionalism
2013	**	IEEE Career Asset Manager (1996)
2022	**	Professional Engineers in Industry (Undated)
2111	**	The Function of the Engineer & the Scientist (1966)
2205-A	**	Questions and Answers About Registration for Engineers in Industry (1976)
2212	**	Industrial Exemption in Registration Laws – Position Paper (1975)
2605		A Vital Decision for the Engineering Technician
3018	**	Engineering Stages of New Product Development (1990)
30451	**	The Industry Professional Development Award Guide (Annual Publication Under this Number)
4041	**	NSPE Issues Brief, "Exemptions From Licensing Laws", Dec 1, 1997 (1997)
		NOT USED

Publications of PEI and Industry from NSPE		
** Listed in References		
Pub	**	Title
	**	A Professional Look at the Engineer in Industry (1955)
	**	Brochure: American Industry (Undated)
	**	Changing Face of Engineering Employment in Industry, Jul 6, 1998 (1998)
		Continuing Education of Professional Engineers; PEI Survey Report (1966)
		Final Report of the Skills Conversion Project: A Report to the Department of Labor (1972)
	**	How to Revive a State PEI Division by John Drum (1980)
	**	Industry Engineer (1992 - 1997)
	**	NSPE PEI Guide for State PEI Organizations to Start a "New Product Award" Program
	**	NSPE PEI Industry Forum (1983 - 1992)
	**	PEI Handbook 2006-2007, Jul 3, 2006 (2006)
	**	Practice Division Planning for Success 2006-2007, "The Five Professional Practice Communities" (2007)
	**	Engineer-In-Industry Conf., "Management-Professional Employee Relations" (1956)
	**	Engineer-In-Industry Conf., "Professional Development, the Responsibility of Industry and the Engineer" (1955)
	**	Proceedings: Vesting and Portability in Pension Plans, July 6, 1967 (1967)
	**	Professional Engineers in Industry (PEI) E-news (2004 - Present)
	**	Professional Engineers in Industry Newsletter (1967 - 1975)
	**	Task Force Report and Recommendation for Computer and Software Engineering Licensure Path (2006)
	**	The Next Seven Years: 1991 to 1997, A Supplement to The First Thirty Years (1997)
	**	The Professional Union - A Contradiction (1960)
	**	The Value of Professional Engineering to your Company (Undated)
	**	Where Does NSPE Stand on Industry Exemptions (2005)

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One of the unnoticed values of the NSPE and PEI publications have been the articles written on various topics that are germane to engineers in industry. The early years featured many well written materials on unions and collective bargaining by Paul Robbins; Milton Lunch, NSPE legal counsel; industry engineers and scientists; and managers of major corporations. A comprehensive listing of articles featured through the years in The American Engineer and the PEI periodicals are featured in this section.

EMPLOYMENT PRACTICES/UNIONISM

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ADMINISTRATION

While PEI has had its share of passionate and strong volunteers, there has been a tremendous amount of accomplishments that have occurred behind the scenes in the NSPE offices by the employees of NSPE. Recognizing all of the key staff members is beyond the ability of this publication, but the Staff Manager, of Staff Director, of PEI and the NSPE Executive Director always had the most involvement with the organization.

As PEI migrated to a Practice Section and Practice Division in the 1960's, the need for dedicated staff arose. Long before computers, e-mail and word processing systems, staff members performed considerable amount of clerical work. With time, members became more involved with the administration and clerical work themselves and left the staff to spend more time promoting and advertising PEI.

MEETINGS

Meetings of the Executive Board and Board of Governors have typically been held coincident with the winter and Annual NSPE meetings. The Executive Board also found that it needed to meet in the spring and fall between these two sessions when budget was available. This allowed continuity in program. The meeting locations were selected by the Executive Board membership. The spring and fall meetings ended in the 1990's.

Originally, the PEI Executive Board and Board of Governors met three times a year coincident with the NSPE Board of Directors meetings. Later, when PEI had conferences held in the fall time frame PEI Executive Board and Board of Governors also met during the conferences as well. After these Conferences were discontinued, the Executive Board had regional workshops in the fall. Since the NSPE regional vice presidents were holding regional workshops anyway, it was logical to have the state Practice Divisions of that region meet at the same time. This allowed interface with the State Practice Division officers and State delegates with others from the region.

The first years of these regional workshops were very successful. Many grassroots members became acquainted with PEI and became active. By 1982 the regional workshop or conference concept no longer appeared valid to most of the members. That year many regions dropped the regional conferences. In the late 1980's, some regions again started having Regional Meetings and this eventually resumed throughout the country with meetings occurring at different rates in each Region. Later, the primary purposes of the region meetings were to conduct governance, such as selecting the NSPE Vice Chair for that area. The secondary purpose was to collaborate with common issues across the region.

After the 2005 restructuring of NSPE, the winter meeting was eliminated as a face-to-face gathering. Therefore, PEI did not have face-to-face Executive Board meetings in the winter. For several years, a lengthy Saturday teleconference was held in late January, instead. Eventually, this Saturday teleconference was reduced to a regular one hour teleconference held during the week.

The reasons cited for ending the Saturday teleconference included a decrease in attendance due to scheduling difficulty that made satisfying the full range of time zones.

Summary of PEI Meetings					
Year	Date	Location	Year	Date	Location
1953	Jun 18 - 20	Daytona Beach, FL	1981	Jan 21 - 24	Little Rock, AR
	Nov 6 - 7	Indianapolis, IN		Jul 15 - 18	Bismarck, ND
1954	Feb 19 - 20	Albuquerque, NM	1982	Jan 20 - 23	Phoenix, AZ
	Jun 10 - 12	Milwaukee, WI		Jul 14 - 16	Omaha, NE
1955	Feb 18 - 19	Charlotte, NC	1983	Jan 9 - 15	San Juan, PR
	Jun 2 - 4	Philadelphia, PA		Jul 10 - 16	Dayton, OH
	Oct 14 - 15	Memphis, TN	1984	Jan 16 - 18	San Francisco, CA
Feb 17 - 18	Washington, DC	Jul 8 - 14		Washington, DC	
1956	May 23 - 26	Atlantic City, NJ	1985	Jan 27 - Feb 2	Albuquerque, NM
	Oct 25 - 26	White Sulphur Springs, WV		Jul 15 - 17	Buffalo, NY
	Feb 15 - 16	Charleston, SC	1986	Jan 13 - 15	Fort Worth, TX
Jun 6 - 8	Dallas, TX	Jul 14 - 16		Indianapolis, IN	
1957	Oct 17 - 19	Bismarck, ND	1987	Jan 19 - 21	Orlando, FL
	Feb 13 - 15	East Lansing, MI		Jun 13 - 15	Denver, CO
	Jun 11 - 14	St. Louis, MO	1988	Jan 25 - 27	Mobile, AL
Oct 23 - 25	San Francisco, CA	Jul 18 - 20		Seattle, WA	
1959	Feb 19 - 21	Birmingham, AL	1989	Jan 9 - 11	Atlanta, GA
	Jun 17 - 20	New York NY		Jul 24 - 26	Minneapolis, MN
	Oct 15 - 17	Pittsburgh, PA	1990	Jan 14 - 20	San Diego, CA
Feb 18 - 20	Wichita, KS	Jul 15 - 21		Norfolk, VA	
1960	Jun 8 - 11	Boston, MA	1991	Jan 14 - 16	New Orleans, LA
	Oct 19 - 21	Denver, CO		Jul 22 - 24	Grand Rapids, MI
1961	Feb 9 - 11	Des Moines, IA	1992	Jan 19 - 22	Charleston, SC
	Jul 4 - 7	Seattle, WA		Apr 12 - 13	Pajaro Dunes, CA
	Oct 19 - 21	Roanoke, VA	1993	Jan 23 - 30	Kailua-Kona, HI
Jan 25 - 26	Jackson, MS	Jul 18 - 24		Pittsburgh, PA	
1962	Jun 13 - 16	French Lick, IN	1994	Jan 9 - 15	Tucson, AZ
	Jan 9 - 12	San Antonio, TX		Jul 10 - 16	Kansas City, MO
1963	Jun 26 - 29	Cleveland, OH	1995	Jan 14 - 21	Houston, TX
	Jan 8 - 11	Phoenix, AZ		Jul 23 - 26	Louisville, KY
1964	Jul 1 - 4	Asheville, NC	1996	Jan 17 - 24	Portland, OR
	Jan 20 - 23	New Orleans, LA		Jul 13 - 20	Boston, MA
1965	Jun 30 - Jul 3	Albuquerque, NM	1997	Jan 25 - Feb 1	Charlotte, NC
	Jan 5 - 8	Miami, FL		Jul 19 - 26	Rapid City, SD
1966	Jul 6 - 9	Minneapolis, MN	1998	Jan 24 - 31	Reno, NV

Summary of PEI Meetings					
Year	Date	Location	Year	Date	Location
1967	Jan 4 - 7	San Juan, PR		Jul 24 - Aug 1	Tulsa, OK
	Jul 3 - 6	Hartford, CT	1999	Jan 13 - 20	Atlanta, GA
1968	Jan 10 - 12	Washington, DC		2000	Jul 15 - 17
	Jul 3 - 6	Milwaukee, WI	Jan 28		Arlington, VA
1969	Jan 15 - 18	Las Vegas, NV	2001	Jul 26 - 30	Norfolk, VA
	Jul 9 - 12	Kansas City, MO		Feb 1 - 5	Anchorage, AK
1970	Jan 7 - 10	Atlanta, GA	2002	Jul 26 - 31	Detroit, MI
	Jul 8 - 11	Portland, OR		Jan 17 - 22	Washington, DC
1971	Jan 13 - 16	Memphis, TN	2003	Jul 14	Orlando, FL
	Jul 7 - 10	Louisville, KY		Jan 10	San Francisco, CA
1972	Jan 11 - 15	Dallas, TX	2004	Jul 13	San Antonio, TX
	Jul 11 - 15	Denver, CO		Jan 16	Washington, DC
1973	Jan 9 - 13	Salt Lake City, UT	2005	Jul 11	Honolulu, HI
	Jul 10 - 14	Chicago, IL		Jan 15	San Diego, CA
1974	Jan 15 - 19	Biloxi, MS	2006	Jul 10	Chicago, IL
	Jul 9 - 13	Atlantic City, NJ		Jan 21	Washington, DC
1975	Jan 13 - 18	Tucson, AZ	2007	Jul 8	Boston, MA
	Jul 21 - 26	Minneapolis, MN		Jan 27	Teleconference
1976	Jan 19 - 24	Albuquerque, NM	2008	Jul 28	Denver, CO
	Jul 26 - 31	Philadelphia, PA		Jan 19	Teleconference
1977	Jan 17 - 22	Houston, TX	2009	Jul 26	Portland, OR
	Jul 11 - 16	Anaheim, CA		Jul 16	St. Louis, MO
1978	Jan 25 - 28	New Orleans, LA	2010	Jul 15	Orlando, FL
	Jul 19 - 22	St. Louis, MO	2011	Jul 15	Las Vegas, NV
1979	Jan 24 - 27	Oklahoma City, OK	2012	Jul 13	San Diego, CA
	Jul 11 - 14	Knoxville, TN	2013	Jul 19	Minneapolis, MN
1980	Jan 16 - 19	Atlanta, GA			
	Jul 23 - 26	Detroit, MI			

STAFF ASSISTANCE

As mentioned previously, the PEI Staff Manager, or Staff Director, was the backbone of the NSPE HQ part of the organization. Each Manager had his/her own mark on history and that was demonstrated in the operations of PEI. For the most part, each Staff Director was dedicated to PEI with most Practice Divisions having a dedicated Staff Manager. Most recently, Erin Garcia-Reyes eventually became a shared resource with other Practice Divisions/Interest Groups. This was a sign of cost cutting. Even with this approach, Garcia-Reyes never allowed a PEI task to slip.

With the advances in technology in the last 10 years, volunteers were able to pick up more of the workload of clerical tasks. Reports were simpler to prepare by volunteers with computers and email allowed quick and easy collaboration among members and staff.

PEI Staff Directors		
Year	Staff Member	Notes
1965 - 1966	Conrad J. Marshall, Esq.	
1966 - 1967	C. Richard Booth	
1967 - 1968	Gayle Nick Wright	Interim
1968 - 1969	None	
1969 - 1970	A.C. Libro	
1970 - 1973	Ralph C. "Doc" Spears, Sr.	Resigned in 1973 to become Louisiana SPE Exec Director
1973 - 1974	Harold J. "Hal" Rosengren	Passed away April 14, 1974
1974 - 1977	Paul R. Hull	
1977 - 1999	Gayle Nick Wright	Retired in July 1999
1999 - 2001	Elaine Costello	Assistant t to Wright for several of years prior to 1999
2001	Chris Hanson	Interim
2002 - Present	Erin Garcia Reyes	



The three PEI Staff Directors that have had the most influence on PEI over the years (left to right): Ralph C. "Doc" Spears, nicknamed when coaching high school football (Photo from PEI Newsletter, Mar 1969); Nick Wright, who served the longest in the position (Photo from Mark Brumbach); and Erin Garcia-Reyes, Present PEI Staff Director for over 10 years.

The NSPE Executive Director's role saw many changes over the history of NSPE. Since Practice Divisions play a smaller part of the organization's synergy, Executive Directors focused more of their time on lobbying, managing the building and staff, and answering to the President. Unfortunately, this change in priorities has seen NSPE become more detached from Industry and its leaders. For example, in the middle part of last century, Paul Robbins, P.E. spent a great deal of time promoting industrial themes by working with companies like GM, GE, Western Electric in order to

keep America strong and American engineers free collective of bargaining. In comparison, the last generation of working with Silicon Valley, Redmond WA and other hi tech industry has been negligible. As of early, 2013, the newest Executive Director, Mark J. Golden, takes the helm with much promise.

NSPE Executive Directors		
Service	Name	Title
May 1, 1935 - Jan 31, 1940	Willard S. Conlon, P.E.	Executive Secretary
March 1, 1940 - Dec 31, 1945	Edward F. Larson, P.E.	Executive Secretary
May 1, 1946 - Aug 1, 1978	Paul H. Robbins, P.E., F.NSPE	Executive Director
Aug 1, 1978 - Sep 30, 1995	Donald G. Weinert, P.E., F.NSPE	Executive Director
Aug 1, 1995 - Summer 1998	Russel C. Jones, Ph.D., P.E., F.NSPE	Executive Director
Summer 1998 - Jan 4, 1999	Arthur E. Schwartz, Esq.	Interim Executive Director
Jan 4, 1999 - Fall 2002	Patrick J. Natale, P.E., F.NSPE	Executive Director
Nov 15, 2002 - Late 2006	Albert C. Gray, Ph.D., P.E., F.NSPE	Executive Director
Late 2006 - Early 2007	Arthur E. Schwartz, Esq.	Interim Executive Director
Early 2007 - Jan 1, 2013	Lawrence A. Jacobson, Esq.	Executive Director
Jan 31, 2013 - Present	Mark J. Golden	Executive Director

NSPE has always had a facility to call their own in Washington, DC. The present site is just on the other side of the D.C. line inside Alexandria, VA, just 2 Metro stops from Reagan International. NSPE has always excelled at keeping the building occupied, which has helped the bottom line during lulls in membership. The Headquarters is one of those best kept secrets of NSPE since members rarely get to see the facility for themselves. It would be advantageous for NSPE to make a stronger pitch for members to visit the HQ, and, likewise, for members to stop by and say hi to the staff.

NSPE Headquarters		
Occupation	Name	Address
Sep 3, 1934 - May 1, 1935	Temporary Headquarters	1226 Sumter Street; Columbia, SC
May 1, 1935 - Sep 1946	National Press Building	529 14th St NW; Washington, DC
Sep 1946 - Feb 1949	DuPont Circle	1359 Connecticut Ave NW; Washington, DC
Feb 1949 - Jan 1956		1121 15th Street, NW; Washington, DC
Jan 1956 - Jan 1968	Four Story Building	2029 K Street, NW; Washington, DC 20006
Jan 1968 - Jul 1984	Seven Story Building	2019 K Street, NW; Washington, DC 20006
Since Jul 1984	Present Building	1420 King St; Alexandria, VA 22314



Present NSPE HQ in Alexandria, VA(Left); On May 23, 1983, a ceremonial groundbreaking was held for the 60,000 square foot headquarters building in Alexandria, Virginia on 1420 King Street. (From left to right): NSPE Past President Robert Nichols; Charles Beatley Jr, Alexandria Mayor; Executive Director Don Weinert; President Marvin Specter; and NSPE President-Elect Louis Bacon (Right). (Photo NSPE 75th Anniversary Slide Show).

RECOGNITION

The following is a history of awards that include engineers in industry. Awards for outstanding achievement are beneficial to the recipient and to the profession. PEI is proud of all the recipients and each is congratulated for their achievements.

NSPE AWARD

This award is the highest award given to an engineer who has made outstanding contributions to his profession, public welfare, and/or mankind. While this award is not a PEI award, PEI is extremely proud of those engineers from industry that have been so honored. Recipients of the award that are from industry are based upon the members practice division affiliation or employer's line of business.

PEI and Members from Industry That Received the NSPE Award			
Year	Recipient	Title/Profession	Employer
1949	Herbert Hoover, P.E.	Mining Engineer	31st President of the U.S.
1953	Charles F. Kettering, P.E.	Director of Research	General Motors
1954	Harry A. Winne, P.E.	Vice President	General Electric
1957	Granville M. Read, P.E.	Chief Engineer	DuPont Co.
1960	James A. Fairmann, P.E.	Vice President	New York Edison Co.
1963	Walker Lee Cisler, P.E.	President	Detroit Edison Co.
1964	Walter J. Barrett, P.E.	Supervising Engineer	Bell Laboratories
1966	C. E. Reistle, P.E.	President	Humble Oil Co.
1975	Lyman D. Wilbur, P.E.	VP, Engineering	Morrison-Knudsen Co.
1980	William States Lee, P.E.	President	Duke Power Co.
1983	Luis A. Ferre', P.E.	Governor	Puerto Rico
1989	Robert L. Nichols, P.E., F.NSPE	President	Freese & Nichols
1997	Clarence W. Klassen, P.E.	Chief Engineer	Illinois Sanitary Water Board
2009	Richard H. Stanley, P.E.	Chair	Stanley Group
2011	Teresa H. Ratcliff, Ph.D., P.E., F.NSPE	Asst Vice Chancellor	North Carolina State University

NSPE DISTINGUISHED SERVICE AWARD

This award recognizes an NSPE Licensed Member for exceptional contributions to the Engineering Profession, to one's community, and specifically to NSPE. While this award is not a PEI award, PEI is extremely proud of those engineers from industry that have been so honored.

PEI and Members from Industry That Received the NSPE Distinguished Service Award		
Year	Recipient	Employer
1984	Robert L. Nichols, P.E., F.NSPE	Freese & Nichols
1995	Douglas E. Benner, P.E., F.NSPE	Public Service Electric and Gas Company
1997	Patrick J. Natale, P.E., F.NSPE	Public Service Electric and Gas Company
1999	Kenneth B. Roy Jr., P.E., F.NSPE	QA Associates
2009	H. Ken Rigsbee, P.E., F.NSPE	Phillips Petroleum Co

NSPE FELLOW

The NSPE Fellow Program is a national program intended to recognize deserving professional engineers who have demonstrated long term professional service at the chapter, state and national levels of NSPE. The NSPE Board of Directors established the Fellow recognition program to honor those licensed members who have demonstrated exemplary service to the profession, the Society, and the community.

PEI and Members from Industry That Have Been Elevated to NSPE Fellow, 2001 - Present					
Year	Recipient	State	Year	Recipient	State
2001	Clyde H. Nagata, P.E., F.NSPE	HI	2003	Richard E. Dix, P.E., F.NSPE	TN
2001	Harry E. Bovay Jr., P.E., F.NSPE	TX	2003	Robert L. Hershey, P.E., Ph.D., F.NSPE	DC
2001	Clyde R. Tipton Jr., P.E., F.NSPE	OH	2004	Chip Pickering, P.E., F.NSPE	WV
2001	Douglas E. Benner, P.E., F.NSPE	GA	2004	Clint C. Johannes, P.E., F.NSPE	NE
2001	Edward E. Slowter, P.E., F.NSPE	OH	2004	Curtis A. Beck, P.E., F.NSPE	HI
2001	Frank Notaro, P.E., F.NSPE	NY	2004	Gene R. O'Brien, P.E., F.NSPE	NJ
2001	Jack D. Hinton, P.E., F.NSPE	KS	2004	Howard Cedric Gibbs, P.E., F.NSPE	DC
2001	John P. Church, Ph.D., P.E., F.NSPE	SC	2004	Richard G. Guthrie, P.E., RLS, F.NSPE	AZ
2001	Karen S. Pedersen, P.E., F.NSPE	IA	2004	Samuel W. Grossman, P.E., F.NSPE	CA
2001	Kenneth B. Roy Jr., P.E., F.NSPE	AL	2004	Susanne Leckband, P.E., F.NSPE	AZ
2001	Lamar T. Hawkins, P.E., F.NSPE	AL	2004	William J. Bryan, P.E., F.NSPE	PA
2001	Neil A. Norman, P.E., DEE, F.NSPE	WA	2005	Andy Russo, P.E., F.NSPE	MD
2001	Otto A. Tennant, P.E., F.NSPE	IA	2005	Milton A. Tiede, P.E., F.NSPE	WA
2001	Patrick J. Natale, P.E., F.NSPE	VA	2005	Nils E. Nilsson, P.E., F.NSPE	OH
2001	Richard L. Bidwell, P.E., F.NSPE	VA	2005	R. Gary Finley, P.E., F.NSPE	AZ
2001	Richard O. Frazee, P.E., F.NSPE	FL	2006	Robert W. Emery, P.E., F.NSPE	TN
2001	Robert L. Nichols, P.E., F.NSPE	MO/TX	2007	Glen R. Schwabach, P.E., F.NSPE	WI
2001	Roger M. Zimmerman, P.E., Ph.D., F.NSPE	NM	2007	John M. Wall, Jr., P.E., F.NSPE	DC
2001	William H. Beauchamp, P.E., EDD, F.NSPE	MI	2007	Richard L. Buchanan, P.E., F.NSPE	OH
2001	William J. Kilcullen, P.E., F.NSPE	AZ	2008	Ali M. Mustapha, P.E., F.NSPE	LA
2002	Calvin M. Ochs, P.E., F.NSPE	MO	2008	Deborah M. Shive, P.E., F.NSPE	NC

PEI and Members from Industry That Have Been Elevated to NSPE Fellow, 2001 - Present					
Year	Recipient	State	Year	Recipient	State
2002	James D. Lesikar II, P.E., Ph.D., F.NSPE	MD	2008	Jorge L. Pardo, P.E., F.NSPE	FL
2002	John G. Perdue, P.E., F.NSPE	TN	2008	Robert G. Becnel, P.E., F.NSPE	MO
2002	John G. S. Billingsley, P.E., F.NSPE	DE	2009	Barry Nakamoto, P.E., F.NSPE	HI
2002	John G. Woods, P.E., F.NSPE	PA	2009	Cornelius J. Illenberg, P.E., F.NSPE	NY
2002	Lynn W. Eury, P.E., F.NSPE	NC	2010	Alan J. Olson, P.E., F.NSPE	OH
2002	Merle R. Likins Jr., P.E., Ph.D., F.NSPE	OK	2010	Harry E. Clark, P.E., F.NSPE	TN
2002	Richard T. Berning, P.E., F.NSPE	IL	2010	Howard C. Harclerode II, P.E., F.NSPE	MD
2002	Teresa H Ratcliff, Ph.D., P.E., F.NSPE	NC	2010	J. M. Drake, P.E., F.NSPE	LA
2002	Theodore O. Wright, P.E., F.NSPE	WA	2010	Stephen Dyrnes, P.E., F.NSPE	OR
2003	Alfred W. Dirnberger, P.E., F.NSPE	TX	2011	James Kevin Cooper, P.E., F.NSPE	PEI
2003	C. R. Sivalls, P.E., F.NSPE	TX	2011	Ralph K. Leidy, P.E., F.NSPE	OH
2003	Dale Martin Davis, P.E., F.NSPE	TN	2011	Victor M. Mendoza, P.E., F.NSPE	TX
2003	Gale E. Sights, P.E., F.NSPE	GA	2012	Stephen A. Hutti, P.E., F.NSPE	MO
2003	Gloria P. Holt, P.E., F.NSPE	NJ	2012	John A. Zoeller, P.E., F.NSPE	KY
2003	H. Ken Rigsbee Jr., P.E., F.NSPE	TX	2013	Edgar Benoit, P.E., F.NSPE	LA
2003	H. LeRoy Henderson, P.E., F.NSPE	TN	2013	Howard R. Jones, P.E., F.NSPE	OH

INDUSTRIAL PROFESSIONAL DEVELOPMENT AWARD (IPDA)

The award was presented annually to the industrial employer of engineering personnel which made an outstanding contribution to the profession through its employment practices. An industrial employer is defined as a firm, or division of a firm, whose primary function is to design and manufacture or supply various items of apparatus, devices, equipment, products or systems for the use and benefit of mankind. In the case of multi-plant operations or in the case of geographical or administration decentralization of a company, separate plants, sections or divisions can be nominated.

Nominations for the award were made by local chapters and forwarded to the state society for review and recommendation to the *NSPE Industrial Award Committee*. The award began as an NSPE award in which a separate *Industrial Award Committee* was established in the late 1950's to prepare for the implementation. For the entire 1960's and several years after PEI became a practice section, NSPE managed and issued the award.

Eventually, this award became PEI managed award. The nominations in the earlier years were considerable. It was not uncommon to have as many as 2 dozen nominations in a given year. Over time, the award nominations became less and less and the last presentation was made in 2002.



Fred Shanklin (Left), Regional Vice President, Union Carbide, receives the Industrial Professional Development Award from NSPE President James Shivler. (Photo from PEI Newsletter, August 1973).



R.J. Atkinson, Senior Vice President, Buildings Division, Butler Manufacturing Company receives the NSPE 1974 IPDA from Robert Reitinger, NSPE President. (Photo from PEI Newsletter, Aug/Sep 1974).

Industrial Professional Development Award Recipients			
Year	Company	Division	Location
1960	Phillips Petroleum Company		Bartlesville, OK
1961	General Electric Company (Tied)	Transformer Division	Pittsfield, MA
1961	General Electric Company (Tied)	Instrument Division	Lynn, MA
1962	Bay State Abrasive Products		Westboro, MA
1963	E.I. du Pont de Nemours	Engineering Department	Wilmington, DE
1964	ARO, Incorporated		Arnold Air Force Station, TN
1965	Tennessee Eastman Co		Kingsport, TN
1966	R.J. Reynolds Tobacco Co		Winston-Salem, NC
1967	Eastman Kodak Company	Kodak Park Works Engineering Division	Rochester, NY
1968	Florida Power and Light Co		Miami, FL
1969	Pennsylvania Power & Light		Allentown, PA
1970	Battelle Memorial Institute	Columbus Laboratories	Columbus, OH
1970	Battelle Memorial Institute	Northwest Laboratories	Richland, WA
1971	The Coca-Cola Company	Corporate Engineering Dept	Atlanta, GA
1972	Mellon-Stuart Company		Pittsburgh, PA
1973	Union Carbide Corporation	Nuclear Division	Oak Ridge, TN
1974	Butler Manufacturing Company	Buildings Division	Kansas City, MO
1975	Dow Chemical USA	Engineering & Construction	Houston, TX
1976	Southwestern Bell Telephone Co.	Oklahoma Area Engineering	Oklahoma City, OK

Industrial Professional Development Award Recipients			
Year	Company	Division	Location
1977	Mitchell Engineering Company	Division of CECO Corporation	Columbus, MS
1978	Southwestern Bell Telephone Co.	Kansas City Area Engineering	Kansas City, MO
1979	Pullman Incorporated	Pullman Kellogg Home Office Engineering	Houston, TX
1980	Dow Corning Corp	Facilities and Plant Engineering USA	Midland, MI
1981	None		
1982	Mitchell Engineering Company	Division of CECO Corporation	Columbus, MS
1983	New England Electric		Westborough, MA
1984	Borg-Warner Chemicals	Central Engineering	Parkersburg, WV
1985	Brazos Electric Power Coop.		Waco, TX
1986	Entex Incorporated		Houston, TX
1987	Florida Power and Light		Tallahassee, FL
1988	Florida Power and Light		Miami, FL
1989	Tampa Electric Company		Tampa, FL
1990	Ohio Edison Systems		Akron, OH
1991	Kentucky Utilities Co		Lexington, KY
1992	Tampa Electric Company		Tampa, FL
1993	Schering-Plough Corporation	Schering Technical Operations	Union, NJ
1994	Louisville Water Company		Louisville, KY
1995	Central Hudson Gas & Electric Co		Poughkeepsie, NY
1996	Butler Manufacturing Company	Buildings Division	Kansas City, MO
1997	Florida Power Corporation	Energy Delivery	St. Petersburg, FL
1998	None		
1999	Florida Power Corporation	Energy Delivery	St. Petersburg, FL
2000	Memphis Light, Gas and Water		Memphis, TN
2001	CECO Building Systems	Southern Region	Columbus, MS
2002	The Raymond Corporation		Greene, NY

PEI DISTINGUISHED SERVICE AWARD (DSA)

In 1972, the NSPE Board of Directors approved the *PEI Distinguished Service Award*. This award was to be presented at the summer NSPE Annual Meeting if a recipient worthy of the award was selected by the PEI Executive Board.

The PEI DSA was to be presented to an individual who has made an outstanding contribution of national and/or international scope to advance the causes of the individual engineer in industry or

PEI. Major consideration shall be given to the manner and extent that the engineers in industry have been enriched as a result of the nominee's influence and contributions¹⁵¹.



At the joint practice division luncheon during the NSPE 1991 Annula Meeting, NSPE President Donald Hiatte presents the PEI Distinguished Service Award to Paul B. Wells, president, CEO and board chair of Wells Engineers, Inc, Omaha, NE. (Photo PEI Industry Forum, Aug/Sep 1991).

The awarding of this recognition was suspended by the PEI Executive Board in 1998 due to lack of nominees put forth. It was rejuvenated at the suggestion of Clyde Nagata in 2005. The award was budgeted for the 2005 – 2006 term by Chair Bob Becnel. However, due to the restructuring of NSPE, certain honors and awards were asked to be reviewed to fit the new mission and vision of NSPE after the new structure was implemented in 2006. The DSA award was subsequently modified and given more weight to provide preference of nominees that were Professional Engineers. This was not a previous criteria and the Executive Board of PEI adopted the recommendations quickly. Doug Benner was the first winner under the new rules of the DSA which took place in 2009¹⁵².

¹⁵¹ PEI Agenda Book, January 1996, page 87.

¹⁵² Becnel, Bob, Email and personal notes.

PEI Distinguished Service Award Recipients		
Year	Recipient	Company/Organization
1973	Robert L. Stedfeld	Editor of Machine Design
1974	Pierce Ellis, P.E.	Wisconsin Public Service
1975	L. D. (Chip) Chipman, P.E.	Western Electric
1976	James S. Janssen, P.E.	New Orleans Public Service, retired
1977	R.C. (Doc) Spears, Executive Secretary	Louisiana Engineering Society
1978	Horace R. Lehneis, P.E.	Western Electric
1979	Laurence L. Dresser, P.E.	Dresser Engineering Company
1980	LeRoy Culbertson, P.E.	Phillips Petroleum Company
1981	Robert L. Nichols, P.E.	Freese & Nichols
1982	Alfred W. Andress, P.E.	Monsanto Company
1983	David A. Roberson, P.E.	Arnold Engineering Development Center
1984	Wilson Greatbatch, P.E.	Greatbatch Enterprises
1985	Sherwood L. Fawcett, P.E.	Battelle Memorial Institute
1986	Louis Schindler, P.E.	Southwestern Bell
1987	Ian M. Ross, P.E.	AT&T Bell Laboratories
1988	Myron Tribus, P.E.	American Quality & Productivity Institute
1989	Richard Redpath, P.E.	Johnson & Johnson
1990	Dr. Russell M. Susag, P.E.	3M Company
1991	Paula B. Wells, P.E.	Wells Engineers, Inc.
1992	None	
1993	W. Edwards Deming, Ph.D.	Consultant in Statistical Studies
1994	William S. Lee, P.E.	Duke Power Company
1995	William J. Lhota, P.E.	American Electric Power Service Corp
1996	None	
1997	None	
1998	Suspended through 2008	
2009	Douglas Benner, P.E.	DEB Consulting
2010	None	
2011	Thomas Voss, P.E.	Ameren Corporation
2012	None	
2013	Michael Heyeck, P.E.	American Electric Power (ret)

QBS AWARD FOR INDUSTRY

In the 1995-1996 administrative year under Chair Gloria Holt, an industry-based QBS award was established when Holt announced the division's endorsement of a new Industry Qualifications-Based Selection (QBS) Award sponsored by PEPP.

This new form of recognition would follow similar criteria and nomination procedures of the already established PEPP QBS Award Program. The selection was a mid-to-large size industrial company or corporation that has progressive selection procedures and uses these procedures as a matter of course in selecting consulting engineers for design contracts.¹⁵³ No known winners existed for this award.

NSPE/PEI NEW PRODUCT AWARD (NPA)

The Wisconsin Society of Professional Engineer initiated a Governor's New Product award in 1959. In 1978-1979 the Wisconsin PEI delegates explained the program and encouraged other state PEI sections to do the same. Missouri started the Governor's New Product Award program in 1980 and Iowa and Kentucky followed a year later. In 1982 Cal Ochs of Missouri presented a resolution for the New Product Award to the NSPE Board of Directors and it was accepted. It was known that a national program would be helpful as State recipients would apply for a National Award. This would encourage more states to participate. The first national awards were set for the 1984-1984 administrative year. The categories were divided into three areas - large, medium and small companies or divisions. The award was the same for each. All costs and administration were covered by PEI.

During the first year of the awards being offered, NSPE received a total of 37 nominations received from California, Georgia, Idaho, Illinois, Kansas, Kentucky, Michigan, Minnesota, Missouri, New York, North Carolina, Pennsylvania, Virginia and Wisconsin. The nominations all received endorsements of their respective state governor's office.¹⁵⁴

In the beginning, the New Product Award was considered an NSPE award as opposed to PEI. NSPE provided the budget for the awards. Eventually, this award category was completely managed by PEI, but still serves as the longest running PEI award offered. Eventually a "Mega" category was added for the NPA award.

NSPE New Product Award Recipients				
Year	Small	Medium	Large	Mega
1984	Case Fire-Fryer Top Fire Extinguisher <i>Ultec, Incorporated</i> Exton, PA	7400 Pulsatile Blood Pump <i>Sams, Incorporated</i> Ann Arbor, MI	Kodak Disc Camera <i>Kodak</i> Rochester, NY	Category Not Established

¹⁵³ "QBS Award for Industry Established", *Industry Engineer*, August/September 1995, page 2.

¹⁵⁴ *PEI Industry Forum*, Winter/Spring 1984, page 2.

NSPE New Product Award Recipients				
Year	Small	Medium	Large	Mega
1985	Quad 1 Computerized Tomographic Scanners <i>Omnimedical Company</i> Springfield, IL	Gilman Automatic Drill & Mill Machine <i>Gilman Engineer & Manufacturing Company</i> Janesville, WI	Glean Herbicide <i>du Pont Agriculture Chemical Department</i> Belle, WV	Category Not Established
1986	Geopump Energy System <i>Megatech Corporation</i> Billerica, MA	Package PACT Wastewater Treatment Plant <i>Zimpro Incorporated</i> Rothschild, WI	Single Mode Optical Waveguide System <i>Corning Glass Works</i> Wilmington, NC	Category Not Established
1987	Carboflex Carbon Fibers <i>Ashland Carbon Fibers</i> Ashland, KY	Ovonyx Multilayer X-ray Dispersive Mirrors <i>Ovonic Synthetic Materials</i> Troy, NY	Fortel High-Performance Partially Oriented Yarn <i>Celanese Textile Fibers</i> Charlotte, NC	Category Not Established
1988	Precision Powder Metal Compacting Press <i>Dougherty Precision Systems Inc.</i> St. Petersburg, FL	Digitech EAS 20/20 System <i>Digitech Communication, Inc</i> Huntsville, AL	Drytech Aqueous Fluid Absorbents <i>Dow Chemical</i> Midland, MI	Category Not Established
1989	POLETEST Pole Strength Analyzer <i>Engineering Data Management, Inc.</i> Fort Collins, CO	Cross 2000 Piston-Turning Machine <i>Cross Company</i> Fraser, MI	World-Class Parking Brake Cable <i>Orschein Company</i> Moberly, MO	Category Not Established
1990	"Thermal Knife" Filler Removal Machine <i>Automated Technology Systems, Inc.</i> Winston-Salem, NC	PRAB Voice Command I <i>PRAB Command, Inc.</i> Kalamazoo, MI	9000 Perfusion System <i>Sarns/3M</i> Ann Arbor, MI	Category Not Established
1991	Thermal Pest Eradication <i>Isothermics, Incorporated</i> Anaheim, CA	Soil Remediation Unit <i>TPS Technologies, Inc.</i> Apopka, FL	Beech Starship <i>Beech Aircraft Corporation</i> Wichita, KS	Category Not Established
1992	BG Cool'r Clean'r Coolant Purification System <i>BG Products, Inc.</i> Wichita, KS	The COMMANDER <i>Hackney & Sons, Inc.</i> Washington, NC	Traffic Alert and Collision Avoidance Sys. (TACSII) <i>Bendix/King Air Transport</i> Fort Lauderdale, FL	Category Not Established
1993	Saddle Vent Ventilation Technique <i>Air Systems International, Inc.</i> Chesapeake, VA	IMO-1/IM-101 Tank Container <i>Brenner Tank, Inc.</i> Fond du Lac, WI	Manitowoc Model M250 <i>Manitowoc Engineering Co.</i> Manitowoc, WI	Category Not Established
1994	TouchFax Multi-Media Terminals <i>TouchFax Information Systems</i> Lenexa, KS	Rotablator <i>Heart Technology, Incorporated</i> Bellevue, WA	SpeedDome <i>Sensormatic Electronics Corp</i> Deerfield Beach, FL	Category Not Established

NSPE New Product Award Recipients				
Year	Small	Medium	Large	Mega
1995	Hoveround <i>Hoveround Corporation</i> Sarasota, FL Excalibur Knife for Life <i>Eliminator Industries, Inc.</i> Riviera Beach, FL	Mas-Hamilton X-07 Self Powered Combo Lock <i>Mas-Hamilton Group</i> Lexington, KY	Q-Series Semi-Automatic Stretch Wrapping System <i>Lantech Incorporated</i> Louisville, KY	Category Not Established
1996	Bypass Electric Mobile Oil Refiner <i>TF Purifier, Inc.</i> Boynton Beach, FL	Dimension 7000 AutoWafer SPM System <i>Digital Instruments, Inc.</i> Santa Barbara, CA	VaporVac® <i>Gilbarco Inc.</i> Greensboro, NC	Category Not Established
1997	Single Phase Electric Motor <i>Precise Power Corporation</i> Bradenton, FL	Inovoject™ <i>Embrex, Inc.</i> Research Triangle Park, NC	Boeing 777 <i>Boeing Commercial Airplane Co</i> Seattle, WA	Category Not Established
1998	Logic V-Series Utility Boat <i>Logic Marine Corporation</i> Durham, NC	Tegra Automated Insp. Sys. <i>Key Technology</i> Walla Walla, WA	Kohler OHC Engine <i>Kohler Company</i> Kohler, WI	Category Not Established
1999	Phototech™ <i>Universal Air Technology</i> Alachua, FL	PF5 Power Flush & Fluid Exchange System <i>BG Products, Inc.</i> Wichita, KS	Mercedes Benz M-Class All Activity Vehicle <i>Mercedes-Benz US Intl.</i> Tuscaloosa, AL	LOGIQ 700 MR Premium Ultrasound System <i>GE Medical Systems</i> Milwaukee, WI
2000	GrafXflit <i>Innovative Packaging Corp.</i> Milwaukee, WI	Wafer-Based Micro-Optics <i>Digital Optics Corporation</i> Charlotte, NC	SmartSite Needle-Free Valve <i>Alaris Medical Systems</i> Creedmoor, NC Color Control System <i>QTI</i> Sussex, WI	Premier I Aircraft <i>Raytheon Aircraft</i> Wichita, KS
2001	IcoMap™ <i>UCLID Software LLC</i> Madison, WI	Photonic Chip™ <i>Digital Optics Corporation</i> Charlotte, NC	Paint Film Technology <i>Green Tokai Company</i> Brookville, OH	LightSpeed QX/I CT Scanner <i>GE Medical Systems</i> Milwaukee, WI
2002	Matrix Constituent Separator <i>Industrial Recovery Systems International, Inc.</i> Charlotte, NC	None	GoodCents® SELECT <i>Gulf Power Company</i> Pensacola, FL	Chrysler PT Cruiser <i>DaimlerChrysler Corporation</i> Auburn Hills, MI
2003	The UroCycler® <i>UroSolutions, Incorporated</i> Orlando, FL	The SMART Trac™ System <i>CEM Corporation</i> Matthews, NC	E4600 Disk Storage System <i>LSI Logic Storage Systems</i> Wichita, KS	MK20e/MK25 Electronic Brake Systems <i>Continental Teves</i> Morganton, NC
2004	SNR & 3-Stage Controlled Release Fertilizer <i>Florikan E.S.A., Corp.</i> Sarasota, FL	Scorpion-Rugged Notebook <i>DRS Tactical Systems, Inc.</i> Palm Bay, FL	Bioreactor-Ready Bottom Liner System <i>Jones Edmunds & Associates, Inc.</i> Gainesville, FL	None

NSPE New Product Award Recipients				
Year	Small	Medium	Large	Mega
2005	SmartSkim Vertical System <i>Universal Separators, Inc.</i> Madison, WI	ChemWell 2910 <i>Awareness Technology, Inc.</i> Palm City, FL	Orion Radio Frequency Meter Reading System <i>Badger Meter, Inc.</i> Milwaukee, WI	None
2006	KoolGlide® Carpet Seaming System with Sinch Technology <i>Nexicor, LLC</i> Loveland, OH	Cable Stayed Bridge Cradle System <i>FIGG Engineering</i> Tallahassee, FL	DSP600 Digital Imaging Alignment Sensors <i>Hunter Engineering Company</i> Bridgeton, MO	MCS-E3 Solid-State Overload Relay <i>Rockwell Automation</i> Milwaukee, WI
2007	Aluminum Picket Handrail <i>Giralt Enterprises, Inc.</i> Miami, FL	Intelite Compact Modular Series <i>Orion Energy Systems</i> Plymouth, WI	Clean Strip™ Coating Excellence <i>International, LLC</i> Wrightstown, WI	Kohler Cimarron Comfort Height™ Toilets with Class Five™ Technology <i>Kohler, Company</i> Kohler, WI
2008	Produce Bin Washer GCS© <i>Salazar Machine & Steel, Inc.</i> Immokalee, FL SopoNova4.0 <i>Sopogy, Inc.</i> Honolulu, HI	AES1510 <i>AuthenTec, Inc.</i> Melbourne, FL	The Evolution Series™ Residential Food Waste Disposers <i>InSinkErator</i> Racine, WI	Cummins Particulate Filter (CPF) <i>Cummins Emission Solutions (CES)</i> Stoughton, WI
2009	Algal Turf Scrubber® (ATS™) <i>HydroMentia, Inc.</i> Ocala, FL	Heated Catalyst System for Control of Cooking Odors <i>Catalytic Combustion Corp</i> Bloomer, WI	Digital Precise Air Control System (D-PAC) <i>AAON</i> Tulsa, OK	KOHLER Express™ Vanity <i>Kohler Co.</i> Kohler, WI
2010	FOD Speed Slitter™ <i>Uruseal Inc.</i> Dover, NH	NextAire Packaged Gas Heat Pump <i>IntelliChoice Energy</i> Las Vegas, NV	Apollo® Solar Light Pipe <i>Orion Energy Systems, Inc.</i> Manitowoc, WI	Disney's Handheld Device and Assistive Technology <i>Walt Disney Parks and Resorts U.S., Inc.</i> Lake Buena Vista, FL
2011	Hydro-Brace™ <i>W.J. Castle, P.E. & Associates, P.C.</i> Hainesport, NJ	None	RQ Series - High Efficiency Rooftop Units <i>AAON</i> Tulsa, OK	Crutonite <i>Eaton Corporation</i> Marshall, MI
2012	None	None	None	None
2013	None	None	None	None



John Kuller (Left), western regional director of Eastman Kodak, receives on behalf of his company, the first annual NSPE New Product Award in the large company category from NSPE President Louis Bacon, for the Kodak Disc Photography System. (Photo PEI Industry Forum, Winter/Spring 1984).

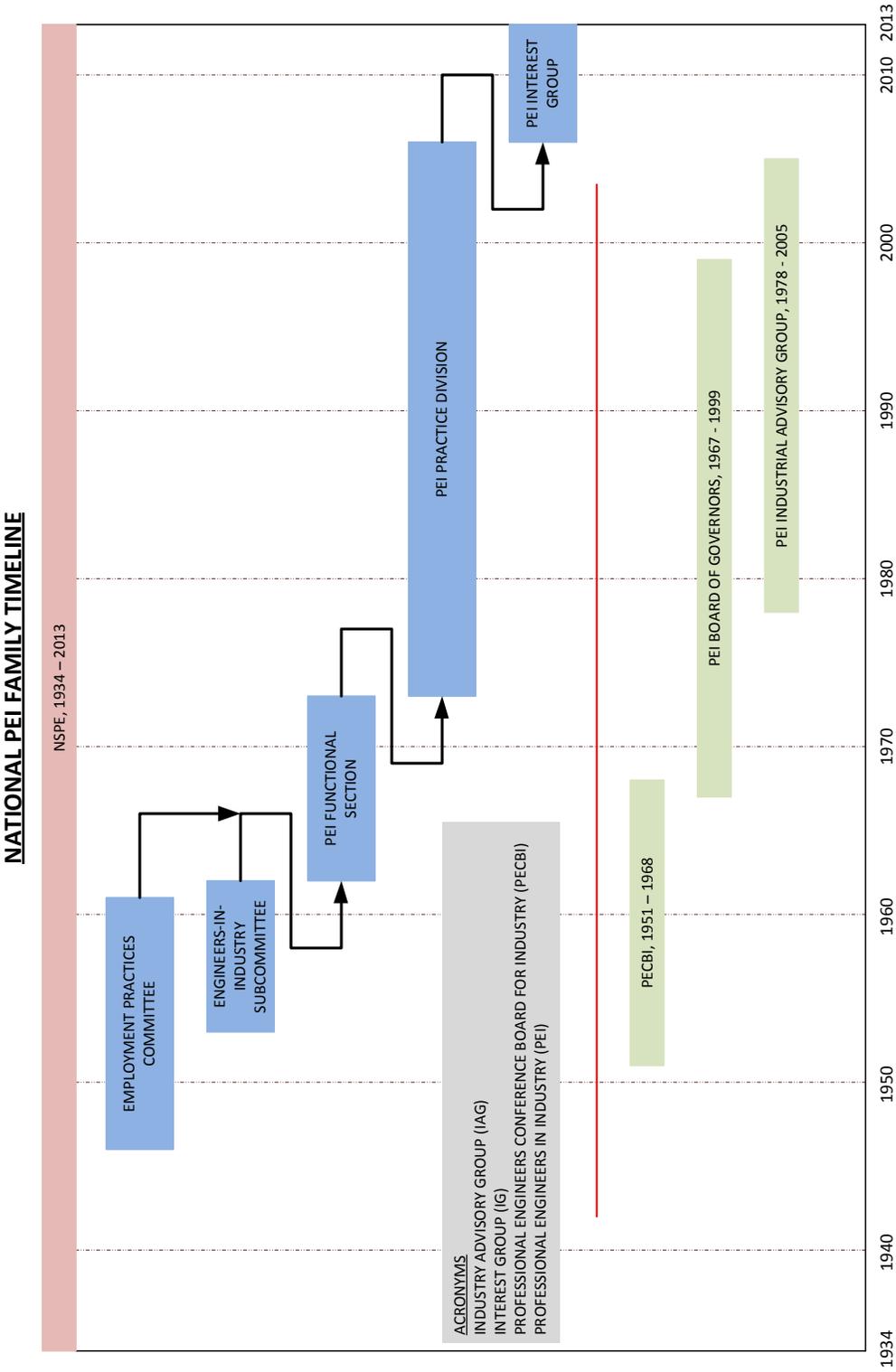
COMMITTEE ROSTERS AND OFFICERS

As information exists, identifying and recognizing all of the key individuals that have served PEI in a “formal” capacity over the years is important. It is the characteristics of the volunteers in leadership and governance that sets the guidance for the organization. Many of the integral projects and positions that PEI established were directly related to special skills of these individuals.

The PEI Executive Board, Board of Governors, NSPE officers, NSPE Executive Committee and NSPE Board of Directors all appreciate the time and effort of those who have served for the benefit of PEI and the engineering profession. The following have given their time, talent and money for the Professional Engineers in Industry.

The table of rosters, herein, is as complete as resources permit for the earlier years. Several sources went into completing the tables of officers and volunteers and it the information was surprisingly exhaustive. At times, discrepancies in spelling appeared when the same information appears in multiple sources. For situations of spelling inconsistencies, the more conventional format was used in surnames.

1946**
** Administrative year was Jan 1 - Dec 31
Employment Practices Committee
J.S. Kennedy (OH) - Chair
A.H. Baum (MO)
J.H. Morgan (IL)
Charles E. Snyder (WV)
Daniel Kramer (NJ)
Wm. L. Thraikill (WA)
John Bringhurst (TX)



1947**	
** Administrative year was Jan 1 - Dec 31	
Employment Practices Committee	Committee on Problems of Industrial Groups (Special)
J.S. Kennedy (OH) - Chair	W.F. Ryan (MA) - Chair
A.H. Baum (MO)	C.W. Burke (NY)
J.H. Morgan (IL)	B. Williams (MO)
Charles E. Snyder (WV)	
Daniel Kramer (NJ)	
Wm. L. Thraikill (WA)	
John Bringhurst (TX)	

1948 **
** Administrative year was Jan 1 - Dec 31
Employment Practices Committee
J.S. Kennedy (OH) - Chair

1949 - 1950**	
** Administrative year began in 1949 as July 1 - June 30	
Employment Practices Committee	Schedule of Fees and Salaries Committee
W.H. Larkin (NY) - Chair	Ole Singstad (NY) - Chair
F. McC. Gunby (MA)	
T.E. Linville (NY)	
J.N. Van Sant (NM)	
T.J. Skinker (MO)	
S.G. Szabo (MI)	
W.E. Williams (AZ)	

1950 - 1951		
Employment Practices Committee	Salary and Fee Study Committee (Special)	Sub-Committee on Industry and Public Utilities
William S. Dean (NJ) - Chair	Ole Singstad (NY) - Chair	Ole Singstad (NY) - Chair
Arthur C. Bullen (CA)	Charles B. Molineaux (NY)	Wyllys G. Stanton (OH) - Vice-Chair
T.J. Skinker (MO)	Joe B. Butler (MO)	Claude Hathaway (CO)
T.E. Linville (NY)		George Zimmer (WV)
John Lovell (GA)		Edgar Harty (MA)
J.N. Van Sant (NM)		Willis Gille (MN)

1951 - 1952		
Employment Practices Committee	Salary and Fee Committee	Sub-Committee on Industry and Public Utilities
R.A. Blackburn (PA) - Chair	Ole Singstad (NY) - Chair	Ole Singstad (NY) - Chair
W.W. Bergerson (WA)	Charles B. Molineaux (NY)	C.E. Brody (CA) - Vice-Chair
T.S. Thompson (MN)	Joe B. Butler (MO)	C.M. Hathaway (CO)
T.E. Linville (NY)		Noah E. Hull (TX)
E.H. Wickland (NJ)		Edgar Harty (MA)
		Willis Gille (MN)

1952 - 1953 Employment Practices Committee
A.J. Ryan (CO) - Chair
T.S. Thompson (MN)
A.J. Behling (WI)
E.H. Wickland (NJ)
F.T. Drough (TX)
Ralph Stauffer (MA)
Joseph D. Rufo (CA)

1953 - 1954	
Employment Practices Committee	Engineer-in-Industry Committee
Alfred J. Ryan (CO) - Chair	R.A. Blackburn (PA) - Chair
George DeMent (IL)	E.H. Wickland (NJ)
R.H. Myhra (ND)	Wayne Ault (OH)
J.D. Griffiths (NE)	T.E. Casselman (MA)
W.W. Bergerson (WA)	Louis J. Larson (WI)
	Dan Langenwalter (NY)
	George Steven (NY)

1954 - 1955	
Employment Practices Committee	Engineer-in-Industry Committee
R.A. Blackburn (PA) - Chair	R.A. Blackburn (PA) - Chair
George DeMent (IL)	E.H Wickland (NJ)
H.H. Brown (AZ)	Wayne Ault (OH)
J.D. Griffiths (NE)	T.E. Casselman (MA)
D.A. Iomata (RI)	Louis J. Larson (WI)
Wallace McRay (AL)	Dan Langenwalter (NY)
R.H. Myhra (ND)	George Steven (NY)

1955 - 1956	
Employment Practices Committee	Engineer-in-Industry Subcommittee
R.A. Blackburn (PA) - Chair	Wayne Ault (OH) - Chair
A.J. Delmastro (NJ)	E.H Wickland (NJ)
George DeMent (IL)	T.E. Casselman (MA)
Wayne Ault (OH)	Louis J. Larson (WI)
Linus Brown (IL)	Dan Langenwalter (NY)
	R.F. Danner (OK)

1956 - 1957	
Employment Practices Committee	Engineer-in-Industry Subcommittee
Not Available	Wayne Ault (OH) - Chair
	E.H Wickland (NJ)
	T.E. Casselman (MA)
	Louis J. Larson (WI)
	Dan Langenwalter (NY)
	R.F. Danner (OK)

1957 - 1958	
Employment Practices Committee	Engineer-in-Industry Subcommittee
Not Available	Wayne Ault (OH) - Chair
	E.H Wickland (NJ)
	T.E. Casselman (MA)
	Louis J. Larson (WI)
	Dan Langenwalter (NY)
	R.F. Danner (OK)

1958 - 1959	
Employment Practices Committee	Engineer-in-Industry Subcommittee
W.L. Hindermann (MN) - Chair	Harry P. Cooper (TX) - Chair
Frank Bromilow (NM)	Walter Burnham (KS)
Harry P. Cooper (TX)	Walter Chupa (MI)
H.R. Veenstra (IA)	Richard Hoft (NY)
Leonard White (AR)	John Ludwig (MN)

1959 - 1960		
Employment Practices Committee	Engineer-in-Industry Subcommittee	Industrial Award Committee
L. Eugene Easley (IN) - Chair	Harry P. Cooper (TX) - Chair	R.A. Blackburn (PA) - Chair
Harry Cooper (TX)	Walter Burnham (KS)	Wayne Ault (OH)
Wesley Gibertson (DC)	John Ludwig (MN)	Louis J. Larson (WI)
John Lanigan (NY)	Richard Hoft (NY)	R.F. Danner (OK)
James Ryan (MN)		George Steven (NY)

1960 - 1961		
Employment Practices Committee	Engineer-in-Industry Subcommittee	Industrial Award Committee
Not Available	Harry P. Cooper (TX) - Chair	Not Available
	Walter Burnham (KS)	
	John Ludwig (MN)	
	Richard Hoft (NY)	
	Lowell Bernhardt (MI)	

1961 - 1962	
Engineer-in-Industry Committee	Industrial Award Committee
Richard G Hoft (NY) - Chair	Wayne Ault (OH) - Chair
Lowell Bernhardt (MI)	Walter Burnham (KS)
J.R. Thayer (CA)	Louis J. Larson (WI)
William Crowder (NC)	Roy Sessums (LA)
	E. H. Wickland (NJ)

1962 - 1963		
Professional Engineers in Industry Functional Section		Industrial Award Committee
Chair	Richard G Hoft (NY)	Roy Sessums (LA) - Chair
Chair - Midwest Region	Lowell Bernhardt (MI)	Walter Burnham (KS)
Chair - Western Region	J.R. Thayer (CA)	H. Paul Cooper (TX)
Chair - Southeast Region/ Alternate Chair	William Crowder (NC)	E. H. Wickland (NJ)
Chair - Northeast Region	H. Carl Bauman (NJ)	

1963 - 1964		
Professional Engineers in Industry Functional Section		Industrial Award Committee
Chair	William L. Crowder (OK)	Walter Burnham (KS) - Chair
Past Chair	Richard G. Hoft (NY)	James Hallet (DE)
Vice Chair - Western Region	Paul Blanchard (UT)	James Knight (KY)
Vice Chair - Southeastern Region	William M. Batchelor (NC)	James Thompson (GA)
Vice Chair - North Central Region	Arthur Kaspar (MO)	Henry Wakeland (NY)
Vice Chair - Central Region	Lowell Bernhardt (MI)	
Vice Chair - Northeastern Region	H. Carl Bauman (NJ)	
Vice Chair - Southwestern Region	W.L. Culbertson (OK)	

1964 - 1965		
Professional Engineers in Industry Functional Section		Industrial Award Committee
Chair	William L. Crowder (OK)	James Hallet (DE) - Chair
Past Chair	Richard G. Hoft (NY)	William Dean (NJ)
Vice Chair - Western Region	Keith McDaniel (WA)	Dwight Goodman (TN)
Vice Chair - Southeastern Region	William M. Batchelor (NC)	James Knight (KY)
Vice Chair - North Central Region	Arthur Kaspar (MO)	James Thompson (GA)
Vice Chair - Central Region	William Stevens (OH)	
Vice Chair - Northeastern Region	H. Carl Bauman (NJ)	
Vice Chair - Southwestern Region	W.L. Culbertson (OK)	

1965 – 1966 Professional Engineers in Industry Functional Section	
Chair	Keith K. McDaniel
Past Chair	William L. Crowder
Vice Chair – Western Region	William L. Carey
Vice Chair – Southeastern Region	William M. Batchelor
Vice Chair – North Central Region	Arthur A. Kaspar
Vice Chair – Central Region	William M. Stevens
Vice Chair – Northeastern Region	Herbert A. Niedhammer
Vice Chair – Southwestern Region	J. R. Birdwell

1966 – 1967 Professional Engineers in Industry Functional Section	
Chair	Keith K. McDaniel
Past Chair	William L. Crowder
Vice Chair – Western Region	William L. Carey
Vice Chair – Southeastern Region	William M. Batchelor
Vice Chair – North Central Region	Arthur A. Kaspar
Vice Chair – Central Region	William M. Stevens
Vice Chair – Northeastern Region	Herbert A. Niedhammer
Vice Chair – Southwestern Region	E. L. Misegades

1967 – 1968 Professional Engineers in Industry Functional Section	
Chair	William M. Batchelor
Past Chair	Keith K. McDaniel
Secretary	L.D. (Chip) Chipman
Vice Chair – Western Region	R. W. Decker
Vice Chair – Southeastern Region	Norman S. Pliner
Vice Chair – North Central Region	Allen G. Widner
Vice Chair – Central Region	
Vice Chair – Northeastern Region	
Vice Chair – Southwestern Region	E. L. Misegades

1968 – 1969 Professional Engineers in Industry Practice Section	
Chair	R. W. Decker
Past Chair	William M. Batchelor
Secretary	L.D. (Chip) Chipman
Vice Chair – Western Region	Donald D. Ledbetter
Vice Chair – Southeastern Region	
Vice Chair – North Central Region	Howard S. Silver
Vice Chair – Central Region	Edward E. Slowter
Vice Chair – Northeastern Region	James G. Crooks
Vice Chair – Southwestern Region	B. J. Nankervis

1969 – 1970 Professional Engineers in Industry Practice Section	
Chair	Edward E. Slowter
Past Chair	William M. Batchelor
Secretary	Horace Lehneis
Vice Chair – Western Region	Donald D. Ledbetter
Vice Chair – Southeastern Region	N. S. Pilner
Vice Chair – North Central Region	Howard S. Silver
Vice Chair – Central Region	W. S. Madden
Vice Chair – Northeastern Region	R. G. Holfelder
Vice Chair – Southwestern Region	B. J. Nankervis
Consultant	L. D. Chipman

1970 – 1971 Professional Engineers in Industry Practice Section	
Chair	Edward E. Slowter
Past Chair	William M. Batchelor
Secretary	Horace Lehneis
Vice Chair – Western Region	Donald D. Ledbetter
Vice Chair – Southeastern Region	Harold J. Black
Vice Chair – North Central Region	R. D. (Jack) Hook
Vice Chair – Central Region	
Vice Chair – Northeastern Region	R. G. Holfelder
Vice Chair – Southwestern Region	Phillip R. Owens
Consultant	L. D. Chipman

1971 – 1972 Professional Engineers in Industry Practice Section	
Chair	Donald D. Ledbetter
Past Chair	Edward E. Slowter
Secretary	R. L. Bidwell
Vice Chair – Western Region	Boris A. Bernstein
Vice Chair – Southeastern Region	Harold J. Black
Vice Chair – North Central Region	R. D. (Jack) Hook
Vice Chair – Central Region	James R. Guy
Vice Chair – Northeastern Region	W. P. Humak
Vice Chair – Southwestern Region	Phillip R. Owens
Consultant	L. D. Chipman

1972 – 1973 Professional Engineers in Industry Practice Section	
Chair	Donald D. Ledbetter
Past Chair	Edward E. Slowter
Secretary	R. L. Bidwell
Vice Chair – Western Region	Boris A. Bernstein
Vice Chair – Southeastern Region	H. Nelson Sellers
Vice Chair – North Central Region	Robert W. Jarvis
Vice Chair – Central Region	James R. Guy
Vice Chair – Northeastern Region	W. P. Humak
Vice Chair – Southwestern Region	James S. Janssen
Consultant	L. D. Chipman

1973 – 1974 Professional Engineers in Industry Practice Division	
Chair	Horace Lehneis
Past Chair	Donald D. Ledbetter
Secretary	Robert L. Hershey
Vice Chair – Western Region	John J. Bonn
Vice Chair – Southeastern Region	H. Nelson Sellers
Vice Chair – North Central Region	Robert W. Jarvis
Vice Chair – Central Region	Neil E. Bays
Vice Chair – Northeastern Region	Dmytro Odryna
Vice Chair – Southwestern Region	James S. Janssen
Consultant	L. D. Chipman

1974 – 1975 Professional Engineers in Industry Practice Division	
Chair	Horace Lehneis
Chair-Elect	Phillip R. Owens
Past Chair	Donald D. Ledbetter
Secretary	Robert L. Hershey
Vice Chair – Western Region	John J. Bonn
Vice Chair – Southeastern Region	H. Nelson Sellers
Vice Chair – North Central Region	Otto A. Tennant
Vice Chair – Central Region	Neil E. Bays
Vice Chair – Northeastern Region	Dmytro Odryna
Vice Chair – Southwestern Region	Lloyd L. Piper, II
Consultant	L. D. Chipman
Consultant	Edward E. Slowter

1975 – 1976 Professional Engineers in Industry Practice Division	
Chair	Phillip R. Owens
Chair-Elect	Lloyd L. Piper, II
Past Chair	Horace Lehneis
Secretary	Robert W. Jarvis
Vice Chair – Western Region	Theodore O. Wright
Vice Chair – Southeastern Region	James V. Hallsey
Vice Chair – North Central Region	Otto A. Tennant
Vice Chair – Central Region	Lynn E. Arnold
Vice Chair – Northeastern Region	Robert Salvin
Vice Chair – Southwestern Region	John Ditmer
Consultant	L. D. Chipman
Consultant	Marvin Kolhoff
Consultant & NSPE President-Elect	Edward E. Slowter

1976 - 1977 Professional Engineers in Industry Practice Division	
Chair	Lloyd L. Piper, II
Chair-Elect	Robert W. Jarvis
Past Chair	Phillip R. Owens
Secretary	Robert W. Perman
Vice Chair - Western Region	Theodore O. Wright
Vice Chair - Southeastern Region	Arnold W. Kenly
Vice Chair - North Central Region	Vernon L. Asher
Vice Chair - Central Region	Lynn E. Arnold
Vice Chair - Northeastern Region	Robert Salvin
Vice Chair - Southwestern Region	John Ditmer
Consultant	L. D. Chipman

1977 - 1978 Professional Engineers in Industry Practice Division	
Chair	Robert W. Jarvis
Chair-Elect	Lynn E. Arnold
Past Chair	Lloyd L. Piper, II
Secretary	John J. Bonn
Vice Chair - Western Region	H. T. Herron
Vice Chair - Southeastern Region	Arnold Kenly
Vice Chair - North Central Region	Vernon L. Asher
Vice Chair - Central Region	Ronald Stoeckel
Vice Chair - Northeastern Region	John G. Woods
Vice Chair - Southwestern Region	John Ditmer

1978 - 1979 Professional Engineers in Industry Practice Division	
Chair	Lynn E. Arnold
Chair-Elect	John J. Bonn
Past Chair	Robert W. Jarvis
Secretary	Robert Salvin
Vice Chair - Western Region	H. T. Herron
Vice Chair - Southeastern Region	Joseph B. Cox
Vice Chair - North Central Region	Barry C. Rist
Vice Chair - Central Region	Ronald Stoeckel
Vice Chair - Northeastern Region	John G. Woods
Vice Chair - Southwestern Region	Louis Schindler

1979 – 1980 Professional Engineers in Industry Practice Division	
Chair	John J. Bonn
Chair-Elect	Robert Salvin
Past Chair	Lynn E. Arnold
Secretary	John Dicky
Vice Chair – Western Region	William F. Rauch, Jr.
Vice Chair – Southeastern Region	Joseph B. Cox
Vice Chair – North Central Region	
Vice Chair – Central Region	Arthur A. McPhail
Vice Chair – Northeastern Region	David B. Camp
Vice Chair – Southwestern Region	Louis Schindler

1980 – 1981 Professional Engineers in Industry Practice Division	
Chair	Robert Salvin
Chair-Elect	Louis Schindler
Past Chair	John J. Bonn
Secretary	Barry C. Rist
Vice Chair – Western Region	William F. Rauch, Jr.
Vice Chair – Southeastern Region	H. LeRoy Henderson
Vice Chair – North Central Region	Marvin A. Goldfarb
Vice Chair – Central Region	Arthur A. McPhail
Vice Chair – Northeastern Region	David B. Camp
Vice Chair – Southwestern Region	James L. Pape

1981 – 1982 Professional Engineers in Industry Practice Division	
Chair	Louis Schindler
Chair-Elect	Barry C. Rist
Past Chair	Robert Salvin
Secretary	William F. Rauch, Jr.
Vice Chair – Western Region	James Fuller
Vice Chair – Southeastern Region	H. LeRoy Henderson
Vice Chair – North Central Region	Marvin A. Goldfarb
Vice Chair – Central Region	Clarence C. Clarke
Vice Chair – Northeastern Region	Charles Tommor
Vice Chair – Southwestern Region	James L. Pape

1982 – 1983 Professional Engineers in Industry Practice Division	
Chair	Barry C. Rist
Chair-Elect	William F. Rauch, Jr.
Past Chair	Louis Schindler
2 nd Past Chair	Robert Salvin
Secretary	H. LeRoy Henderson Jr.
Vice Chair – Western Region	James Fuller
Vice Chair – Southeastern Region	R. Thomas Hobbs
Vice Chair – North Central Region	Calvin M. Ochs
Vice Chair – Central Region	Clarence C. Clarke
Vice Chair – Northeastern Region	Charles Tommor
Vice Chair – Southwestern Region	James L. Pape

1983 – 1984 Professional Engineers in Industry Practice Division	
Chair	William F. Rauch, Jr.
Chair-Elect	H. LeRoy Henderson Jr.
Past Chair	Barry C. Rist
2 nd Past Chair	Louis Schindler
Secretary	James L. Pape
Vice Chair – Western Region	William Kilcullen
Vice Chair – Southeastern Region	R. Thomas Hobbs
Vice Chair – North Central Region	Calvin M. Ochs
Vice Chair – Central Region	Richard Collier
Vice Chair – Northeastern Region	John F. Drum
Vice Chair – Southwestern Region	Willard L. Amann



PEI Executive Board for 1983 – 1984 (front standing, left to right): Calvin Ochs, H. LeRoy Henderson, Barry Rist and R. Thomas Hobbs; (front sitting, left to right): Louis Schindler and Charles Tommor; (back, left to right): William Rauch, William Kilcullen, William Amann, John Drum. (Photo from Industry Forum, Summer/Fall 1983).

1984 – 1985 Professional Engineers in Industry Practice Division	
Chair	H. LeRoy Henderson Jr.
Chair-Elect	James L. Pape
Past Chair	William F. Rauch, Jr.
2 nd Past Chair	Barry C. Rist
Secretary	Willard L. Amann
Vice Chair – Western Region	James K. Palmer
Vice Chair – Southeastern Region	M. C. (Bud) Lunsford
Vice Chair – North Central Region	Jack D. Hinton
Vice Chair – Central Region	Clyde R. Tipton, Jr.
Vice Chair – Northeastern Region	John F. Drum
Vice Chair – Southwestern Region	Billy Rentrop

1985 – 1986 Professional Engineers in Industry Practice Division	
Chair	James L. Pape
Chair-Elect	Calvin M. Ochs
Past Chair	H. LeRoy Henderson Jr.
2 nd Past Chair	William F. Rauch, Jr.
Secretary	M. C. (Bud) Lunsford
Vice Chair – Western Region	James K. Palmer
Vice Chair – Southeastern Region	Rogers F. Starr
Vice Chair – North Central Region	Jack D. Hinton
Vice Chair – Central Region	Clyde R. Tipton, Jr.
Vice Chair – Northeastern Region	Howard C. Harclerode, II
Vice Chair – Southwestern Region	Billy Rentrop

1986 – 1987 Professional Engineers in Industry Practice Division	
Chair	Calvin M. Ochs
Chair-Elect	M. C. (Bud) Lunsford
Past Chair	James L. Pape
2 nd Past Chair	H. LeRoy Henderson Jr.
Secretary	Jack D. Hinton
Vice Chair – Western Region	James K. Palmer
Vice Chair – Southeastern Region	Rogers F. Starr
Vice Chair – North Central Region	T. Richard Andresen
Vice Chair – Central Region	Clyde R. Tipton, Jr.
Vice Chair – Northeastern Region	Theresa L. Roesch
Vice Chair – Southwestern Region	William A. Rauh

1987 – 1988 Professional Engineers in Industry Practice Division	
Chair	M. C. (Bud) Lunsford
Chair-Elect	Jack D. Hinton
Past Chair	Calvin M. Ochs
2 nd Past Chair	James L. Pape
Secretary	Clyde R. Tipton, Jr.
Vice Chair – Western Region	Dennis Leiterman
Vice Chair – Southeastern Region	Rogers F. Starr
Vice Chair – North Central Region	T. Richard Andresen
Vice Chair – Central Region	W. Robert Buell
Vice Chair – Northeastern Region	Alfred E. Stahl
Vice Chair – Southwestern Region	Gary K. Cohea

1988 – 1989 Professional Engineers in Industry Practice Division	
Chair	Jack D. Hinton
Chair-Elect	Clyde R. Tipton, Jr.
Past Chair	M. C. (Bud) Lunsford
2 nd Past Chair	Calvin M. Ochs
Secretary	William A. Rauh
Vice Chair – Western Region	Dennis Leiterman
Vice Chair – Southeastern Region	Timothy J. Tomes
Vice Chair – North Central Region	Rex Gary Finley
Vice Chair – Central Region	W. Robert Buell
Vice Chair – Northeastern Region	Alfred E. Stahl
Vice Chair – Southwestern Region	Gary K. Cohea

1989 – 1990 Professional Engineers in Industry Practice Division	
Chair	Clyde R. Tipton, Jr.
Chair-Elect	William A. Rauh
Past Chair	Jack D. Hinton
2 nd Past Chair	M. C. (Bud) Lunsford
Secretary	Dennis Leiterman
Vice Chair – Western Region	Richard G. Guthrie
Vice Chair – Southeastern Region	Timothy J. Tomes
Vice Chair – North Central Region	Rex Gary Finley
Vice Chair – Central Region	Richard T. Berning
Vice Chair – Northeastern Region	Patrick J. Natale
Vice Chair – Southwestern Region	Gary K. Cohea

1990 – 1991 Professional Engineers in Industry Practice Division	
Chair	William A. Rauh
Chair-Elect	Dennis Leiterman
Past Chair	Clyde R. Tipton, Jr.
2 nd Past Chair	Jack D. Hinton
Secretary	Rex Gary Finley
Vice Chair – Western Region	Richard G. Guthrie
Vice Chair – Southeastern Region	Gale E. Sights
Vice Chair – North Central Region	Dennis E. Fessler
Vice Chair – Central Region	Richard T. Berning
Vice Chair – Northeastern Region	Patrick J. Natale
Vice Chair – Southwestern Region	Scott A. Woods



PEI Executive Board for 1990 – 1991 (front, left to right): Dick Guthrie, Richard Berning, Pat Natale, Denis Fessler, and Dennis Leiterman; (back, left to right): Ken Roy, William Rauh, Gary Finley, Jack Hinton, Clyde Tipton, and Scott Woods. (Photo from Industry Forum, Aug/Sep 1990).

1991 – 1992 Professional Engineers in Industry Practice Division	
Chair	Dennis Leiterman
Chair-Elect	Rex Gary Finley
Past Chair	William A. Rauh
2 nd Past Chair	Clyde R. Tipton, Jr.
Secretary	Richard T. Berning
Vice Chair – Western Region	William H. Beauchamp
Vice Chair – Southeastern Region	Gale E. Sights
Vice Chair – North Central Region	Dennis E. Fessler
Vice Chair – Central Region	Edward Byrum
Vice Chair – Northeastern Region	Gloria P. Holt
Vice Chair – Southwestern Region	Scott A. Woods

1992 – 1993 Professional Engineers in Industry Practice Division	
Chair	Rex Gary Finley
Chair-Elect	Richard T. Berning
Past Chair	Dennis Leiterman
2 nd Past Chair	William A. Rauh
Secretary	Gale E. Sights
Vice Chair – Western Region	William H. Beauchamp
Vice Chair – Southeastern Region	Johnnie Therriac
Vice Chair – North Central Region	Rex Meyer
Vice Chair – Central Region	Edward Byrum
Vice Chair – Northeastern Region	Gloria P. Holt
Vice Chair – Southwestern Region	Edgar P. Benoit



PEI Executive Board for 1992 – 1993 (front, left to right): Gail Sights, Gary Finley, Dennis Leitterman, and Richard Berning; (back, left to right): Johnnie Therriac, Rex Meyer, Edward Byrum, William Rauh, Gloria Holt, Edgar Benoit and William Beauchamp. (Photo from Industry Engineer, Oct/Nov 1992).

1993 – 1994 Professional Engineers in Industry Practice Division	
Chair	Richard T. Berning
Chair-Elect	Gale E. Sights
Past Chair	Rex Gary Finley
2 nd Past Chair	Dennis Leiterman
Secretary	Gloria P. Holt
Vice Chair – Western Region	Donald D. Ledbetter
Vice Chair – Southeastern Region	Johnnie Therriac
Vice Chair – North Central Region	Rex Meyer
Vice Chair – Central Region	Ralph K. Leidy
Vice Chair – Northeastern Region	John G. Woods
Vice Chair – Southwestern Region	Edgar P. Benoit



PEI Executive Board for 1993 – 1994 (front, left to right): Ralph Leidy, Gloria Holt, Gary Finley and Rex Meyer; (back, left to right): Edgar Benoit, Johnnie Therriac, John Woods, Richard Berning, Dennis Leitterman, Donald Ledbetter and Gale Sights. (Photo from Industry Engineer, Aug/Sep 1993).

1994 – 1995 Professional Engineers in Industry Practice Division	
Chair	Gale E. Sights
Chair-Elect	Gloria P. Holt
Past Chair	Richard T. Berning
2 nd Past Chair	Rex Gary Finley
Secretary	Kennth B. Roy, Jr.
Vice Chair – Western Region	Donald D. Ledbetter
Vice Chair – Southeastern Region	Gary R. Keesecker
Vice Chair – North Central Region	Mark K. Brumbach
Vice Chair – Central Region	Ralph K. Leidy
Vice Chair – Northeastern Region	John G. Woods
Vice Chair – Southwestern Region	Edgar P. Benoit

1995 – 1996 Professional Engineers in Industry Practice Division	
Chair	Gloria P. Holt
Chair-Elect	Kennth B. Roy, Jr.
Past Chair	Gale E. Sights
2 nd Past Chair	Richard T. Berning
Secretary	Edgar P. Benoit
Vice Chair – Western Region	Milton A. Tiede
Vice Chair – Southeastern Region	Gary R. Keesecker
Vice Chair – North Central Region	Mark K. Brumbach
Vice Chair – Central Region	Donald C. Wood
Vice Chair – Northeastern Region	Karen S. Pedersen
Vice Chair – Southwestern Region	J. Madison Drake

1996 – 1997 Professional Engineers in Industry Practice Division	
Chair	Kenneth B. Roy, Jr.
Chair-Elect	Edgar P. Benoit
Past Chair	Gloria P. Holt
2 nd Past Chair	Gale E. Sights
Secretary	Ralph K. Leidy
Vice Chair – Western Region	Milton A. Tiede
Vice Chair – Southeastern Region	Teresa A. Helmlinger
Vice Chair – North Central Region	Mark K. Brumbach
Vice Chair – Central Region	Donald C. Wood
Vice Chair – Northeastern Region	Karen S. Pedersen
Vice Chair – Southwestern Region	Richard H. Paulk

1997 – 1998 Professional Engineers in Industry Practice Division	
Chair	Edgar P. Benoit
Chair-Elect	Ralph K. Leidy
Past Chair	Kennth B. Roy, Jr.
2 nd Past Chair	Gloria P. Holt
Secretary	Karen S. Pedersen
Vice Chair – Western Region	Richard Minetto
Vice Chair – Southeastern Region	Teresa A. Helmlinger
Vice Chair – North Central Region	Mark K. Brumbach
Vice Chair – Central Region	W. Robert Buell
Vice Chair – Northeastern Region	Neil J. Illenberg
Vice Chair – Southwestern Region	Richard H. Paulk

1998 – 1999 Professional Engineers in Industry Practice Division	
Chair	Ralph K. Leidy
Chair-Elect	Karen S. Pedersen
Past Chair	Edgar P. Benoit
2 nd Past Chair	Kennth B. Roy, Jr.
Secretary	Teresa A. Helmlinger
Vice Chair – Western Region	Richard Minetto
Vice Chair – Southeastern Region	Robert W. Emery
Vice Chair – North Central Region	Chris Herrera
Vice Chair – Central Region	W. Robert Buell
Vice Chair – Northeastern Region	Neil J. Illenberg
Vice Chair – Southwestern Region	Richard Bogdanovich



PEI Executive Board for 1998 – 1999 (front, left to right): Karen Pedersen, Edgar Benoit, Ralph Leidy, and Teresa Helmlinger; (back, left to right): Christopher Herrera, Robert Emery, Richard Bogdanovich, and Robert Buell. (Photo from Engineering Times, October 1998).

1999 – 2000 Professional Engineers in Industry Practice Division	
Chair	Karen S. Pedersen
Chair-Elect	Richard Guthrie
Past Chair	Ralph K. Leidy
2 nd Past Chair	Edgar P. Benoit
Secretary	Douglas Benner
Vice Chair – Western Region	Clyde Nagata
Vice Chair – Southeastern Region	Robert W. Emery
Vice Chair – North Central Region	Chris Herrera
Vice Chair – Central Region	W. Robert Buell
Vice Chair – Northeastern Region	John G. Woods
Vice Chair – Southwestern Region	Richard Bogdanovich



PEI Executive Board for 1999 – 2000 (front, left to right): W. Robert Buell, Teresa Helmlinger, Karen Pedersen, and Clyde Nagata; (back, left to right): Richard Bogdanovich, Ralph Leidy, Robert Emery, and Richard Guthrie. (Photo from Engineering Times, Aug/Sep 1999).

2000 – 2001 Professional Engineers in Industry Practice Division	
Chair	Richard Guthrie
Chair-Elect	Douglas Benner
Past Chair	Karen S. Pedersen
2 nd Past Chair	Ralph K. Leidy
Secretary	Robert W. Emery
Vice Chair – Western Region	Clyde Nagata
Vice Chair – Southeastern Region	Richard O. Frazee
Vice Chair – North Central Region	Ronald E. Hill
Vice Chair – Central Region	W. Robert Buell
Vice Chair – Northeastern Region	John G. Woods
Vice Chair – Southwestern Region	Richard H. Paulk



PEI Executive Board for 2000 – 2001 (front, left to right): Karen Pedersen, Richard Guthrie and Douglas Benner; (back, left to right): Clyde Nagata, Richard Frazee, Richard Paulk, Robert Emery, Ronald Hill, and John Woods. (Photo from Engineering Times, October 2000).

2001 – 2002 Professional Engineers in Industry Practice Division	
Chair	Douglas Benner
Chair-Elect	Robert W. Emery
Past Chair	Richard Guthrie
2 nd Past Chair	Karen S. Pedersen
Secretary	Johnnie Theriac
Vice Chair – Western Region	Clyde Nagata
Vice Chair – Southeastern Region	Richard O. Frazee
Vice Chair – North Central Region	Ronald E. Hill
Vice Chair – Central Region	Richard L. Buchanan
Vice Chair – Northeastern Region	Neal J. Illenberg
Vice Chair – Southwestern Region	Richard H. Paulk



PEI Executive Board for 2001 – 2002 (left to right): Johnnie Theriac, Neil Illenberg, Karen Pedersen, Clyde Nagata, Richard Guthrie, Richard Buchanan, Richard Frazee, Douglas Benner, and Robert Emery. (Photo from Engineering Times, October 2001).

2002 – 2003 Professional Engineers in Industry Practice Division	
Chair	Robert W. Emery
Chair-Elect	Johnnie Theriac
Past Chair	Douglas Benner
2 nd Past Chair	Richard Guthrie
Secretary	Clyde Nagata
Vice Chair – Western & Pacific Region	Curtis A. Beck
Vice Chair – Southeastern Region	Jorge L. Pardo
Vice Chair – North Central Region	Robert (Bob) G. Becnel
Vice Chair – Central Region	Richard L. Buchanan
Vice Chair – Northeastern Region	Neal J. Illenberg
Vice Chair – Southwestern Region	Richard H. Paulk



Outgoing PEI Chair Douglas Benner (Right) hands gavel to Incoming PEI Chair Robert Emery at Jul 14, 2002 at the NSPE Annual Meeting in Orlando. (Photo from Douglas Benner).

2003 – 2004 Professional Engineers in Industry Practice Division	
Chair	Johnnie Theriac
Chair-Elect	Clyde Nagata
Past Chair	Robert W. Emery
2 nd Past Chair	Douglas Benner
Secretary	Robert (Bob) G. Becnel
Young Engineer Representative	Jonn Nebbe
Vice Chair – Western & Pacific Region	Curtis A. Beck
Vice Chair – Southeastern Region	Jorge L. Pardo
Vice Chair – North Central Region	David M. Allen
Vice Chair – Central Region	Richard L. Buchanan
Vice Chair – Northeastern Region	Neal J. Illenberg
Vice Chair – Southwestern Region	J. Kevin Cooper



PEI Executive Board for 2003– 2004 (left to right): Robert Emery, Johnnie Theriac, Clyde Nagata, Bob Becnel, Curtis Beck, Rick Buchanan, and Jorge Pardo. (Photo from Erin Garcia).

2004 – 2005 Professional Engineers in Industry Practice Division	
Chair	Clyde Nagata
Chair-Elect	Robert (Bob) G. Becnel
Past Chair	Johnnie Theriac
2 nd Past Chair	Robert W. Emery
Secretary	J. Kevin Cooper
Young Engineer Representative	Jennifer Harrell
Vice Chair – Western & Pacific Region	Curtis A. Beck
Vice Chair – Southeastern Region	Jorge L. Pardo
Vice Chair – North Central Region	Jonn Nebbe
Vice Chair – Central Region	Richard L. Buchanan
Vice Chair – Northeastern Region	Neal J. Illenberg
Vice Chair – Southwestern Region	Carlos Garza

2005 – 2006 Professional Engineers in Industry Practice Division	
Chair	Robert (Bob) G. Becnel
Chair-Elect	J. Kevin Cooper
Past Chair	Clyde Nagata
2nd Past Chair	Johnnie Theriac
Secretary	Richard L. Buchanan
Young Engineer Representative	James Mathis
Vice Chair – Western & Pacific Region	Curtis A. Beck
Vice Chair – Southeastern Region	Jorge L. Pardo
Vice Chair – North Central Region	Jonn Nebbe
Vice Chair – Central Region	Michael J. Vinarcik
Vice Chair – Northeastern Region	John M. Wall, Jr.
Vice Chair – Southwestern Region	Carlos Garza



PEI Executive Board for 2005 – 2006 (front left to right): Jorge Pardo, Bob Becnel, John Wall and Mike Vinarcik; (back left to right): Johnnie Theriac, Clyde Nagata, Rick Frazee, J. Kevin Cooper and Rick Buchanan. (Photo from Erin Garcia).

2006 – 2007 Professional Engineers in Industry Interest Group	
Chair	J. Kevin Cooper
Chair-Elect	John M. Wall, Jr.
Past Chair	Robert (Bob) G. Becnel
Secretary	Andy Russo
Young Engineer Representative	James Mathis
Vice Chair – Western & Pacific Region	Barry Nakamoto
Vice Chair – Southeastern Region	Rick Frazee
Vice Chair – North Central Region	Jonn Nebbe
Vice Chair – Central Region	Michael J. Vinarcik
Vice Chair – Northeastern Region	Cullen M. Flanders
Vice Chair – Southwestern Region	Carlos Garza

2007 – 2008 Professional Engineers in Industry Interest Group	
Chair	Andy Russo
Chair-Elect	John M. Wall, Jr.
Past Chair	J. Kevin Cooper
NSPE Interest Group Board of Director	Clyde Nagata
Secretary	Richard L. Buchanan
Young Engineer Representative	James Mathis
Vice Chair – Western & Pacific Region	Curtis A. Beck
Vice Chair – Southeastern Region	Jorge L. Pardo
Vice Chair – North Central Region	Jonh Nebbe
Vice Chair – Central Region	Michael J. Vinarcik
Vice Chair – Northeastern Region	Cullen M. Flanders
Vice Chair – Southwestern Region	Carlos Garza

2008 – 2009 Professional Engineers in Industry Interest Group	
Chair	John M. Wall, Jr.
Chair-Elect	Richard L. Buchanan
Past Chair	Andy Russo
NSPE Interest Group Board of Director	Clyde Nagata
Secretary	Jonh Nebbe
Young Engineer Representative	Richard Willoughby
Vice Chair – Western & Pacific Region	Curtis A. Beck
Vice Chair – Southeastern Region	Jorge L. Pardo
Vice Chair – North Central Region	Stephen A. Hutti
Vice Chair – Central Region	H Michael J. Vinarcik
Vice Chair – Northeastern Region	Cullen M. Flanders
Vice Chair – Southwestern Region	James Mathis

2009 – 2010 Professional Engineers in Industry Interest Group	
Chair	Richard L. Buchanan
Chair-Elect	Jonh Nebbe
Past Chair	John M. Wall, Jr.
NSPE House of Delegate Representative	Robert (Bob) G. Becnel
Secretary	Curtis A. Beck
Young Engineer Representative	Austin Lin
Vice Chair – Western & Pacific Region	Franklin Fong
Vice Chair – Southeastern Region	Jorge L. Pardo
Vice Chair – North Central Region	Stephen A. Hutti
Vice Chair – Central Region	Howard R. Jones
Vice Chair – Northeastern Region	Cullen M. Flanders
Vice Chair – Southwestern Region	James Mathis

2010 – 2011 Professional Engineers in Industry Interest Group	
Chair	Jonh Nebbe
Chair-Elect	Curtis A. Beck
Past Chair	Richard L. Buchanan
NSPE House of Delegate Representative	Robert (Bob) G. Becnel
Secretary	Cullen M Flanders
Young Engineer Representative	Austin Lin
Vice Chair – Western & Pacific Region	Franklin Fong
Vice Chair – Southeastern Region	Jorge L. Pardo
Vice Chair – North Central Region	Stephen A. Hutti
Vice Chair – Central Region	Howard R. Jones
Vice Chair – Northeastern Region	Thomas J Kesolits
Vice Chair – Southwestern Region	James Mathis

2011 – 2012 Professional Engineers in Industry Interest Group	
Chair	Curtis A. Beck
Chair-Elect	Stephen A. Hutti
Past Chair	Jonh Nebbe
NSPE House of Delegate Representative	Richard L. Buchanan
Secretary	Austin Lin
Young Engineer Representative	Peter E. Pisasale
Vice Chair – Western & Pacific Region	Franklin Fong
Vice Chair – Southeastern Region	Vacant
Vice Chair – North Central Region	Donald W. Mitchell
Vice Chair – Central Region	Howard R. Jones
Vice Chair – Northeastern Region	Thomas J Kesolits
Vice Chair – Southwestern Region	Neerali J. Desai

2012 – 2013 Professional Engineers in Industry Interest Group	
Chair	Stephen A. Hutti
Chair-Elect	Austin Lin
Past Chair	Curtis A. Beck
Secretary	Franklin Fong
NSPE Interest Group Board of Director	Curtis A. Beck
NSPE House of Delegate Representative	Curtis A. Beck
Young Engineer Representative	Peter E. Pisasale
Vice Chair – Western & Pacific Region	Thomas Smailus
Vice Chair – Southeastern Region	Stanley L Nurnberger III
Vice Chair – North Central Region	Donald W. Mitchell
Vice Chair – Central Region	Howard R. Jones
Vice Chair – Northeastern Region	Thomas J Kesolits
Vice Chair – Southwestern Region	Neerali J. Desai

STATE PEI DIVISION HISTORIES

There has been significant amount of success across the United States in terms of the individual State PEI organizations. Many of the projects and awards that have been presented at the NSPE PEI organization began as a concept and have been previously implemented in a State. For example, the New Product Award began as a Governor's New Product Award in Wisconsin. It was subsequently started under Calvin Ochs in the 1980's who liked the idea.

The activity in the states has varied greatly from state to state. This is due in large part to the level of its industrial base within the state as well as those states with at least one large metropolitan area. This goes without saying since the early days of PEI began with engineering employees from larger companies that were more prototypical manufacturing and industrial companies of the 1950's and 1960's.

As engineers became more common in small and medium sized companies, PEI activity became more diversely employed across the country. However, as economic cycles moved up and then back down, smaller companies were less capable of supporting its engineers to remain active in PEI. As it became more of a burden on the engineer to financially fund his/her activity, membership and participation waned.

The original concept of practice sections envisioned not only a proactive division at the national level, but a parallel sequence to NSPE - National, State and Chapter units. In the beginning many interested members from State Societies attended the Board of Governors meetings to see what PEI was all about. In the early years they were allowed the privilege of the floor though they were not official delegates from their state. This introduction encouraged these persons to form State Practice Divisions. The State Practice Divisions delegates reported on their State activities in the PEI area plus the problems and successes of industry in their state.

Some on the Board of Governors pointed out to the officers that many of the PEI delegates and even some officers were members of national PEI, but were not members of their State PEI. James Crooks explained that the Rules of Government made it clear where the state does not have a PEI section, an NSPE member who is in industry can be a member of PEI and a delegate to the PEI Board of Governors.

The approval of a state PEI section starts when the state PEI had an approved constitution with bylaws that the State Society Board of Directors approved. In addition, the State president must give his signature as proof of the Board action, the proposed state PEI chairman sign the request to be approved by national PEI and list of officers appointed or elected. The submission of this information was sent to the Executive Board of PEI and the Board of Governors for approval. In the early years of PEI some actions of the approval process were lost and in the early seventies the board had to approve 15 States who had been previously approved.

The state PEI sections or divisions when approved were authorized to send a voting delegate and to receive what remuneration was available from national PEI based on finances of PEI. The first states that developed PEI sections included:

- 1960 – Connecticut, Illinois, Michigan, New Jersey, Ohio and Wisconsin
- 1962 – Indianan, New York, and North Carolina

Some of literature has indicated that in 1990 45 "states" had PEI Sections or were organized and approved to send delegates to the Board of Governors. The Executive Committee encouraged activity at the State and Chapter level. Most "States" felt that having a representative at the national level met their minimum requirements. Many members were pleased with the activity at the national level and pleased to support such action with their dues and being represented with a delegate to the Board of Governors. After thorough research, the best summary of officially chartered State organizations is shown below.

Summary of Officially Chartered State PEI Organizations							
Order	State	State Date	NSPE Date	Order	State	State Date	NSPE Date
1	Illinois		1960	24	DC	Apr 23, 1969	Jul 8, 1969
2	Ohio		1960	25			
3	Michigan		1960	26	Kentucky		Jul 6, 1971
4	Wisconsin		1960	27	Iowa	Apr 1968	Jul 6, 1971
5	New Jersey		1960	28	West Virginia	Jun 4, 1971	Jul 6, 1971
6	Connecticut		1960	29	Missouri		Jul 11, 1972
7	New York	Jun 20, 1959	1962	30	New Jersey		Jul 11, 1972
8	North Carolina		1962	31	Colorado		Jul 11, 1972
9	Indiana		1962	32	Arizona		Jul 11, 1972
10	Texas	Jul 1963		33	Massachusetts		Jul 11, 1972
11	Florida	May 2, 1964		34	Oklahoma		Jan 9, 1973
12	Virginia	Jun 27, 1968		35	Connecticut		Jan 9, 1973
13	Kansas	1959		36	New Hampshire		Jan 9, 1973
14	Washington	1961		37	Utah		Jan 9, 1973
15	Idaho	1960	Jan 1969	38	Rhode Island		Jul 10, 1973
16	Pennsylvania		Mar 1969	39			
17	Maryland			40			
18	Minnesota			41			
19	California			42	New Mexico		1978
20	Mississippi			43	North Dakota		Jul 1978
21	South Carolina			44	Montana		Nov 1979
22	Tennessee			45			
23	Georgia	May 9, 1969	Jul 8, 1969				

ALABAMA

Alabama PEI Engineer of the Year Recipients					
1983	Bernie Corker, P.E.	Gadsden	1998	None	
1984	Marvin Richter, P.E.	Birmingham	1999	None	
1985	Thomas Saunder, P.E.	Birmingham	2000	None	
1986	Kenneth Roy, Jr, P.E.	Anniston	2001	None	
1987	Charles Haynes, P.E.	Anniston	2002	None	
1988	Mustafa Ocak, P.E.	Birmingham	2003	J C "Buzz" Vance, III, P.E.	Birmingham
1989	David Pongetti, P.E.	Florence	2004	None	
1990	Jean Richardson, P.E.	Birmingham	2005	None	
1991	Edwin Hardin, P.E.	Birmingham	2006	None	
1992	Robert Moore, P.E.	Birmingham	2007	None	
1993	Randolph Bunt, P.E.	Birmingham	2008	None	
1994	Jack Chapman, P.E.	Montgomery	2009	None	
1995	John Schnetzler, P.E.	Birmingham	2010	None	
1996	John Kent, P.E.	Birmingham	2011	None	
1997	None		2012	None	

COLORADO

The following is a brief history of the Professional Engineers in Industry (PEI) Practice Division of the Professional Engineers in Colorado (PEC). Its intent is to recognize and document past leaders in the Colorado PEI and programs the Practice Division pursued.

Colorado PEI Governors	
1965 - 1966	Akbar F. Brinsmade
1970 - 1971	Louis J. Schmitt
1977 - 1978	Horace Jackson
1985 - 1987	James R. Johns
1987 - 1989	Scott A. Woods
1989 - 1990	Scott A. Woods May Fry (Co-Chair)
1990 - 1991	D. Todd Murphy

PEI in Colorado can be traced back to October 4, 1965, when 34 PEC members chartered the state PEI practice division. Akbar F. Brinsmade was the first chairman and Louie J. Schmitt the first secretary of the Colorado PEI.

Scott Woods and Max Fry sent a questionnaire to more than 200 PEC-PEI members in October 1988, to query the members about their interest in PEI activities. Responses showed that the most interest lay in the area of meetings with speakers and social/educational programs. Other activities in the questionnaire included: networking, employer recognition programs, awards and membership involvement.

As a result of the survey, four technical socials were coordinated in 1990 - 1991. The socials included a networking happy hour at a local hotel, followed by a half-hour presentation. Since the attendance was dropping off, the socials were stopped.

Some of the information for Colorado, herein, originally written by D. Todd Murphy for The First 30 Years¹⁵⁵.

CONNECTICUT

Connecticut PEI Chairs	
1999 - 2000	Kenneth Lipman, P.E.
2000 - 2001	Kenneth Lipman, P.E.
2001 - 2002	Kenneth Lipman, P.E.
2002 - 2003	Kenneth Lipman, P.E.
2003 - 2004	Kenneth Lipman, P.E.
2004 - 2005	Ernest Gardow, P.E., Ph.D.
2005 - 2006	Ernest Gardow, P.E., Ph.D.
2006 - 2007	Ernest Gardow, P.E., Ph.D.
2007 - 2008	Thomas Vasko, P.E., Ph.D.
2008 - 2009	Thomas Vasko, P.E., Ph.D.
2009 - 2010	Austin Lin, P.E.
2010 - 2011	Nate Angliss, P.E.
2011 - 2012	Nate Angliss, P.E.

DELAWARE

Delaware is a small state in both area and population. Its geography is diverse of its north-south, 120 plus miles long shape. It is narrow and most of its population and engineers are in the northern section which is the narrowest, about 20 miles average across. Engineers are a higher than normal percentage of the population. Many engineers working in Delaware are residents just beyond its borders in New Jersey, Maryland, and Pennsylvania.

¹⁵⁵ Tennant, Otto, The First 30 Years, NSPE, June 1991, pg 46-47.

When the Delaware Society of Professional Engineers (DSPE) was organized in 1950 (Chartered by NSPE in January 1951), it was one organization for the whole state area. DSPE is the original name of the Delaware Engineering Society (DES) but was changed in 1988 - 1989 to Delaware Engineering Society (DES) to avoid name confusion with the Delaware Association of Professional Engineers (DAPE). DAPE was formed of the Delaware registered Professional Engineers living in Delaware, by State Law to be the electoral body which elects a self rule State (Registration & Policing) Council. This law also legally protects the use, in Delaware, of the word Engineer and its other derivatives for use by Delaware registered engineers only.

In 1962 - 1963, DSPE split into two chapters: a smaller chapter for the two southern counties of Kent and Sussex; and a larger chapter in northern New Castle County. The hope was that growth would continue and eventually permit the Kent and Sussex Chapter to split into separate chapters. Something that was desirable, as the commute from Dover (largest city in Kent County) to Seaford (largest city in Sussex County) is about 50 miles. Unfortunately this didn't happen and growth stopped for NSPE, DES, Kent and Sussex County, and New Castle County. Since then, membership erosion started and continues through today.

Member in the late 1990's of Kent and Sussex County is just under 50. The membership of New Castle County is just under 200. The state membership is a little more than 240 excluding the student membership.

At one time the potential membership of the PEI would have made it the largest Practice Division of DES if such a group had existed. With downsizing, the policy of "fast tracking" and emphasis on MBA degrees has eliminated registered Professional Engineers from middle and upper management of Delaware's big industrial companies such as DuPont, ICI, and Hercules. The persons rising to these management levels were not given the luxury of staying put, or the time to do the work (study for test, etc.) to obtain registration. With no encouragement from management and the fewer numbers of engineers from these companies, the base for a PEI has dwindled.

In the early 1960's when more than 50% of the DES membership was from Industry, an attempt was made to organize a PEI group. Dave Fiet, P.E. was appointed as Chair/Organizer, but similarly to 1993 - 1994, Du Pont, his employer, transferred him to Europe and no group was actually formed. There is no history of an actual DES Practice Division group. The only history is of the State Society and its aborted attempts at forming local Practice Division groups.

In 1992 when the Reorganization of NSPE Study was first talked about and it appeared major control of the Society was going to the Practice Divisions, DES 1991 - 1992 President Jack Billingsley, P.E., appointed a PEPP Chair/Organizer, Bob Chagnon, P.E., who worked hard trying to start a group. After three years and no progress, Bob resigned as DES-PEPP Chair and no one has agreed to be his replacement as of 1997.

An attempt to organize a PEE group was taken on by 1992 - 1993 DES Past President Russ Jones in 1994. He worked at organizing a DES-PEE until he left Delaware to become NSPE Executive Director. As DES had less than four members of the faculty, his major endeavors first had to be recruiting NSPE-DES members from the University of Delaware. When Jones left, no one was available as a replacement.

With this as a background, Joe J. Welker, Jr. agreed in 1995 - 1996 to be PEI Chair/Organizer. A survey questionnaire was sent to everyone in the DES roster listed as PEI for area of work (plus a few that weren't listed but in fact were employed in industry) with very negative results. Only one reply expressed an interest in a separate group. A few others replied but only to indicate they had no time to get further involved. At the 1996 Annual DES Meeting, 1994 - 1995 NSPE-PEI Chair Gloria Holt, was a guest Program Speaker. A no charge pre-meeting reception was arranged in her honor. Invitations to the reception were the outgoing/incoming state and chapter officers and all of the persons contacted in the DES-PEI survey.

The conclusion has been drawn by the DES Board of Directors that the DES membership has no interest in expanding the Practice Divisions and that NSPE itself should continue to be the focus and provider of service to the membership. The DES Board is supportive of the downsizing being attempted by NSPE and feels that the Practice Divisions must be part of the downsizing. In-as-much-as the NSPE Board of Directors is meeting only once a year, the DES Board has refused funding attendance at the winter National meetings as a PEI Governor. Hence, Joe Welker has been directed to carry a resolution to the NSPE Annual Meeting suggesting further downsizing of the Practice Divisions.

There have been Industry Visitations during the 1992 - 1997 time frames. The visits were through the State sponsorship and not through a DES-PEI Practice Division; however the National PEI committee participated in them. These visits were received graciously, but no visible results of improved help of encouragement from the Industries for increased participation of their engineering employees in the Society. Conditions of employment for engineers are good in these industries except for the fear of a continuing program of downsizing. The major industries of interest for DES at the time were DuPont, Hercules and ICI as these have been the large employers of engineers and have their home office located in Wilmington, Delaware. While these visits have not produced members for NSPE-DES, it is probably good to do them every four to six years just to make the industries aware of NSPE and DES.

As of 1997, Joe J. Welker, Jr. is the only DES Officer of a Practice Division -- named as DES Vice-President/PEI Chair.

Some of the information for Delaware, herein, originally written by Joe. J. Welker, Jr., P.E. for The Next Seven Years¹⁵⁶.

DISTRICT OF COLUMBIA

Each year DCSPE-PEI awards an Industrial Professional Development Award. For the last several years the winner has been Potomac Electric Power Company (PEPCO).

¹⁵⁶ Rauch, William F., The Next Seven Years, NSPE, June 1997, p 23-24.

Each year DCSPE holds a MathCounts competition. DCSPE-PEI members participate in MathCounts as individual members of DCSPE, rather than as a PEI activity.

District of Columbia Society of Professional Development			
1993 - 1994	Potomac Electric Power Co (PEPCO)	2003 - 2004	Potomac Electric Power Co (PEPCO)
1994 - 1995	Potomac Electric Power Co (PEPCO)	2004 - 2005	Potomac Electric Power Co (PEPCO)
1995 - 1996	Potomac Electric Power Co (PEPCO)	2005 - 2006	Potomac Electric Power Co (PEPCO)
1996 - 1997	Potomac Electric Power Co (PEPCO)	2006 - 2007	Potomac Electric Power Co (PEPCO)
1997 - 1998	Potomac Electric Power Co (PEPCO)	2007 - 2008	Inactive
1998 - 1999	Potomac Electric Power Co (PEPCO)	2008 - 2009	Inactive
1999 - 2000	Potomac Electric Power Co (PEPCO)	2009 - 2010	Inactive
2000 - 2001	Potomac Electric Power Co (PEPCO)	2010 - 2011	Inactive
2001 - 2002	Potomac Electric Power Co (PEPCO)	2011 - 2012	Inactive
2002 - 2003	Potomac Electric Power Co (PEPCO)		

District of Columbia PEI Chairs					
1969 - 1970	Edward Brady	1984 - 1985	Carlos Villarreal	1998 - 1999	Robert Hershey
1970 - 1971	Robert Hershey	1985 - 1986	Alan Letzt	1999 - 2000	Robert Hershey
1971 - 1972	Robert Hershey	1986 - 1987	Robert Hershey	2000 - 2001	
1972 - 1973	Henry James	1987 - 1988	Robert Hershey	2001 - 2002	
1973 - 1974	Henry James	1988 - 1989	Robert Hershey	2002 - 2003	
1974 - 1975	Roger Butler	1989 - 1990	Wilbur Sherwood	2003 - 2004	
1975 - 1976	Henry Burford	1990 - 1991	Howard C. Gibbs	2004 - 2005	
1976 - 1977	A. Wadi Williams	1991 - 1992		2005 - 2006	
1977 - 1978	Russ Kevala	1992 - 1993		2006 - 2007	John M. Wall
1978 - 1979	Robert Hershey	1993 - 1994		2007 - 2008	John M. Wall
1979 - 1980	Robert Hershey	1994 - 1995		2008 - 2009	Andy Russo
1980 - 1981	David Mahesh	1995 - 1996		2009 - 2010	Andy Russo
1981 - 1982	Alan Letzt	1996 - 1997	Robert Hershey	2010 - 2011	Howard C. Gibbs
1982 - 1983	Claude Dimmette	1997 - 1998	Robert Hershey	2011 - 2012	Howard C. Gibbs
1983 - 1984	Claude Dimmette				

District of Columbia PEI Governors					
1970 - 1971	Robert Hershey	1984 - 1985	Robert Hershey	1998 - 1999	Robert Hershey
1971 - 1972	Robert Hershey	1985 - 1986	Robert Hershey	1999 - 2000	Robert Hershey
1972 - 1973	Robert Hershey	1986 - 1987	Robert Hershey	2000 - 2001	
1973 - 1974	Robert Hershey	1987 - 1988	Robert Hershey	2001 - 2002	
1974 - 1975	Robert Hershey	1988 - 1989	Robert Hershey	2002 - 2003	
1975 - 1976	Robert Hershey	1989 - 1990	Robert Hershey	2003 - 2004	
1976 - 1977	Robert Hershey	1990 - 1991	Robert Hershey	2004 - 2005	
1977 - 1978	Robert Hershey	1991 - 1992	Robert Hershey	2005 - 2006	
1978 - 1979	Robert Hershey	1992 - 1993	Robert Hershey	2006 - 2007	
1979 - 1980	Robert Hershey	1993 - 1994	Robert Hershey	2007 - 2008	
1980 - 1981	Robert Hershey	1994 - 1995	Robert Hershey	2008 - 2009	
1981 - 1982	Robert Hershey	1995 - 1996	Robert Hershey	2009 - 2010	
1982 - 1983	Robert Hershey	1996 - 1997	Robert Hershey	2010 - 2011	
1983 - 1984	Robert Hershey	1997 - 1998	Robert Hershey	2011 - 2012	



(Left to right): M.M. Abrams, President of DCSPE; Charles Jones, NUS Corporation; Robert Hershey, PEI Chair of DCSPE 1971 - 1972. (Photo from PEI Newsletter, April 1972).

Some of the information for District of Columbia, herein, originally written by Dr. Robert L. Hershey, P.E. for The Next Seven Years¹⁵⁷.

¹⁵⁷ Rauch, William F., The Next Seven Years, NSPE, June 1997, p 25.

FLORIDA

The Florida Professional Engineers In Industry (FPEI) is a Practice Section of the Florida Engineering Society (FES). The other Practice Sections of FES are as follows: Florida Professional Engineers In Government (FPEG), Florida Engineers In Construction (FEC), Florida Engineers In Education (FEE), Professional Surveyors Of Florida (PSF) and Florida Institute Of Consulting Engineers (FICE).



PEI Outgoing Southeastern Region Vice Chair, Rich Frazee, receives the Outstanding Service Award from PEI Chair Douglas Benner at the Orlando Meeting Jul 14, 2002. (Photo from Doug Benner):

The Florida Engineering Society which was founded in 1917 operated without practice sections until 1950 when the Surveying and Mapping Division was formed. In 1964 additional practice sections were added. The practice section for engineers in industry was formed in 1964 as Florida Association of Engineers in Industry (FAEI). The "Rules of Procedure and Operation" for the practice section were adopted on May 2, 1964. In 1968 the provision for "Sustaining Firms" was added. In 1973 the name was changed to Florida Engineers in Industry (FEI). In 1980 the name of the practice section was changed to the present name "Florida Professional Engineers In Industry" (FPEI). In 1984 the first "New Product Award" was awarded. The award shortly thereafter became the Governor's New Product Award, with the assistance of the Florida State Governor's Office. In 1986 a new position was added, "Governor" to national Professional Engineers in Industry. Prior to this date the section Chairman also acted as the Governor to national PEI. The Governor's position is the only three year term office in the practice section. The purpose of the three year term is to provide improved involvement at the national level. Timothy J. Tomes, P.E. was the first Governor serving 1986 - 1988.

The Objectives of the practice section were:

- 1) To provide an effective forum for discussion and action on problems of common interest to engineers employed in industry.
- 2) To promote the professional development, recognition, and economic interest of its members.
- 3) To provide a means of communication for its members and liaison with Professional Engineers in Industry Practice Section of NSPE and with other similar state sections.
- 4) To promote cooperative relations between engineers and management in furtherance of high standards of professional service employment.

The *Governor's New Product Award* program, established in 1985, salutes Florida inventors in the design and development of new products, machines, processes or materials. Selection of the winning entries is based on the sales & economic impact in the state of Florida, the innovative use of engineering principles, and the improved savings, productivity, energy efficiency and safety. The *Governor's New Product Award* program is administered by the Florida Professional Engineers in Industry, a practice section of the Florida Engineering Society.

Florida PEI Chairs					
1982 - 1983	Charles C. Haynes, P.E.	1992 - 1993	Armando J. Noble, P.E.	2002 - 2003	Jorge L. Pardo, P.E.
1983 - 1984	Charles C. Haynes, P.E.	1993 - 1994	Faustino L. Prado, P.E.	2003 - 2004	Alan Keith, P.E.
1984 - 1985	Timothy J. Tomes, P.E.	1994 - 1995	Richard M. Baker, P.E.	2004 - 2005	Rebecca J. McClintock, P.E.
1985 - 1986	Eugene T. Tonn, P.E.	1995 - 1996	Richard M. Baker, P.E.	2005 - 2006	Patrick Ferland, P.E. Jorge L. Pardo, P.E.
1986 - 1987	Richard O. Frazee, P.E.	1996 - 1997	Roy W. Smith, P.E.	2006 - 2007	John E. Touchton, P.E.
1987 - 1988	Richard G. Peck, P.E.	1997 - 1998	Jorge L. Pardo, P.E.	2007 - 2008	Rebecca J. McClintock, P.E.
1988 - 1989	Donald E. Hirsch, P.E.	1998 - 1999	Harold T. Snyder, P.E.	2008 - 2009	
1989 - 1990	Kevin G. Boothe, P.E.	1999 - 2000	I. R. Greene, P.E.	2009 - 2010	
1990 - 1991	D. Gordon Nelson, P.E.	2000 - 2001	Rebecca J. McClintock, P.E.	2010 - 2011	
1991 - 1992	Donald L. Bland, P.E.	2001 - 2002	Jorge L. Pardo, P.E.	2011 - 2012	Richard O. Frazee, P.E.

Florida PEI Governors			
1988 - 1989	Richard O. Frazee, P.E.	2000 - 2001	Richard O. Frazee, P.E.
1989 - 1990	Richard O. Frazee, P.E.	2001 - 2002	Richard O. Frazee, P.E.
1990 - 1991	Richard O. Frazee, P.E.	2002 - 2003	Richard O. Frazee, P.E.
1991 - 1992	Richard O. Frazee, P.E.	2003 - 2004	Richard O. Frazee, P.E.
1992 - 1993	Richard O. Frazee, P.E.	2004 - 2005	Richard O. Frazee, P.E.
1993 - 1994	Richard O. Frazee, P.E.	2005 - 2006	Richard O. Frazee, P.E.
1994 - 1995	Richard O. Frazee, P.E.	2006 - 2007	Richard O. Frazee, P.E.
1995 - 1996	Richard O. Frazee, P.E.	2007 - 2008	Richard O. Frazee, P.E.
1996 - 1997	Richard O. Frazee, P.E.	2008 - 2009	
1997 - 1998	Richard O. Frazee, P.E.	2009 - 2010	
1998 - 1999	Richard O. Frazee, P.E.	2010 - 2011	
1999 - 2000	Richard O. Frazee, P.E.	2011 - 2012	Jorge L. Pardo, P.E.

Industry Professional Development Award Recipients		
1986	Florida Power & Light Company (*)	
1987	Florida Power & Light Company (*)	
1988	Tampa Electric Company (*)	Large
	Lee County Electric Cooperative, Inc	Small
1989	Tampa Electric Company	Large
	Coulter Electronics, Inc.	Small
1990	Tampa Electric Company	Large
	Coulter Electronics, Inc.	Small
1991	Tampa Electric Company (*)	
1992	Tampa Electric Company	Large
	Coulter Corporation	Small
1993	None	
1994	Florida Power Corporation	Large
	Lee County Electric Cooperative, Inc.	Small
1995	Johnson Controls, World Services	
1996	Florida Power Corporation, Energy Delivery Section (*)	

Florida Governor's New Product Award			
Year	Small	Medium	Large
1985	CPU-4000 <i>Environmental Technology</i> Orlando	Raydish <i>Radyx Satellite Systems</i> Ocala	KTD-800 Portable Date Terminal <i>Motorola</i> Plantation
1986	None		
1987	Precision Powder Metal Compacting Press (*) <i>Dougherty Precision Systems, Inc.</i> St. Petersburg	Shock Shield GFI <i>Technology Research Corp</i> Clearwater	Paramax Analytical System <i>American Dade</i> Miami
1988	Paravant Computer Systems		Baxter Healthcare Corp
1989	Dehumidifier Heat Pipe System <i>The Dihn Company</i> Alachua	330 Thermocouple Digital Thermometer <i>Atkins Technical, Inc.</i>	Reflective Memory System <i>Gould Computer Systems, Inc.</i> Ft. Lauderdale
1990	The Mighty Mule <i>GTO Inc.</i> Tallahassee	Smart-Cache <i>Distributed Processing Technology</i> Maitland	Soil Remediation Unit (*) <i>TPS Technology, Inc.</i> Apopka
1991	ISEP <i>Advance Separation Technologies, Inc.</i>	IRC-3 Life Safety <i>Fire Alarm & Systems Technology, Inc.</i>	Aircraft Collision Avoidance System (*) <i>Bendix/King Air Transport Division</i>
1992	RHD <i>Disk Technologies Corporation</i> Winter Park	Spectrum Efficient Digital Audio Technology <i>Scientific-Atlanta Broadcast Radio & Data Systems</i> Melbourne	Ultra Max Product Line <i>Sensormatic Electronics Corporation</i> Deerfield Beach
1993	Lancelot <i>King Arthur's Tools</i> Tallahassee	Unimod H Series <i>Unipower Corporation</i> Pompano Beach	SpeedDome (*) <i>Sensormatic Electronics Corporation</i> Deerfield Beach
1994	Excalibur Knife for Life (*) <i>Eliminator Industries</i> Riviera Beach	Hoveround (*) <i>Hoveround Corporation</i> Sarasota	VRS 2000 <i>Sensormatic Electronics Corporation</i> Deerfield Beach
1995		TF Purifier Bypass Electric Mobile Oil Refiner (*) <i>TF Purifier, Inc.</i> Boyton Beach	<i>Boston Whaler, Inc.</i>
1996	<i>Automation, Inc.</i>	Large HP Single Phase Motor (*) <i>Precise Power Corporation</i> Bradenton	<i>XOMED Surgical Products</i>
1997	None		

Florida Governor's New Product Award			
Year	Small	Medium	Large
1998	Phototech (*) <i>Universal Air Technology</i> Alachua	Autoclaved Aerated Concrete <i>YTONG Florida, Ltd.</i> Haines City	Smarty Smart Card Reader <i>SmartDisk Corp</i> Naples
1999	Omni Sealock TM System <i>Omni Security Consultants</i> Miami	PM6000 <i>TeCom Inc.</i> Tampa	Phasor TM Return Path <i>Cheetah Technologies</i> Bradenton
2000	PRISMA Beams <i>COMPSYS, Inc.</i>	QwikBoost <i>Mainstream Engineering Corp</i>	FASTPASS Ticketing System <i>Walt Disney World Co.</i>
2001	Airmaster Oven <i>Unique Products, Inc.</i>	Good Cents® SELECT (*) <i>Gulf Power Company</i>	Hardistorm fRCP Speed Drain <i>Hardie Pipe, Division of James Hardie, Inc.</i>
2002	Florikan SNR Fertilizer (*) <i>Florikan/Agrikan</i>	The UroCycler (*) <i>UroSolutions, Inc.</i>	
2003	Entre Pad AES 4000 <i>AutehenTec, Inc.</i> Melbourne	Digital Video Machine HD <i>Alcorn McBride, Inc.</i> Orlando	Bioreactor-Ready Bottom Liner System (*) <i>Jones Edmunds & Associates</i> Gainesville
2004	CART <i>Written Technologies, Inc.</i> Jacksonville	I-CONN <i>Ocean Design, Inc.</i> Ormond Beach	MicroEssentials™ Granular Fertilizer <i>Cargil Crop Nutrition</i> Riverview
2005	Mobile Energy Response System <i>GeoAge, Inc.</i> Jacksonville	Chem Well 2910 (*) <i>Awareness Technology</i> Palm City	
2006	Aluminum Pickett Handrails (*) <i>Giralt Enterprises, Inc.</i> Miami	Mercury Marine Switches <i>Mercury Marine Plant 7</i>	
2007	Produce Bin Washer GCS (*) <i>Salazar Machine and Steel</i> Immokalee	AES 1510 (*) <i>AuthenTec, Inc.</i> Melbourne	TEAMS <i>Florida's Turnpike Enterprise</i> Ocoee
2008	Alga Turf Scrubber (*) <i>Hydromentia, Inc.</i> Ocala		
2009	None	None	None
2010	None	None	None
2011	None	None	None
2012	None	None	None

Some of the information for Florida, herein, originally written by Richard O. Frazee, P.E. for The Next Seven Years¹⁵⁸.

GEORGIA

The Georgia PEI archives documents activities as early as 1970. Since that time the practice division has been operating on a continuous basis. During the 1980's, the Division met twice a year with an average attendance of 20 members out of the 200 members carried on the rolls. During this tenure GSPE-PEI continuously provided representatives to the NSPE Board of Governors meetings that were held twice a year.

Each year the GSPE-PEI has awarded a state PEI plaque for the *Industrial Professional Development Award*. The winner of the state award is always submitted to NSPE as part of their national IPDA awards program.

Each year the metro area of Atlanta and the State of Georgia recognizes an "Outstanding Engineer in Industry." Each year PEI submits nominations for these awards and is usually successful in having their candidates selected.

Andrew College	Cuthbert, GA
Brewton-Parker College	Mt. Vernon, GA
Clark College	Atlanta, GA
La Grange College	La Grange, GA
Morehouse College	Atlanta, GA
Paine College	August, GA

Georgia PEI Chairs also served as the Georgia PEI Governor to the NSPE National Meetings when they existed.

GSPE-PEI participated in the NSPE/EAL program and had on a continuing basis participated in negotiations for the placement of equipment. At its peak, the following colleges in Georgia participated in the EAL program.

Georgia had an active MATHCOUNTS® program and PEI supplied manpower and financial support to the MATHCOUNTS® Committee.

GSPE-PEI also provided a director and financial support for the Georgia Engineering Foundation, a non-profit organization with representatives from approximately 35 engineering organizations located within the state. The purpose of the foundation was to foster and promote the engineering profession. It awarded a number of scholarships to state engineering schools annually.

A summary of activities from 1988 - 1989 by the Georgia PEI include:

- 1) Chairman Gale Sights attended the NSPE Board of Governors meetings in Seattle, WA and Atlanta, GA.

¹⁵⁸ Rauch, William F., The Next Seven Years, NSPE, June 1997, p 16-18.

- 2) In June held a state meeting in Point Clear, AL.
- 3) In January held a state meeting in Atlanta, GA.
- 4) GA-PEI donated manpower and \$1,000 to GA MATHCOUNTS®.
- 5) GA-PEI donated check of \$1,000 to Georgia Engineering Foundation to fund a scholarship.
- 6) GA-PEI nominee for *State Engineer of the Year in Industry* was selected.
- 7) GA-PEI participated in negotiations between NSPE-PEI and Educational Assistance Limited and the Southern Co. for donation of computer equipment.
- 8) GA-PEI provided extensive manpower and planning assistance for the NSPE National Convention in Atlanta.



A 1995 photograph from a National PEI Executive Board "outing" in Park City, UT. Gale Sights, 1994 - 1995 National PEI Chair (Right) and Richard Berning, 1993 - 1994 National PEI Chair (Left). (Photo from Gale Sights).

In 1988, GSPE-PEI embarked on a program to organize the engineers in industry behind a common theme. The purpose was to provide organizational meaning to these engineers, to publicize PEI, and to attract additional members. The theme was "imports."

Georgia PEI Chairs					
1975 - 1976	Denver Johnson	1988 - 1989	Gale Sights	2001 - 2002	Wendel Carter
1976 - 1977	Hugh Cazal	1989 - 1990	Gale Sights	2002 - 2003	Andy Harrison
1977 - 1978	Ivan Winsett	1990 - 1991	Gale Sights	2003 - 2004	Andy Harrison
1978 - 1979	Tom Vasil	1991 - 1992	Gale Sights	2004 - 2005	Gale Sights
1979 - 1980	Joe Aycock	1992 - 1993	Shirley Sawnee	2005 - 2006	Gale Sights
1980 - 1981	Joe Aycock	1993 - 1994	Shirley Sawnee	2006 - 2007	Gale Sights
1981 - 1982	Larry Scheff	1994 - 1995	John Wackerman	2007 - 2008	Gale Sights
1982 - 1983	Larry Scheff	1995 - 1996	John Wackerman	2008 - 2009	Gale Sights
1983 - 1984	Joe Cox	1996 - 1997	Tammy Griffin	2009 - 2010	Gale Sights
1984 - 1985	Joe Cox	1997 - 1998	Tammy Griffin	2010 - 2011	Gale Sights
1985 - 1986	Chuck Huling	1998 - 1999	Tammy Griffin	2011 - 2012	Gale Sights
1986 - 1987	Chuck Huling	1999 - 2000	Wendel Carter		
1987 - 1988	Gale Sights	2000 - 2001	Wendel Carter		

The program began in January 1988 at an out state winter meeting with a seminar held in conjunction with the Georgia Department of Industry & Trade. Engineers from the Georgia Engineering Society as well as engineers outside the organization were invited. 100 persons attended.

Georgia Practice Divisions went inactive about 4 years ago (approx 2004). They do have a published set of criteria if they wish to become active again. However, none have chosen to do so yet. PEI had about a \$30,000 endowment which issues a \$1000 scholarship each year. This money is being held in trust and the scholarships are being administered by the GEF (Georgia Engineering Foundation) a group which handles a number of engineering scholarships in the state. Also, annually collected Practice Division dues are being held in escrow, and from time to time the GSPE board, with the concurrence of the Practice Chairs of record, including Gale Sights, will transfer the money to the GEF or MATHCOUNTS®. Full accounting is being kept by the GSPE office. About 10 years ago, GSPE combined with ACEC, ASCE, and several other engineering organizations to form the Georgia Engineering Alliance. It was a very good move. Sharing expenses, they are able to keep a very nice office, with a staff of 6 with 2 being devoted full time to GSPE¹⁵⁹.

Some of the information for Georgia, herein, originally written by Gale E. Sights, P.E. for The First 30 Years¹⁶⁰.

¹⁵⁹ Sights, Gale, e-mail to author, July 8, 2008.

¹⁶⁰ Tennant, Otto, The First 30 Years, NSPE, June 1991, pg 48-49.

HAWAII

The Hawaiian Professional Engineers in Industry (PEI) Practice Division was formed in 1990 as an integral part of the Hawaii Society of Professional Engineers (HSPE). The first PEI Governor for



Hawaii and National PEI Chairs at the NSPE Annual Meeting in 2003 at San Antonio. Curtis Beck, 2011 – 2012 National PEI Chair (Left) and Clyde Nagata, 2004 – 2004 National PEI Chair (Right). (Photo from NSPE).

HSPE was Bill Beauchamp, who eventually became the National Vice President for the Western Region. HSPE has grown to four chapters but has not have an active PEI program for some time.

Due to the relatively small size of HSPE, the Practice Divisions do not distinguish themselves at our State level. They all work together to jointly promote and support mutual objectives, programs, and goals on behalf of the State Society. These programs include scholarships, MATHCOUNTS, and working in conjunction with the Sugar Bowl bound University of Hawaii Warriors on grants for students taking the Fundamentals exam. For example, if you go to a local Mathcounts Competition, you would see PEPP, PEI, PEG, and PEHE all working together¹⁶¹.

Some of the information for Hawaii, herein, originally written by Anonymous for The Next Seven Years¹⁶².

¹⁶¹ Nakamoto, Barry, e-mail to author, December 3, 2007.

¹⁶² Rauch, William F., The Next Seven Years, NSPE, June 1997, p 11.

IDAHO



R.W. Decker served as National PEI Chair from 1968 - 1996 and Idaho State PEI Chair in 1966. (Photo from PEI Newsletter, Mar 1969).

Idaho PEI Chairs & Governors					
1960	George Millar	1978	Sherman A. Nelson	1996	Steve Walker
1961	George Millar	1979	Sherman A. Nelson	1997	Steve Walker
1962	George Millar	1980	J. L. Johnstone	1998	Steve Walker
1963	J.P. O'Connor	1981	None	1999	Steve Walker
1964	Thomas R. Spalding	1982	Ralph Fearnow	2000	Steve Walker
1965	Thomas R. Spalding	1983	Ralph Fearnow	2001	Mike Morrison
1966	Richard Decker	1984	Ralph Fearnow	2002	Mike Morrison
1967	Ruel Barrus	1985	Ralph Fearnow	2003	Mike Morrison
1968	Albert McGuire	1986	Ralph Fearnow	2004	
1969	Walt Walstra	1987	Ralph Fearnow	2005	
1970	John Esklin	1988	Thomas W. Prange	2006	
1971	John Esklin	1989	Thomas W. Prange	2007	
1972	John Esklin	1990	Thomas W. Prange	2008	
1973	John Esklin John Commander	1991	Thomas W. Prange	2009	
1974	John Commander	1992	Ralph Fearnow	2010	
1975	John Commander	1993	None	2011	
1976	John Commander	1994	None	2012	
1977	John Commander	1995	None		

INDIANA

NSPE was founded by a group of highly dedicated engineers under the leadership of Dr. David B. Steinman, world renowned bridge builder in 1934. This professional wide engineering society established their headquarters at 1033 National Press Building, Washington, D.C. Two and one-half years later Dr. Steinman's National Professional Engineer's Society had come to the banks of the Wabash in the state of Indiana. On January 8th, 1937 the National Society of Professional Engineer's representative Willard Conton presented the Indiana Society of Professional Engineers their State Charter.

Before 1927 someone had to take the initiative to assemble a group of professional engineers to organize a State Society in Indiana. As Sultan G. Cohen, P.E. first ISPE president wrote in an article published in February 1962 in the *Indiana Professional Engineer*, "I attended the birth of ISPE, (Indiana Society of Professional Engineers) I think it was about 1935 when a committee of engineers from Indiana Engineering Council called a group of selected professional engineers into the meeting (including a few engineers working in industry) and suggested that we develop a professional engineering society or, at least, an interested group to meet and invite with the executive secretary of the National Society of Professional Engineers".

A committee was subsequently formed within the Indiana Engineering Council and professional engineers in the area with Cohen acting as the interim president until the Indiana organization was organized and charter acquired, whereupon Cohen became the founder-president of the Indiana Society of Professional Engineers. Let me quote some more of Cohen's letter as to what took place as I'm sure it will be of interest to the engineers in industry.

Indiana PEI Chairs & Governors					
1961 - 1962	Kenneth M. Leech	1978 - 1979	Clarence C. Clarke	1995 - 1996	Edward J. Byrum, P.E.
1962 - 1963	Richard L. Hamilton	1979 - 1980	Clarence C. Clarke	1996 - 1997	Philip W. Wolverton, P.E.
1963 - 1964	Dana L. Hannan	1980 - 1981	Maryann Zimmerman	1997 - 1998	Philip W. Wolverton, P.E.
1964 - 1965	Horst H. Schneider	1981 - 1982	Thomas L. Staley	1998 - 1999	Philip W. Wolverton, P.E.
1965 - 1966	Herschel E. Murphy	1982 - 1983	Thomas L. Staley	1999 - 2000	None
1966 - 1967		1983 - 1984	Thomas L. Staley	2000 - 2001	Edward J. Byrum, P.E.
1967 - 1968		1984 - 1985	Edward J. Byrum, P.E.	2001- 2002	Edward J. Byrum, P.E.
1968 - 1969		1985 - 1986	Gary E. Dial	2002 - 2003	Edward J. Byrum, P.E.
1969 - 1970		1986 - 1987	Edward J. Byrum, P.E.	2003 - 2004	Edward J. Byrum, P.E.
1970 - 1971		1987 - 1988	Gary E. Dial	2004 - 2005	Eric Carleton, P.E.
1971 - 1972		1988 - 1989	Edward J. Byrum, P.E.	2005 - 2006	None
1972 - 1973		1989 - 1990	Edward J. Byrum, P.E.	2006 - 2007	Ralph Power, P.E.
1973 - 1974		1990 - 1991	Edward J. Byrum, P.E.	2007 - 2008	Leslie B. Carroll, P.E.
1974 - 1975		1991 - 1992	Edward J. Byrum, P.E.	2008 - 2009	Inactive
1975 - 1976	Ronald F. Steckel	1992 - 1993	Edward J. Byrum, P.E.	2009 - 2010	Inactive
1976 - 1977	James E. Fisher	1993 - 1994	Edward J. Byrum, P.E.	2010 - 2011	Inactive
1977 - 1978	Clarence C. Clarke	1994 - 1995	Edward J. Byrum, P.E.	2011 - 2012	Inactive

Cohen continued in his letter, "During 1926, monthly meetings were held - most of them in the auditorium of the War Memorial in Indianapolis. Our early membership was an inspired one, because we had so many problems that were both interesting and controversial. Our interest and activity in the welfare of government employed engineers attracted much attention and membership. I recall overflow attendance at monthly meetings when salary scales and working conditions of state engineers were discussed. Some of the talks from the floor were militant and belligerent and sounded as much like a labor union as a professional society. However, interest was intent and activity was controlled to such an extent that no blot was put on the society escutcheon. My officers were M.G. Johnson, city engineer of Indianapolis as Vice-President; Jessie V. Swithe, Secretary; and H. O. Garman, Treasurer Our membership soared in 1927 and 1928 to a total in excess of 500. The membership was disproportionately in Civil Engineers because the registration in Indiana was likewise preponderant and the Civil Engineers were in a majority in government employ.

NSPE gave much encouragement and assistance in the development of ISPE. During the administration of Perry Ford as President of the Ohio Society of Professional Engineers, he visited our Indiana state meetings frequently. Perry was quite an orator. I later served under him as a national Vice-President. There were timid souls within our membership who feared that our society might degenerate into a labor union; but many of our most able critics later became working members We did employ the working interest and encouragement of the various founders societies in Indiana in our formative years. From these humble beginnings, a great society was born."

At the time of the Charter presentation in 1937 there were thirteen membership applications signed and by the end of January 1937 ninety-eight applications had been signed. The first application for membership in the Indiana Society of Professional Engineers was signed by Harry O. Garman, P.E. on December 19, 1936. James T. Hallett, P.E. was Chairman of the Committee appointed to draft the First ISPE constitution which culminated in January 8, 1937 with the Indiana Society receiving their NSPE charter to become a member of NSPE.

In 1957 a small group of engineers who worked in industry started at the state levels to organize a Committee of Employment Practices which became the Committee of Engineers in Industry, which eventually became a functional PEI section of NSPE.

One of NSPE's building blocks was the NSPE Board of Directors. In 1960 they approved a recommendation by the Committee on Engineers in Industry to form a national functional section. At the 27th Annual Meeting of NSPE in Seattle, Washington in July 1961 a Functional Section for Engineers in Industry was authorized by the NSPE Board of Directors. This was a logical step as the Committee on Engineers in Industry had been in existence for several years with functional sections for Engineers in Industry in the States of Illinois, Ohio, Michigan, Wisconsin, New Jersey and Connecticut.

New York, North Carolina and Indiana were in the process of organizing functional sections in 1962.

The NSPE functional section of the Committee of Engineers in Industry in its first few years of existence completed or started many important projects for the engineering profession.

- Professional look at the engineer in industry.
- Established Industrial Professional Development Award.
- Criteria for Professional Employment of Engineers.
- Questions and Answers on Registration.
- Engineering Employment Practices Newsletter.
- Published a book, *The Engineers in Industry in 1960 - A Professional Program*
- Established State-Level Visits to Industry

These were all timely topics to attract the attention of the engineers working in industry.

It was not until about twenty years after the founding of NSPE that activity pertaining to engineers working in industry was to be recognized by NSPE membership. About the year 1957 the first overtures of engineers working in industry began to be recognized as a viable committee within the framework of NSPE.

During the years 1957 - 1961 were the gestation period for forming the body of the functional section of the Professional Engineers in Industry. The birth of the Functional Section of the Professional Engineers in Industry took place on Friday, June 15, 1962 at French Lick, Indiana at 0900 hours.

In June 1962 the Indiana Society of Professional Engineers under the guidance of Harold L. Michael, P.E., President of ISPE and his committee, to honor the 25th anniversary of the Indiana Society of Professional Engineers being chartered by NSPE, hosted NSPE's Annual Convention June 13 - 16, 1962 at French Lick, Indiana.

The convention highlight was the blast off of the NSPE's Professional Engineers in Industry. This was the functional section of the Engineers in Industry which had been active on the national and state levels since 1957. The Professional Engineers in Industry was given functional status in July 1961 and was authorized to hold the first meeting for their membership at the annual NSPE convention to be held in 1962 in Indiana.

All state societies having a functional section or an active Engineers in Industry committee sent one delegate to the convention at French Lick with one-half the delegate's transportation expense paid to attend the first meeting of the new functional section at the NSPE June 1962 annual convention.

Frederick B. Morse, P.E., Indiana's National Director in 1962, wrote in his follow up report on the Convention which was recorded in the *Indiana Professional Engineer* dated July - August 1962.

Frederick B. Morse wrote, "I want to use my space quota (in this issue) for just one thing that happened at the French Lick meeting. I want to tell you about the Professional Engineers in Industry - a Functional Section of NSPE. There has been an active Engineer's in Industry Committee at the National level for several years; in July 1961 they were given permission by the Board of Directors to form a Functional Section. So the meeting at French Lick on June 15, 1962 was their first as a Functional Section. The meeting began about 9 o'clock and lasted all day. There were several important talks by outstanding engineers. Officers for the coming year were elected. Committees were designated and long range programs were formulated. Thirty state societies were represented. Yep, a real nice lift off." (note: February 20, 1962 John Glenn, Jr. First American in space)

At the state level, Indiana was making some low orbits in setting up a functional section in the state and several chapters such as the Lafayette section had formed active Engineers in Industry committees in 1962. In 1962 there were about 2,100 registered engineers in Indiana employed in industry who were not members of NSPE.

Some of the information for Indiana, herein, originally written by Edward J Byrum, P.E. for The First 30 Years¹⁶³.

IOWA

The Iowa Engineering Society (IES) was 100 years old in 1989. Industry from the founding of the Society until IES joined NSPE, was a strong supporter of all its activities. The Society was formed in 1889 from two previous state engineering societies. It was interesting to note that approximately half of the charter members were from industry. The largest group from industry was civil engineers associated with the railroads in Iowa. Other industrial engineers active in the Society were employed by the telephone utilities, electric and gas utilities, water companies, the steel fabrication industry, cement industry, appliance manufacturers, electrical manufacturers and contractors and general contractors.

IES was the main proponent for establishing a law for engineers to become registered. The registration of engineers became law in 1919. Those presently active in engineering in 1919 could become registered under the grandfather clause. Practically all those active in industry and were members of the Iowa Engineering Society and became registered.

In the middle twenties those in industry formed a Mechanical, Industrial, Utility and Railroad Section as part of the Iowa Engineering Society. They met once a year at the annual meeting and discussed what position they should take on issues at the Iowa legislature. In 1955 the attendance

¹⁶³ Tennant, Otto, The First 30 Years, NSPE, June 1991, pg 53-57.

became so low that the chairman for that year, Otto Tennant, asked the Board of Directors of IES to drop this Section. The Board of Directors dissolved the Section that year.

Iowa PEI Engineer of the Year Award Recipients		
1980 - 1981	Otto A. Tennant	Iowa Power
1981 - 1982	Stanley H. Lee	NW States Portland Cement Company
1982 - 1983	Ivan Schaller	Iowa Power
1983 - 1984	Donald E. Stewart	John Deere
1984 - 1985	Tony Koelker	NW States Portland Cement Company
1985 - 1986	John Kyhl	Iowa Southern Utilities
1986 - 1987	Donald Mitchell	Iowa Power
1987 - 1988	Curt Johnson	Cedar Falls Utilities
1988 - 1989	Gerhardt Winkel	John Deere
1989 - 1990	George K. Hellert	John Deere
1990 - 1991		

During the late forties IES discovered that they needed support of employers to encourage growth of the Society and to survive financially. The membership dues were not sufficient. Inflation of 3% and dues of \$10.00 raised costs beyond the income from dues. The Society developed a Sustaining Employer Program that not only encouraged employees to join the Society, but gave additional revenue for the Society. At the same time membership dues were raised. The extra funds were to be used for a permanent executive secretary and employ a lobbyist to contact the State Legislature. The majority of the Sustaining Members were from Industry.

While many in industry in Iowa encouraged registration of its employees they still lobbied effectively for the continuation of the industrial Exemption clause in the Iowa Code.

A separate division in IES for engineers from industry was discussed many times. Management was not in favor of such an organization since they felt it might be a shadow union organization. In addition, they were adamant that engineers in industry in Iowa had no need and must not consider a "Sounding Board" organization. The NSPE-PEI format indicated to the Sustaining Members that this supposition was not true. The interest in the formation and establishing a PEI section came after Burt Livingston attended the December 1965 meeting of NSPE-PEI in Oklahoma City, OK. He returned with great enthusiasm for the concept of Engineers in Industry having its own practice section in Iowa.

A committee was formed of Burt Livingston and Otto Tennant to investigate further the possibilities of establishing a PEI section. They attended the NSPE-PEI meeting in Kansas City in the summer of 1966. A report was made and Burt Livingston published in the January 1967 *Exponent* the reasons engineers in industry should petition the Board of Directors of the Iowa Engineering Society for a PEI Section. In September 1967 the section met all the requirements of IES Board of Directors and NSPE-PEI with interim PEI Section officers being appointed.

In April 1968 IES-PEI was formed and approved at the Annual Meeting of the Iowa Engineering Society held in Des Moines, Iowa. The Board agreed to a modest fee of \$1.00 per industry member

from the IES dues to help the Section get started. At that time there were 320 members or 35% of the total IES membership associated with industry.

Most programs in the early years were primarily conducted during breakfast at the annual meeting of the Iowa Engineering Society. In 1976 - 1977 when Gregory Fehr was Chairman a seminar was held in conjunction with the Iowa State Engineering Extension Department. This was to assist Engineers in Industry to meet the continuing education requirement of the Iowa Board of Engineering and Land Surveying Examiners.

In 1980 a program was started whereby the officers of the IES and the chairman of the PEI section contacted the major industries in the state to develop a dialogue with them. Those industries contacted were John Deere - Dubuque Works, ALCOA - Bettendorf, John Deere - Waterloo and Northwestern Bell Telephone - Des Moines. The following year there were two all day meetings with the chief engineer or president of 9 industrial firms attending. A third meeting was called, but all were too busy to attend.

Since 1980 the officers of IES-PEI have complemented the programs of NSPE-PEI program. The Governor's New Product of the Year Award was a successful program. In the early years the Iowa Engineering Society requested IES-PEI to administer this program. During 1990 there were a total of eleven entries submitted: 6 in the Small Company category, 2 in the Medium Company category, and 3 in the Large Company category.

In the year 1990 - 1991, IES-PEI worked actively with NSPE-PEI interests in the coordination with NSPE-EAL. The coordinator for Iowa was John Tucker with the Doerfer Corporation in Cedar Falls, IA and James Madill with John Deere Corporation in Waterloo, IA.

NSPE-PEI held a breakfast meeting in 1991 - 1992 but so few attended there was no more effort made. Many PEI members in Iowa have continued paying dues at both the national and state level. This group of PEI registrants has been used as a mailing list by the executive/director of IES. Since he also lobbied for IES he contacts these members for input to the legislators on subjects that will either adversely or positively affect PEIs in Iowa.



Donald E. Stewart, of East Dubuque, Illinois, and senior engineering analyst, John Deere Dubuque Works, displays an "Award of Appreciation" presented to him by Junior Achievement of the Tri-States Area, for his 10 years of service, knowledge, integrity, skills and dedication to youth, having served as an advisor, judge of the "Junior Achievement Officers of the Year" competition, and presenter of awards. (Photo from Industry Forum, Dec 1986/Jan 1987).

Iowa Engineering Society PEI Presidents					
1965 - 1966	Burt Livingston	Maytag Co	1978 - 1979	Stanley Lee	States Portland Cement
1966 - 1967	Burt Livingston	Maytag Co	1979 - 1980	Stanley Lee	States Portland Cement
1967 - 1968	Otto A. Tennant	Iowa Power	1980 - 1981	Stanley Lee	States Portland Cement
1968 - 1969	Otto A. Tennant	Iowa Power	1981 - 1982	Donald E. Stewart	John Deere
1969 - 1970	Max P. Gassman	John Deere	1982 - 1983	Donald E. Stewart	John Deere
1970 - 1971	Ernest C. Greiner	Iowa Public Service	1983 - 1984	Donald E. Burchett	John Deere
1971 - 1972	Max P. Gassman	John Deere	1984 - 1985	Donald E. Burchett	John Deere
1972 - 1973	John C. Swander	General Growth	1985 - 1986	Walter Hull	
1973 - 1974	Ralph Draves		1986 - 1987	Walter Hull	
1974 - 1975	Ivan Schaller	Iowa Power	1987 - 1988	Donald Mitchell	Iowa Power
1975 - 1976	Ivan Schaller	Iowa Power	1988 - 1989	Donald Mitchell	Iowa Power
1976 - 1977	Gregory Fehr	Fischer Controls	1989 - 1990	Donald E. Stewart	John Deere (retired)
1977 - 1978	Stanley Lee	States Portland Cement	1990 - 1991	Donald E. Stewart	John Deere (retired)

The staff of IES understands there are EIT members who are interested in an active PEI. However, under the present rules they must wait until they become PEs before taking a leadership position. The PEI Iowa bank account is large enough that when PEI is active again there are funds to send a delegate to the national meetings.

In 1990 - 1991 IES-PEI was active in the Waste Reduction Assistance Program managed by the Iowa Department of Natural Resources - Waste Management Authority Division. The program trained experienced professional senior engineers from industry to assist companies in reducing waste and waste related costs. IES-PEI senior engineers active in this program were

IES-PEI Senior Engineers in Waste Reduction Assistance Program, 1990 - 1991	
Richard Brunn	Bettendorf
Thomas Jameson	Davenport
Wayne Kenfield	Ellston
George Otto	Newton
Frank Rosenkranz	Clinton
Richard Smith	Cedar Falls
Donald Griebel	Urbandale
Henry Kadavy	Davenport
Robert Madison	Ankeny
Les Ramsey	Webster City
Dale Smith	Des Moines
Don Stewart	East Dubuque

Each year, the Professional Engineers in Industry Section of the Iowa Engineering Society presented the *Engineer of the Year Award* to one its members. This award was given to a member who head effectively devoted his skills knowledge, experience and education for advancement and betterment of mankind, human welfare, his profession, the Professional Engineers in Industry, the Iowa Engineering Society and the National Society of Professional Engineers in a dedicated manner that is praiseworthy and deserving of professional recognition.

Some of the information for Iowa, herein, originally written by Otto A. Tennant, P.E. and Donald E. Stewart, P.E. for The First 30 Years¹⁶⁴ and by Otto A. Tennant, P.E. for The Next Seven Years¹⁶⁵.

KANSAS

The Kansas Professional Engineers in Industry Society was formed as a division of the Kansas Engineering Society in 1959. The first president of the division was D.D. (Jack) Hook. The early years of the society saw action primarily at the KES Annual Meeting. The attendance was usually quite good. Over the years the PEI group had been active and conducted many programs that were a benefit to PEI, KES, NSPE and the public.

In recent years while there is still only the one meeting each year at the annual meeting, the activities of the officers and members with industry have been beneficial to both. Contacts with the members are by letter and a annual bulletin.

The Annual *Governor's New Product Award* was given to 3 Kansas Manufacturers in 1989. Approximately 11 students in 5 colleges benefitted from the Educational Assistance Ltd. program conducted in Kansas. Three seminars were held in November and December 1989 for juniors and seniors were conducted at the three major universities in Kansas.

Many of the PEI members have also becam active in the Kansas Engineering Society and NSPE. NSPE regional vice presidents were D.D. (Jack) Hook and Barry Rist, Jr. Those who became Chairman of the NSPE-PEI were Barry Rist, Jr. and Jack Hinton.

Kansas PEI Chairs & Governors					
1959 - 1960	D. D. (Jack) Hook	1977 - 1978	Rex Weigand	1995 - 1996	Don Taylor, P.E.
1960 - 1961	Harvey Leaver	1978 - 1979	Rex Weigand	1996 - 1997	Don Taylor, P.E.
1961 - 1962		1979 - 1980	Rodney Horn	1997 - 1998	Don Taylor, P.E.

¹⁶⁴ Tennant, Otto, The First 30 Years, NSPE, June 1991, pg 50-52.

¹⁶⁵ Rauch, William F., The Next Seven Years, NSPE, June 1997, p 36.

1962 - 1963		1980 - 1981	Rodney Horn	1998 - 1999	Don Taylor, P.E.
1963 - 1964	James Sampson	1981 - 1982	Kenneth Turner	1999 - 2000	Don Taylor, P.E.
1964 - 1965	C. O. Bryant	1982 - 1983	Jack Hinton, P.E.	2000 - 2001	Don Taylor, P.E.
1965 - 1966	Albin H. Schweers	1983 - 1984	Jack Hinton, P.E.	2001- 2002	Don Taylor, P.E.
1966 - 1967	D. D. (Jack) Hook	1984 - 1985	Marcia Turner	2002 - 2003	Don Taylor, P.E.
1967 - 1968		1985 - 1986		2003 - 2004	Don Taylor, P.E.
1968 - 1969	L. Duane Walrafen	1986 - 1987	Steve Smart	2004 - 2005	Don Taylor, P.E.
1969 - 1970	E. C. Anderson	1987 - 1988	Steve Smart	2005 - 2006	Don Taylor, P.E.
1970 - 1971	Robert Wilson	1988 - 1989	Rex Meyer	2006 - 2007	Don Taylor, P.E.
1971 - 1972	Virgil Lundberg	1989 - 1990	Rex Meyer	2007 - 2008	Don Taylor, P.E.
1972 - 1973	Merle K. Burkhart	1990 - 1991	Don Taylor, P.E.	2008 - 2009	Don Taylor, P.E.
1973 - 1974	Thomas Pickford	1991 - 1992	Tom Meyers	2009 - 2010	Don Taylor, P.E.
1974 - 1975	Bruce E. Schlosser	1992 - 1993	Don Taylor, P.E.	2010 - 2011	Douglas Grauer, P.E.
1975 - 1976	Barry Rist, Jr.	1993 - 1994	Don Taylor, P.E.	2011 - 2012	Douglas Grauer, P.E.
1976 - 1977	Barry Rist, Jr.	1994 - 1995	Don Taylor, P.E.		



Winner of the 1984 competition of the Kansas Engineering Society's (KES) Governor's New Product Award contest sponsored by PEI. (Left to right): Neill Bryan, Ben Madison, The Coleman Company, Wichita for the "Crawdad"; Carlton Byrd, Didde Graphic Systems Corporation, Emporia, for the "ComPerfector"; Kansas Governor John Carlin; and Howard Botts and David Dahl, B&D Instruments, Valley Center, for the "Model 2504 TAS/PLUS Air Speed System".. (Photo from PEI Industry Forum, Spring/Summer 1984).

Some of the information for Kansas, herein, originally written by Edward J Byrum, P.E. for *The First 30 Years*¹⁶⁶.

KENTUCKY

The first beginnings of the Kentucky PEI can be traced back to 1952 when the State Society formed an Industrial Development Committee to better address the needs of members who were in industry and to attract more participation by engineers in industry at the time. The first Chairman of that committee was Mr. D.B. Williams. In 1961 this committee became known as the Industry Practice Committee. Finally, in 1972 it was made a practice division of KSPE.



The Kentucky Society of Professional Engineers (KSPE) 1984 New Product Awards ceremonies were held under the rotunda of the Kentucky State Capital with Governor Martha Layne Collins presenting the awards. Recipients were (Left to right): William Meade, president, Speedco, Inc ("Quick-Duster"); Commerce Cabinet secretary Carroll Kniceley; Steve Corbitt, regional sales manager, National Mine Service Company ("48C Mine Shuttlecar"); Governor Collins; Thomas Jenkins, senior design engineer, General Electric's Dishwasher Division ("Perma Tuf 'C' Domestic Dishwasher"); Kentucky PEI Chair, David Houtchin; KSPE President James Humphrey; and PEI Awards Chair, Paul Brown. (Photo from PEI Industry Forum, Spring/Summer 1984).

The Kentucky PEI had been active in various programs throughout its life to-date. Among these have been the *Industrial Professional Development Award* program, MATHCOUNTS, KSPE *Governor's New Product Award*, and Industry Visitation program. *Industrial Professional Development Awards*

¹⁶⁶ Tennant, Otto, *The First 30 Years, NSPE*, June 1991, pg 58.

was given for the years 1974 through 1979. MATHCOUNTS was not a program just supported by PEI in Kentucky but one that was strongly supported by the entire KSPE organization of which PEI took an active role. For this reason the Kentucky MATHCOUNTS program is considered to be one of 22 of the best developed programs in the country. In 1995, Kentucky had the first place Mathlete with Richard Reifsnnyder while Kentucky's best team finish had been second in 1987. Kentucky's National Mathletes team normally finishes in the top 15 in the country. The KSPE *Governor's New Product Award* begun in 1982. The Kentucky PEI devoted most of its efforts each year with the coordination of this program and overseeing the selection of the recipients. The Kentucky program produced three (3) national recipients – 1987 and (2) in 1995. An Industrial Visitation program was developed and implemented in 1982. However, due to other higher priorities, this program was not very effective.

The *Governor's New Product Awards* as discontinued in 2004 due to lack of interest.

Kentucky PEI Chairs & Governors					
1952	D. B. Williams	1972 - 1973	Charles M. Bishop	1992 - 1993	John A. Zoeller
1953	D. B. Williams	1973 - 1974	Gerald F. Welling	1993 - 1994	John A. Zoeller
1954	William Skinner	1974 - 1975	James A. White	1994 - 1995	John P. Wheelock
1955	G. A. Weatheron	1975 - 1976	Maurice K. Ohlman	1995 - 1996	John P. Wheelock Shannon O'Conner
1956 - 1957		1976 - 1977	Maurice K. Ohlman	1996 - 1997	Shannon O'Conner
1957 - 1958		1977 - 1978	James D. Walsh	1997 - 1998	Randal S. Williamson
1958 - 1959		1978 - 1979	James D. Walsh	1998 - 1999	W. Grant Wilson
1959 - 1960		1979 - 1980	Henry J. Saam, Jr.	1999 - 2000	W. Grant Wilson
1960 - 1961		1980 - 1981	Jack Cothren	2000 - 2001	Randal S. Williamson
1961 - 1962	D. H. Kannapell	1981 - 1982	Wayne D. Carmony	2001 - 2002	Kevin T. Mattingly
1962 - 1963	Norman W. Kirschke	1982 - 1983	Ernest E. Brown	2002 - 2003	Kevin T. Mattingly
1963 - 1964		1983 - 1984	Claude L. Thompson David R. Houchin	2003 - 2004	Randal S. Williamson
1964 - 1965		1984 - 1985	David R. Houchin	2004 - 2005	Randal S. Williamson
1965 - 1966	A. P. Haase	1985 - 1986	William C. Moss	2005 - 2006	None
1966 - 1967	A. D. Langford	1986 - 1987	Johnnie Theriac	2006 - 2007	None
1967 - 1968	Vaughn P. Drake	1987 - 1988	Mark S. Brewer	2007 - 2008	None
1968 - 1969	Ted R. Richardson	1988 - 1989	Dudley H. Bottom, Jr.	2008 - 2009	None
1969 - 1970	James M. Boswell, Jr.	1989 - 1990	Thomas R. Herman	2009 - 2010	None
1970 - 1971	James M. Boswell, Jr.	1990 - 1991	James D. Bridges	2010 - 2011	None
1971 - 1972		1991 - 1992	James D. Bridges	2011 - 2012	None

Kentucky Industrial Professional Development Award	
1974	Big Rivers RECC
1975	Ashland Oil (Refinery Division)
1976	Beth-Elkhorn Coal Company
1977	National Mine Service Company
1978	Clow Corporation (Waste Treatment Division)
1979	East Kentucky Power Co-op of Winchester

Kentucky Governor's New Product Award			
Year	Small	Medium	Large
1982			
1983			
1984	<i>SPEEDCO</i>	<i>National Mines Service Company</i>	<i>General Electric</i>
1985	<i>American Mine Tool Division (GTE Products Corporation)</i>	<i>Litton Engineered Systems</i>	
1986	<i>Ashland Carbon Fibers</i>	<i>R. A. Jones Company</i>	
1987	<i>RESTOR Communications</i>	<i>Speed Queen Company</i>	
1988	<i>DataBeam</i>		
1989	<i>Jefferson Audio Video Systems</i>	<i>Volstatic Incorporated</i>	<i>WABCO Fluid Power</i>
1990	<i>Nemeth Engineering Associates, Inc.</i>	<i>Lantech, Inc.</i>	<i>American Air Filter</i>
1991	<i>Electronic Design & Research Co</i>	<i>White Hydraulics, Inc.</i>	<i>E.D. Bullard Co.</i>
1992	<i>DataBeam</i>	<i>Dover Resources Co.</i>	<i>Lantech, Inc.</i>
1993	<i>Mas-Hamilton Group</i>	<i>Zoeller Company</i>	<i>Lexmark International, Inc.</i>
1994		<i>NewTech Enterprises, Inc.</i>	<i>Lantech, Inc.</i>
1995	<i>Image Tel International, Inc.</i>	None	<i>3M Company</i>
1996	<i>Rocket Man, Inc.</i>	<i>Zoeller Pump Co</i>	<i>R.A. Jones & Co, Inc.</i>
1997	<i>Railway Technology</i>	<i>Multi Link Inc</i>	<i>Clark Material Handling Company</i>
1998	<i>PHOENIX Process Equipm Co.</i>	None	<i>Centrifugal Compressor Div</i>
1999	<i>Carey Consulting, Inc.</i>	None	<i>White Hydraulics, Inc</i>
2000	None	None	None
2001	None	None	None
2002	None	None	None
2003	None	None	None

Kentucky Achievement in Industry Recipients			
1967	R. R. Dawson	1982	Wayne Carmody
1968		1983	Ernest E. Brown
1969	James E. Johnston	1984	David R. Houchin
1970	Robert Wilkerson	1985	Henry L. Krebs
1971	Walter Fusiek	1986	Paul W. Brown
1972	James M. Boswell, Jr.	1987	Johnnie L. Theriac
1973	Jesse J. Farra	1988	Mark S. Brewer
1974	Ted R. Richardson	1989	William N. Boggess
1975	Richard W. Smith	1990	Dr. Lee T. Todd, Jr.
1976	Owen H. Lewis	1991	Otis Ballard
1977	Norman W. Kirschke	1992	John A. Zoeller
1978	Eugene W. Scroggin	1993	Thomas R. Herman
1979	Vaughn P. Drake	1994	Dudley H. Bottom, Jr.
1980	Maurice K. Ohlman	1995	William E. Johnson
1981	Henry J. Saam, Jr.	1996	Gregory C. Heitzman

Some of the information for Kentucky, herein, originally written for The First 30 Years¹⁶⁷ and for The Next Seven Years¹⁶⁸.

MASSACHUSETTS

The Massachusetts Society of Professional Engineers Professional Engineers in Industry was active in the 70s. Nathaniel Becker, P.E. employed by Raytheon was leader in PEI during that period. Nathaniel became President of MSPE in 1980-81 at which time PEI, losing its leadership, became inactive. The demise of PEI during the 80's and early 90's came as a result of negative pressure from industry. PEI was being associated with labor unions and viewed by industry as a threat. Today we work with industry to find mutual interests and benefits to the employees of industry.

Each year MSPE-PEI holds at least one meeting of interest to Professional Engineers in Industry. In 1997, PEI participated in Engineers Week by offering a presentation on CAM, Career Asset Manager.

In 1997, a MSPE-PEI Rules of Governance were written and given to the President of MSPE for approval.

¹⁶⁷ Tennant, Otto, The First 30 Years, NSPE, June 1991, pg 59-61.

¹⁶⁸ Rauch, William F., The Next Seven Years, NSPE, June 1997, p 19-22.

Each year MSPE holds a MathCounts competition. MSPE-PEI members participate in MathCounts as individual members of MSPE, rather than as a PEI activity.

In 1997, Industry Visits by Massachusetts PEI included Draper Laboratories, MITRE Corporation and GTE, Inc.

Massachusetts PEI Chairs & Governors		
Year	Chairmen	Governor
1992 - 1993		John P. Donoghue, P.E.
1993 - 1994		Karen S. Pedersen, P.E.
1994 - 1995		Karen S. Pedersen, P.E.
1995 - 1996		John P. Donoghue, P.E.
1996 - 1997	Jeff M. Goldsmith, P.E.	John P. Donoghue, P.E.

Some of the information for Massachusetts, herein, originally written by Karen S. Pedersen, P.E. for The Next Seven Years¹⁶⁹.

MINNESOTA

The PEI division in Minnesota had its beginnings in 1951 based on decision to form an Engineer-In-Industry Functional Group as proposed by the Capital Chapter of MSPE. James J. Ryan volunteered to guide it in its earliest days. Professor Ryan was Professor of Mechanical Engineering at the University of Minnesota, but had worked in Industry during WW II at the General Mills Mechanical Division in the Twin Cities.

In February 1956 it was formally proposed as a section of MSPE, and was installed at its annual meeting in July. In November the Bylaws were changed to allow affiliation of the related groups, and the Honeywell Engineers Club became the first affiliate, and remained one of its most active for several decades. Northern States Power Engineering Club later affiliated, but was less active. In May 1962, the name was changed to the Professional Engineers in Industry to conform to the NSPE designation of sections.

In 1965 a unique idea was proposed to change the section to a Chapter, thereby providing more incentive to gain membership with a chapter status. The idea was approved at the June 1965 annual meeting of MSPE. In 1983 after never quite fulfilling the hopes of proposal for impressive membership gains, and under some pressure from other chapters, the PEI was returned to a division status.

¹⁶⁹ Rauch, William F., The Next Seven Years, NSPE, June 1997, p 26.

The *Professional Development Awards* were solicited and awarded in the early 1970's, but the records of the recipients have been lost.

Two projects that grew out of PEI member concerns were implemented and promulgated as state programs. The first of these were a series of Employment Workshops in 1976 and 1977 spearheaded by Bob Schlentz, an active and future state Chairman of PEI. Schlentz presented an outline of his program at the 1978 National PEI Board of Governors meeting in California.

Another program based on the perceived need was to encourage registration of Engineers in industry through refresher courses for the EIT and Professional Exams in Mechanical and Electrical, put together by Al Baldwin in 1981 and early 1982. Al and Dick Pluntz, both past Chairmen of PEI, participated for many years.

Mathcounts was initiated in September 1983, but was not ever handled as a PEI activity, although many members have assisted it in many ways.

Summary of Activities for Minnesota PEI	
1992 - 1993	<ul style="list-style-type: none"> • Speaker from Northern States Power on Wind Power • Made donation to the MPEF in the honor of Bill Carlson
1993 - 1994	<ul style="list-style-type: none"> • Toured Medtronic, Inc of Fridley, MN • Speaker Chuck Denny, Chairman of ADC Telecommunications • Ethics Presentation on Flood of 1993 by Dean Braatz and Gregory Spoden • Toured North Star Steel of St. Paul
1994 - 1995	<ul style="list-style-type: none"> • Toured Rahr Malting of Shakopee, MN • Toured Northwest Airlines repair facility of Minneapolis • Toured Anderson Windows of Bayport followed by Spring golf outing • Toured Honeywell House of Minneapolis • Toured Planes of Fame Museum of Eden Prairie
1995 - 1996	<ul style="list-style-type: none"> • Speaker from the FBI on Industrial Security • Toured Ford Truck Assembly Plant of St. Paul • Toured the Elk River Concrete Plant of Shakopee • Joint golf outing with the Minneapolis Chapters
1996 - 1997	<ul style="list-style-type: none"> • Toured MTS Corporation of Eden Prairie

MSPE did not keep permanent records prior to 1976. The officer's term of duty was always July 1 through June 30th.

For the 2nd half of the 80's and most of the 90's PEI Minnesota has traditionally conducted a holiday party consisting of dinner with spouses at a Minneapolis Restaurant' (frequently an entertaining German restaurant, the Gasthof Zur Gemutlichkeit in NE Minneapolis). PEI has also typically sponsored a day at the MSPE booth in the education building at the Great Minnesota "Get Together", the Minnesota State Fair, held in late August of each year. Al Baldwin taught (thru the UofM), an number of P.E. refresher courses during the 80's and 90's. Finally, PEI Minnesota has usually tried to have representation at the NSPE Winter and Summer Board of Governor Meetings.

Two well-planned presentations in the 90's, on the Stealth Aircraft scheduled for January 1992, and the Patriot Missile scheduled for 1994, respectively, were canceled by the Pentagon due to the timing of military conflicts in the Middle East and worries of national security.

PEI Minnesota was a chapter, not a practice division, from 1976 to 1983. Practice Divisions dissolved in 2005 in Minnesota.

Minnesota PEI Chairs					
1952 - 1953	James J. Ryan	1970 - 1971	Richard Barrett	1988 - 1989	William Ireland, P.E.
1953 - 1954	Carl Pappenfuss	1971 - 1972	Richard Barrett	1989 - 1990	Scott Meyer, P.E.
1954 - 1955		1972 - 1973	Norton Saude	1990 - 1991	Ramalingam S. Iyer, P.E.
1955 - 1956	John T. Ludwig	1973 - 1974	Burnell Robbins	1991 - 1992	Dwain Bell, P.E.
1956 - 1957	Carl Pappenfuss	1974 - 1975	Al Baldwin	1992 - 1993	Mark Berman, P.E.
1957 - 1958	John T. Ludwig	1975 - 1976	Dick Pluntz	1993 - 1994	Steve Strauss, P.E.
1958 - 1959	Sam Kellough	1976 - 1977	Dick Pluntz	1994 - 1995	Craig Borchard, P.E.
1959 - 1960	Bob Jarvis	1977 - 1978	Bill George, P.E.	1995 - 1996	Robert A. Riesselman, P.E.
1960 - 1961	Robert G. Johnson	1978 - 1979	Dave Baron, P.E.	1996 - 1997	Doug Christensen, P.E.
1961 - 1962	Harold Doxey	1979 - 1980	Tom McGrath, P.E.	1997 - 1998	
1962 - 1963	Bill Hamelink	1980 - 1981	John Kallevig, P.E.	1998 - 1999	
1963 - 1964	Vern Townsend	1981 - 1982	Robert Schlentz, P.E.	1999 - 2000	Thomas E. Johnson, P.E.
1964 - 1965	Wes Borgenson	1982 - 1983	John Berner, P.E.	2000 - 2001	Thomas E. Johnson, P.E.
1965 - 1966	Ron Vegemast	1983 - 1984	John Berner, P.E.	2001 - 2002	Inactive
1966 - 1967	Howard Silver	1984 - 1985	Rich Andresen, P.E.	2002 - 2003	Inactive
1967 - 1968	Curt Motchenbacher	1985 - 1986	Rich Andresen, P.E.	2003 - 2004	Inactive
1968 - 1969	Don Hill	1986 - 1987	Rich Andresen, P.E.	2004 - 2005	Inactive
1969 - 1970	Roger Wolfgram	1987 - 1988	Gary Finley, P.E.		

Some of the information for Minnesota, herein, originally written by Robert W. Jarvis for The First 30 Years¹⁷⁰ and by R.A. Riesselman, P.E. for The Next Seven Years¹⁷¹.

¹⁷⁰ Tennant, Otto, The First 30 Years, NSPE, June 1991, pg 62-63.

¹⁷¹ Rauch, William F., The Next Seven Years, NSPE, June 1997, p 37-39.

MISSISSIPPI

Mississippi PEI Industrial Professional Development Award Recipients					
1976 - 1977	Mitchell Engineering Company	Columbus	1994 - 1995	Singing River Electric Power Association	Lucedale
1977 - 1978	Mississippi Power & Light Company	Jackson	1995 - 1996	None	
1978 - 1979	Masonite Corporation, Central Hardboard Division	Laurel	1996 - 1997	None	
1979 - 1980	Mississippi Chemical Corporation, Engineering Division	Yazoo City	1997 - 1998	South Mississippi Electric Power Association	Hattiesburg
1980 - 1981	Mitchell Engineering Company	Columbus	1998 - 1999	Pearl River Valley Electric Power Association	Columbia
1981 - 1982	Mississippi Chemical Corporation, Engineering Division	Yazoo City	1999 - 2000	Ceco Building Systems, Southern Region	Columbus
1982 - 1983	South Mississippi Electric Power Association	Hattiesburg	2000 - 2001	South Mississippi Electric Power Association	Hattiesburg
1983 - 1984	Mississippi Power Company	Gulfport	2001 - 2002	None	
1984 - 1985	None		2002 - 2003	None	
1985 - 1986	Mississippi Power Company	Gulfport	2003 - 2004	Baxter Healthcare Corporation	
1986 - 1987	Mississippi Power & Light Company	Jackson	2004 - 2005		
1987 - 1988	Mississippi Power Company	Gulfport	2005 - 2006		
1988 - 1989	South Mississippi Electric Power Association	Hattiesburg	2006 - 2007		
1989 - 1990	Mississippi Power Company	Gulfport	2007 - 2008		
1990 - 1991	Entergy Operations, Inc	Jackson	2008 - 2009		
1991 - 1992	None		2009 - 2010		
1992 - 1993	Mississippi Power Company	Gulfport	2010 - 2011		
1993 - 1994	None		2011 - 2012		

MISSOURI

The history of Missouri's PEI is located in a supplement to this publication also prepared by the PEI History Committee, [75 Years of PEI in Missouri \(1937-2012\)](#).

MONTANA

The Professional Engineer In Industry group in Montana was formed in late 1978 due to some prodding by the Western Region VP, PEI, Tom Herron at the Western Region meeting in Maui. Bill Rauch who was President of MSE at the time committed to starting a PEI group. Montana Registered Engineers In Industry disciplines at that time, rivaled the number of engineers in PEPP. The telephone, power, and mining companies employed most of the PEI's.

The Montana PEI by-laws were approved by NSPE and PEI, at the winter meeting in New Orleans in 1979, and Bill Rauch agreed to serve as the PEI Board of Governor.

The main means of communication in Montana is the PEI article in each one of the State publications.

The PEI Governor's from Montana include Bill Rauch, Scott Woods and Steve Wright.

The late 1980's and 1990's saw considerable shift in the membership of PEI in Montana. The downsizing in the telephone industry, and the shutdown of the mining industry in Montana, leaves most of the industry Engineers being employed on the power company side, and as a result the total numbers of Engineers in Industry in Montana has dwindled.

Some of the information for Montana, herein, originally written by Anonymous for The Next Seven Years¹⁷².

NEW JERSEY

The exact date of the founding of NJSPE-PEI is not clear. However, if recent history is an example, the leadership and membership pretty well followed the industrial history of New Jersey.

As in most other states, all NSPE-PEI members are constantly challenged by Federal legislation and regulation. In addition, NJSPE-PEI members are challenged by even more specific legislative initiatives from the active New Jersey legislature and judiciary who both are significantly involved in engineering related matters. It is in this area that the support of NJSPE and its legislative committee has proven helpful.

¹⁷² Rauch, William F., The Next Seven Years, NSPE, June 1997, p 12.



Past NJSPE PEI member John Drum (left) and Doug Benner (right) enjoy a reunion around 2002. (Photo from Doug Benner).

New Jersey is unique among the 50 states. It is the only state to have a major metropolitan area at two ends of the state (New York City and Philadelphia), both within a two hour drive, and neither city within the jurisdiction of the state. This poses several engineering and economic challenges. Many of the engineers in New Jersey must out of necessity be licensed in at least two states.

PEI was relatively inactive before the 1970's. In the 1970's there was a resurgence of NJSPE-PEI activity in response to the increasing needs of our members. In the early 1970's, under the direction of Robert Salvin, a panel discussion was held at Stevens Institute of Technology on how to attract and retain engineers in industry. It is interesting to note that unlike today, salary was the primary motivation at that time. In the early 1980's faculty and financial support concerns were aired in a series of "debates" with deans of engineering at the colleges and universities in New Jersey. In the mid 1980's NJSPE-PEI turned its focus to continuing education through expansion of seminars, including - Total Quality Management, Ethics, and Young Engineers in Industry. These seminars were held during state conferences.

In recent years, NJSPE-PEI has utilized tours as the meeting focus. Some examples of tours taken include the Princeton Plasma Physics Lab (home of fusion research), Raritan River Steel Company (a steel mill using a mini-electric arc furnace which currently produces about 20 percent of the nation's wire rod) and the General Motors Facility to see Corsicas and Berrettas assembled using the latest in robotic techniques.

Since the inception of PEI, New Jersey has played a role at the national level. The first NSPE-PEI Northeast Regional Vice Chairman was Herbert S. Niedhammer, (1964 - 1965 and 1966 - 1967) who was with Exxon Research. Mr. Niedhammer retired from Industry, moved to California, changed careers, and years later became National Chairman of Professional Engineers in Construction. The second New Jersey NSPE-PEI Northeast Regional Vice Chairman was Robert Salvin, (1975 - 1977) with Johnson and Johnson Personal Products. He went on to serve as NSPE-PEI Chairman in 1980 - 1981. Other New Jersey NSPE-PEI Northeast Regional Vice Chairmen include John J. Drumm (1983 - 1985), Theresa L. Roesch (1986 - 1987), Patrick J. Natale (1989 - 1991) and Gloria P. Holt (1991 - 1992). John Drumm established a model state PEI program while employed by AT&T. This model is still used in the PEI Manual.

NJSPE-PEI conducted Industry Visits in 1992 with Johnson & Johnson and New Jersey Bell.

In addition to the industry tours already mentioned, NJSPE-PEI conducted a tour of the AT&T Quality Management and Engineering Organization facilities, and learned about their application of TQM, the various support facilities and monorail plans at Newark Airport, the PSE&G Bergen Generating Station Repowering Project (combustion turbines in a combined cycle using portions of an old conventional power plant), the highly automated New York Times printing plant, and NJIT Center for Environmental Engineering and Science (hazardous waste research center).

In 1990, NJ passed the "Building Design Services Act" which defined which profession designs and seals which types of buildings, and can be prime contractor. The regulations for this Act were released in 1992. These regulations required a Certificate of Authorization for those firms offering and/or performing engineering services in NJ. These regulations were written for the small design firm, but also applied to Industry. The requirements



Shown discussing matter of the Northeastern Regional caucus while in session during the PEI 1983 Annual Meeting in Dayton, OH, are (From left to right): Cathernine Burns, New Jersey PEI Chair; John Drum, Northeastern Regional vice chairman; and Charles Tommer (back only) of Pennsylvania PEI. (Photo from PEI Industry Forum, Summer/Fall 1983).

of the application form were unrealistic for Industry. In 1993 NJSPE-PEI conducted meetings with engineering representatives from Industry, proposed changes to the regulations that did not change the legislative intent, but made Industry compliance possible. These changes were subsequently adopted.

NJSPE-PEI sponsored seminars in World Class Quality With Robust Design, ISO 9000, Total Quality Management for Facilities Design, and How to be a Power Internet User.

Industry Engineers frequently become victims of downsizing. The Chairman of NJSPE-PEI served as Chairman of the NSPE Employment Issues Task Force which investigated this trend and made recommendations to the NSPE Executive Board to help NSPE members cope with this trend. These recommendations were approved and led to a product called Career Asset Manager (a career planning tool) to members. The Chairman of NJSPE-PEI served on the IEEE task force that developed this product. The Employment Issues Task Force has also reviewed and revised *Guidelines for Employment of Engineers and Scientists* that has been developed by IEEE.

In closing, New Jersey's geo-political situation has had a strong impact on PEI activity. In conclusion, current and future, leadership of NJSPE-PEI will continue the history of addressing the contemporary needs of Professional Engineers in Industry, all in an effort to get an ever increasing percent of those engineers active in NSPE.

New Jersey PEI Chairs			
1970 - 1971	Herbert A. Niedhammer	1988 - 1989	Patrick J. Natale
1971 - 1972	Herbert A. Niedhammer	1989 - 1990	Gloria P. Holt
1972 - 1973	Walter Hummak	1990 - 1991	Gloria P. Holt
1973 - 1974	Walter Hummak	1992 - 1993	Douglas E. Benner
1974 - 1975	Robert Salvin	1993 - 1994	Douglas E. Benner
1975 - 1976	Robert Salvin	1994 - 1995	Douglas E. Benner
1976 - 1977	Robert F. Schladale	1995 - 1996	Douglas E. Benner
1977 - 1978	Robert F. Schladale	1996 - 1997	Douglas E. Benner
1978 - 1979	James Mitchell	1997 - 1998	Douglas E. Benner
1979 - 1980	James Mitchell	1998 - 1999	Douglas E. Benner
1980 - 1981	John Drum	1999 - 2000	Douglas E. Benner
1981 - 1982	John Drum	2000 - 2001	
1982 - 1983	John D. Grant	2001 - 2002	
1983 - 1984	Catherine M. Burns	2002 - 2003	
1984 - 1985	Theresa L. Roesch	2004 - 2005	
1985 - 1986	Theresa L. Roesch	2005 - 2006	
1986 - 1987	Theresa L. Roesch	2006 - 2007	
1987 - 1988	Patrick J. Natale	2007 - 2008	

Some of the information for New Jersey, herein, originally written by Douglas Benner and John Grant for The First 30 Years¹⁷³ and by Douglas Benner, P.E. for The Next Seven Years¹⁷⁴.

NEW MEXICO

The New Mexico PEI sponsors two annual awards that started in the early 1990's. These are the *Governor's New Engineering Product Award* and the *Outstanding Engineer in Industry Award*. As New Mexico is not a large industrial state, some years there the Governor's New Engineering Product Award was discontinued. In addition to these two awards, the New Mexico PEI sponsored a "Solar Power Up" program. This program was aimed at 5th and 6th grade Native American students. The students formed teams to build and race solar powered cars. The program was designed to get

¹⁷³ Tennant, Otto, The First 30 Years, NSPE, June 1991, pg 66-67.

¹⁷⁴ Rauch, William F., The Next Seven Years, NSPE, June 1997, p 27-28.

engineers into classrooms with teachers and expose students to science, math, engineers, and working as a team.



Members of the New Mexico Professional Engineers in Industry practice section take part in Albuquerque meeting October 26, 1968. At right is R.W. Decker, PEI Chair, who addressed the group on PEI activities at the national level. (Photo from PEI Newsletter, Dec 1968).



NMSPE Member and National PEI Chair 1975 - 1976, Phillip R. Owens. (Phot from PEI Newsletter June/July 1975).

A review of the *New Mexico Professional Engineer* magazine provides the following list of PEI Practice Division Governors.

New Mexico PEI Chairs					
1977 - 1978	Ross Krayner	1989 - 1990	Jack Maddox	2001 - 2002	
1978 - 1979	Phillip Owens	1990 - 1991	Jack Maddox	2002 - 2003	Dick Paulk
1979 - 1980	Phillip Owens	1991 - 1992		2003 - 2004	
1980 - 1981	Ross Krayner	1992 - 1993	Dick Paulk	2004 - 2005	
1981 - 1982	Phillip Owens	1993 - 1994	Dick Paulk	2005 - 2006	
1982 - 1983	Robert Ray	1994 - 1995	Dick Paulk	2006 - 2007	
1983 - 1984	Frank Bailey	1995 - 1996	Dick Paulk	2007 - 2008	
1984 - 1985	David Neal	1996 - 1997	Keith Miller	2008 - 2009	
1985 - 1986	David Neal	1997 - 1998		2009 - 2010	
1986 - 1987	C. Preston Clements	1998 - 1999		2010 - 2011	
1987 - 1988	C. Preston Clements	1999 - 2000		2011 - 2012	
1988 - 1989	C. Preston Clements	2000 - 2001			

Some of the information for New Mexico, herein, originally written for *The Next Seven Years*¹⁷⁵.

NEW YORK

The Engineer-In-Industry Committee was the first of the Functional Sections Committees (authorized at the 1956 New York State Fall meeting) to fully organize in late 1956. This committee had as its Chairman Rudolph A. Koehler, P.E. of the Schenectady chapter.

The Committee was reorganized as a Practice Division at a general meeting at the NYSSPE 1996 Annual Meeting under a charter granted by the Board of Directors for the New York State Society of Professional Engineers on June 20, 1959. The new organization had six objectives:

- 1) To provide an effective forum for Professional Engineers in Industry.
- 2) To promote the concept that the professional engineer-employer relationship can be enhanced by a free exchange of ideas.
- 3) To encourage chapter level subsections.
- 4) To monitor legislation affecting engineers.
- 5) To encourage licensure, registration and membership in the state society.
- 6) To develop and promote one definite proposal for the improvement of the professional status of Professional Engineer in Industry.

The Industry Practice Division in New York State has worked on employee rights for many years. Practice Division Chairman, C. Curtis Herskind, P.E. in December of 1969 presented a workshop and a preliminary draft of a document entitled *Guide to Conduct of Engineering Work in Industry*. This document covered the topics of defining the role of the engineer employed in Industry as regards to duties and responsibilities and to clear up misunderstandings regarding the engineer's responsibility to the public in matters of safety, reliability, pollution, etc.

This tradition has been carried on in a document published *Guide for the Employed Engineer* which covers the rights and responsibilities of engineers in the work place. At one time, this booklet was distributed to all members of the New York State Society of Professional Engineers in Industry Practice Division.

The Practice Division has worked on other projects over the years and supported Mathcounts, Professional Development Awards, Student Conferences and educational programs for the Practice Division members.

¹⁷⁵ Rauch, William F., *The Next Seven Years*, NSPE, June 1997, p 40.

New York PEI Presidents/Chairs			
1985 - 1986	Al Stalh	1999 - 2000	E. Burrell Fisher (Vice Chair Neil J. Illenberg)
1986 - 1987	Al Stalh	2000 - 2001	E. Burrell Fisher (Vice Chair Neil J. Illenberg)
1987 - 1988	Al Stalh	2001 - 2002	E. Burrell Fisher (Vice Chair Neil J. Illenberg)
1988 - 1989	Al Stalh	2002 - 2003	E. Burrell Fisher (Vice Chair Neil J. Illenberg)
1989 - 1990	Dave Camp	2003 - 2004	Neil J. Illenberg (Vice Chair E. Burrell Fisher)
1990 - 1991	Dave Camp	2004 - 2005	Neil J. Illenberg (Vice Chair E. Burrell Fisher)
1992 - 1993	Dave Camp	2005 - 2006	John Frandina (Vice Chair Frank Roma)
1993 - 1994	Neil J. Illenberg	2006 - 2007	E. Burrell Fisher (Vice Chair Frank Roma)
1994 - 1995	Neil J. Illenberg	2007 - 2008	Frank Roma (Vice Chair Neil J. Illenberg)
1995 - 1996	Neil J. Illenberg	2008 - 2009	Frank Roma (Vice Chair Neil J. Illenberg)
1996 - 1997	Neil J. Illenberg	2009 - 2010	Frank Roma (Vice Chair Neil J. Illenberg)
1997 - 1998	Phi Ryan (Vice Chair Neil J. Illenberg)	2010 - 2011	Frank Roma (Vice Chair Neil J. Illenberg)
1998 - 1999	Phil Ryan (Vice Chair Neil J. Illenberg)	2011 - 2012	Frank Roma (Vice Chair Neil J. Illenberg)

Some of the information for New York, herein, originally written by Neal J. Illenberg, P.E. for The Next Seven Years¹⁷⁶. Other information provided by Frank Roma, P.E.¹⁷⁷

NORTH CAROLINA

The Professional Engineers in Industry (PEI) Division of the Professional Engineers of North Carolina (PENC) was formed in 1960. Over the years there has been certain programs that were administered by the PEI Division. The *Governor's New Product Awards* activity was started in 1982. The first PENC/Governor awards were presented in February 1983 during the PENC winter meeting. The first *PEI Professional Award* was given in 1973.

A summary of accomplishment of the PEI division focuses on the the support of PENC at Chapters and State level with active participation in the following activities:

- MATHCOUNTS
- Governor's New Product Award
- PENC/PAC
- Education Foundation & Scholarship

¹⁷⁶ Rauch, William F., The Next Seven Years, NSPE, June 1997, p 29.

¹⁷⁷ Roma, Frank, Email, May 26, 2012.

- PENC/NC State Board of Registration Recognition
- Ceremony for newly registered professional engineers
- Student Chapter Activities
- Student Paper Competition

There are two colleges in North Carolina that have participated in the NSPE-EAL program which was administered locally by PEI.

As of 2012, the PEI group has not been active in a long time and the Governor's New Product Award (GNPA) was the only thing that kept the last few people interested. In 2005, the GNPA award discontinued because nominations were sparse and of poor quality.

North Carolina PEI Chairs					
1960	Norman S. Pliner	1978 - 1979	Robert W. McDonald	1995 - 1996	
1961	Norman S. Pliner	1979 - 1980	Richard T. Wilcox	1996 - 1997	
1962	William MacBatchelor, Jr.	1980 - 1981	Ralph W. Cox	1997 - 1998	
1963	Guy H. Cheek	1981 - 1982	John Brooks	1998 - 1999	
1964	Dana H. Rucker	1982 - 1983	Alpha M. Neely	1999 - 2000	William N. Breedlove
1965	Richard P. Willard	1983 - 1984	Alpha M. Neely	2000 - 2001	William N. Breedlove
1966	Frederick M. Baldwin	1984 - 1985	William E. West	2001 - 2002	William N. Breedlove
1967		1985 - 1986	Charles A. Barron	2002 - 2003	Andrew Straw
1968		1986 - 1987	Charles A. Barron	2003 - 2004	Gil Vinzani
1969 - 1970	Herman L. Cook	1987 - 1988	Janie M. Wood	2004 - 2005	Gil Vinzani
1970 - 1971		1988 - 1989	Janie M. Wood	2005 - 2006	None
1971 - 1972	James Wilson	1989 - 1990	Teresa A. Helmlinger	2006 - 2007	None
1972 - 1973	James Wilson	1990 - 1991		2007 - 2008	None
1973 - 1974		1991 - 1992		2008 - 2009	None
1974 - 1975	Joe A. Ellisor	1992 - 1993		2009 - 2010	None
1975 - 1976	James V. Hallsey	1993 - 1994		2010 - 2011	None
1976 - 1977	Ben C. Wilson	1994 - 1995		2011 - 2012	None
1977 - 1978	R. Thomas Hobbs				

North Carolina Governor's New Product Award				
Year	Small	Medium	Large	Mega
1983			<i>Cannon Mills Co.</i> <i>Kelly-Springfield Tire Company</i> <i>Microelectronics Center of General Electric</i>	

North Carolina Governor's New Product Award				
Year	Small	Medium	Large	Mega
1984	<i>ConvaTec</i>	<i>Celanese Fibers Operations</i>	<i>Northern Telecom, Inc.</i>	
1985	<i>CEM Corporation</i>	<i>Standyne, Inc.</i>	<i>Corning Glass Works</i>	
1986	<i>Jacumin Engineering & Machine Co.</i>	<i>Celanese Corporation</i>	<i>Square D Company</i>	
1987	<i>Carolina Medical Electronics, Inc.</i>	<i>Douglas Battery Manufacturing Co.</i>		
1988	<i>Carolon Company</i>	<i>H & H Products, Inc.</i>	<i>Burroughs Wellcome Co.</i>	
1989	<i>Automated Technology Systems, Inc.</i>	<i>Aeroglide Corporation</i>	<i>IBM Corporation</i>	
1990	<i>Light Engineered Displays, Inc.</i>	<i>Morris & Associates</i>	<i>General Electric</i>	
1991	<i>Carolina Nail, Inc.</i>	<i>Hackney & Sons, Inc.</i>	<i>ITT Teves</i>	
1992	<i>Cree Research, Inc.</i>	<i>Wellco Enterprises, Inc.</i>	<i>Weyerhaeuser</i>	
1993				
1994	<i>Integrated Electronic Innovation</i>	<i>Power Curbers, Inc.</i>	<i>Roche Image Analysis Systems</i>	
1995	<i>Moisture Intrusion Detection Systems, Inc.</i>	<i>The Gregory Manufacturing Company</i>	<i>Gilbarco Incorporated</i>	
1996	<i>Embrex, Inc.</i>	<i>Troxler Electronic Laboratories</i>	<i>Lucent Technologies</i>	
1997		<i>Logic Marine Corporation</i>		
1998	<i>Vengame Creek Stone, Inc.</i>	<i>Harper Corporation of America</i>	<i>Corning Cable Systems</i> <i>Siecor (Merged into Corning Cable Systems)</i>	
1999		<i>Digital Optics Corp</i>	<i>ALARIS Medical Systems, Inc.</i>	
2000	<i>Frisby Technology</i>	<i>Digital Optics Corp</i>	<i>Weck Closure Systems</i>	
2001	<i>Industrial Recovery Systems International Incorporated</i>		<i>Corning Cable Systems</i>	
2002	Westwood Super-Shuttle <i>Westwood Manufacturing, Inc</i> Elizabethtown, NC	SMART Trac System <i>CEM Corporation</i> Matthews, NC		MK20e/MK25 Series of Electronic Brake systems (EBS) <i>Continental Teves, a Division of Continental AG of Germany</i> Morganton, NC
2003			Short Finder <i>Santronics</i> Sanford, NC	Z Trak Models 737 and 757 <i>John Deere Turf Care</i> Fuquay-Varina, NC
2004	None			

North Carolina Governor's New Product Award				
Year	Small	Medium	Large	Mega
2005	None			

Some of the information for North Carolina, herein, originally written by Teresa A. Helmlinger for The First 30 Years¹⁷⁸.

OHIO

- 1946 The earliest record of any Industry Group within OSPE was this year although the record notes that the group was "reactivated" at the OSPE annual meeting in Akron. The group competed with others for participants and gradually slipped into anonymity again.
- First Chairman - W. J. Secrest, Ch.Eng., Firestone Rubber
 - Second Chairman - John D. Coleman, Prin. Eng., Frigidaire Div., G.M.
- 1957 The group decided to go with a separate meeting in the fall. The first of these was held in conjunction with the Dayton Chapter. John Coleman was the prime mover of this event. Approximately 85 attended.
- 1958 A two day fall conference was held with 11 speakers from industry participating. Incoming NSPE President Tom Linville attended and addressed the group. Attendance was 110.
- 1963 Joint NSPE and OSPE meeting held in Cleveland. Several Industry sessions were held.
- 1964 Although there is little formal activity on the part of 1979 PEI, the OSPE Industry Advisory Group continues to meet from time to time with 20 to 30 participants.
- 1981 Ohio PEI begins to recognize under the guidance of Clyde Tipton, Jr. as Chairman. The leadership group - albeit small - meets regularly and Governors from Ohio attend all NSPE-PEI National Meetings. This is a pattern which continues in the subsequent years.
- 1983 Ohio PEI offers financial support to students to attend ELI Leadership Lab. First Ohio Industry visitation to Ohio Bell occurred in Cleveland. Clyde Tipton receives OSPE-PEI Distinguished Service Award.

¹⁷⁸ Tennant, Otto, The First 30 Years, NSPE, June 1991, pg 68.

- 1984 Joe Batchelder - Chairman - Ohio introduces concept of Industry and Education working together at the winter NSPE meeting. This was the beginning of what we now know as EAL.
- 1987 In this year (1987) PEI sponsors its first seminar at the OSPE Annual Convention: a practice it continues on an annual basis.
- 1989 Jack M. Frost, Chairman. Ohio has first "official" entry in the "New Product Award" contest.

Ohio PEI Chairs & Governors			
1981-1982	Clyde Tipton, Jr., P.E.	1996-1997	Jack M. Frost, P.E.
1982-1983	Clyde Tipton, Jr., P.E.	1997-1998	Clyde Tipton, Jr., P.E.
1983-1984	Clyde Tipton, Jr., P.E.	1998 - 1999	Richard L Buchanan, P.E.
1984-1985	Joe Batchelder	1999 - 2000	Richard L Buchanan, P.E.
1985-1986	Clyde Tipton, Jr., P.E.	2000 - 2001	Richard L Buchanan, P.E.
1986-1987	Clyde Tipton, Jr., P.E.	2001 - 2002	Norm Lewis, P.E.
1987-1988	William Hohenstein	2002 - 2003	Norm Lewis, P.E.
1988-1989	William Hohenstein	2004 - 2005	Jim Kearns, Ph.D., P.E.
1989-1990	Jack M. Frost, P.E.	2005 - 2006	Jim Kearns, Ph.D., P.E.
1990-1991	Jack M. Frost, P.E.	2006 - 2007	Howard Jones, P.E.
1991-1992	Ralph Leidy, P.E.	2007 - 2008	Howard Jones, P.E.
1992-1993	Ralph Leidy, P.E.	2008 - 2009	Michael Thompson, P.E.
1993-1994	Dean Philips	2009 - 2010	Mike Le Marr, P.E.
1994-1995	Dean Philips	2010 - 2011	Mike Le Marr, P.E.
1995-1996	Jack M. Frost, P.E.	2011 - 2012	Howard Jones, P.E.

It is noteworthy that during the 1980s, OSPE-PEI has been successful in retaining 300 - 400 dues paying members. This has permitted PEI to initiate a number of efforts not only benefiting PEI, but all of OSPE. During this period OSPE-PEI has been an active and continuing participant in the affairs of NSPE-PEI.

Through these years OSPE-PEI has remained a force within the ranks of OSPE and continuing to support the programs of NSPE-PEI. At least one, sometimes as many as three, people have represented the state at NSPE-PEI Board of Governors meetings

Individuals continue to advance within the organization. Ralph Leidy served as NSPE PEI Chair. Clyde Tipton served as NSPE President.

Ohio New Product Award Recipients		
1996	Parker Hannifin Corporation	
1997	Holophane Corporation	
1998	Flexible Pavements BETA LaserMike Incorporated	Large Small
1999	Monarch Marking Systems Green Tokai Company LTD Ohio Timberland Products	Large Medium Small
2000	Akro Mills Pile Dynamics	Large Small
2001	None	
2002	None	
2003	None	
2004	None	
2005	Nexicor LLC	
2006	None	
2007	None	
2008	Eaton Corporation	
2009	None	
2010	Exacter Incorporated	
2011	Northern States Metals Company	
2012		

Some of the information for Ohio, herein, originally written by Jack H. Frost for The First 30 Years¹⁷⁹.

OREGON

The Professional Engineers in Industry (PEI) Practice Division in the Professional Engineer of Oregon (PEO) has been active since about 1972. The present PEI Governor (since 1993) is Steven Dyrnes and his predecessor was Uldis Seja. At the State level there are some infrequent PEI meetings, however early in 1996 there were a couple of industry visits with National officers at Boise Cascade and David and Harry Fruit Packing plant.

Steve Dyrnes, P.E. continues to hold the Oregon Board of Director position for PEI as of 2011-2012.

¹⁷⁹ Tennant, Otto, The First 30 Years, NSPE, June 1991, pg 69-70.

Some of the information for Oregon, herein, originally written for The Next Seven Years¹⁸⁰.

PENNSYLVANIA

Early efforts to form the Pennsylvania - Professional Engineers in Industry (PSPE-PEI) can be traced to 1964 - 1965 work by Jim Crooks, Dave Phillips, Stan Eisenhard and Norm Schaeffer. Jim Crooks became Chairman in the 1965 - 1966 administrative year.

PSPE has been actively involved in the MATHCOUNTS program since 1984. Although not a PEI program, many PEI members in around the state have organized, raised funds and worked at the local and state competition.



The Pennsylvania Society of Professional Engineers awarded its certificate of endorsement of Guidelines for Professional Engineer-Management Relationships to Pennsylvania Power & Light Company PP&L. (Left to Right): William Baum, PP&L vice president; Norman Schaffer, PEI Vice Chair, Northeastern Region; and Stanley Eisenhard, State PEI Chair. (Photo from PEI Newsletter, Nov 1969).

PSPE has had an Outstanding Engineering Achievement Award which PSPE-PEI administers. The award recognizes projects substantially completed and located in Pennsylvania; or developed, designed, or managed by an organization located in Pennsylvania. Recipients are selected from projects exhibiting outstanding engineering achievement which benefits Pennsylvania.

- In addition, PSPE-PEI continues to be active in many other projects. Among these are
- Active efforts to continue gaining membership and PEI projects in each chapter
- Arranging seminars at PSPE's Annual Conventions

¹⁸⁰ Rauch, William F., The Next Seven Years, NSPE, June 1997, p 13.

- Participating in the NSPE-PEI Education Assistance Limited program
- Reporting on proceedings of the American Quality Products Institute
- Reviewing and encouraging PSPE efforts in the legislative arena

Pennsylvania PEI Chairs					
1965 - 1966	James G. Crooks, P.E.	1982 - 1983	Garland M. Lilly, P.E.	1999 - 2000	Maurice R Silvestris, P.E.
1966 - 1967	James G. Crooks, P.E.	1983 - 1984	Garland M. Lilly, P.E.	2000 - 2001	Leonard J. Lutz, P.E.
1967 - 1968	David L. Phillips, P.E.	1984 - 1985	Leonard J. Lutz, P.E.	2001 - 2002	Leonard J. Lutz, P.E.
1968 - 1969	David L. Phillips, P.E.	1985 - 1986	Leonard J. Lutz, P.E.	2002 - 2003	Leonard J. Lutz, P.E.
1969 - 1970	Stanley E. Eisenhard, P.E.	1986 - 1987	William K. Gillespie, P.E.	2003 - 2004	Leonard J. Lutz, P.E.
1970 - 1971	Stanley E. Eisenhard, P.E.	1987 - 1988	William K. Gillespie, P.E.	2004 - 2005	None
1971 - 1972	Raymond E. Cantagallo, P.E.	1988 - 1989	Earl S. McCabe, Jr., P.E.	2005 - 2006	None
1972 - 1973	Norman G. Schaffer, P.E.	1989 - 1990	Earl S. McCabe, Jr., P.E.	2006 - 2007	None
1973 - 1974	Norman G. Schaffer, P.E.	1990 - 1991	John G. Woods, P.E.	2007 - 2008	None
1974 - 1975	John G. Woods, P.E.	1991 - 1992	John G. Woods, P.E.	2008 - 2009	None
1975 - 1976	John G. Woods, P.E.	1992 - 1993	William M. Middleton, P.E.	2009 - 2010	None
1976 - 1977	Robert J. Anderson, P.E.	1993 - 1994	William M. Middleton, P.E.	2010 - 2011	None
1977 - 1978	Robert J. Anderson, P.E.	1994 - 1995	Leonard J. Lutz, P.E.	2011 - 2012	None
1978 - 1979	Charles J. Tommor, P.E.	1995 - 1996	Leonard J. Lutz, P.E.		
1979 - 1980	Charles J. Tommor, P.E.	1996 - 1997	Earl S. McCabe, Jr., P.E.		
1980 - 1981	Nelson Sellers, P.E.	1997 - 1998	Earl S. McCabe, Jr., P.E.		
1981 - 1982	Charles J. Tommor, P.E.	1998 - 1999	Maurice R Silvestris, P.E.		

Pennsylvania PEI Industrial Professional Development Award Recipients					
1965	The Fuller Company	1981	Air Products and Chemicals, Inc.	1997	None
1966	Philadelphia Electric Company	1982	Bethlehem Steel Corporation	1998	None
1967	Pittsburgh Plate Glass Company	1983	Westinghouse, Water Reactor Div	1999	None
1968	Sun Oil Company	1984	Merck, Share and Dohme Co.	2000	None
1969	Pennsylvania Power & Light Company	1985	U.S. Steel, Fairless Works	2001	None
1970	Western Electric Company	1986	None	2002	None
1971	Western Electric Company, Allentown Works	1986	None	2002	None
1972	Mellon - Stuart Company	1988	None	2004	None
1973	Bessemer & Lake Erie Railroad Company	1989	None	2005	None
1974	Metropolitan Edison Company	1990	None	2006	None
1975	Dravo Company	1991	Betz, Converse & Murdock, Co	2007	None
1976	Lee - Norse Company	1992	None	2008	None
1977	Wheelabrator-Forge, Air Pollution Control Div	1993	None	2009	None

Pennsylvania PEI Industrial Professional Development Award Recipients					
1978	Gulf Science and Technology	1994	None	2010	None
1979	Elliot Co., Division of Carrier	1995	None	2011	None
1980	Fuller Company, World Headquarters	1996	None	2012	None

Pennsylvania PEI Distinguished Service Award Recipients					
1979	Norman G. Schaffer, P.E.	Western Electric Co	1996	None	
1980	John G. Woods, P.E.	TRW	1997	None	
1981	Robert J. Anderson, P.E.	Dravo Corporation	1998	None	
1982	Charles J. Tommor, P.E.	PP&L Co	1999	None	
1983	Nelson Sellers, P.E. (posthumously)	Rohm & Haas Co	2000	None	
1984	John N. Wambold, P.E.	NBI	2001	None	
1985	Garland M. Lilly, P.E.	Westinghouse Electric Co	2002	None	
1986	Frederick E. Eidman, P.E.	General Electric Co	2002	None	
1986	Leonard J. Lutlz, P.E.	Philadelphia Electric Co.	2004	None	
1988	None		2005	None	
1989	William K. Gillespie, P.E.	Pittsburgh Des Moines	2006	None	
1990	None		2007	None	
1991	None		2008	None	
1992	Mark Z. Hanlon, P.E.	BCM Co	2009	None	
1993	Roland Schmidt, P.E.	General Electric Co	2010	None	
1994	None		2011	None	
1995	None		2012	None	

Pennsylvania Outstanding Engineer in Management Award Recipients					
1981	Harold S. Mohler, P.E.	1992	None	2002	None
1982	Theodore Burtis, P.E.	1993	H. Leonard Krouse, P.E.	2004	None
1983	James L. Everett, III, P.E.	1994	None	2005	None
1984	Robert K. Campbell, P.E.	1995	Brooks A. Britcher, Jr., P.E.	2006	None
1985	John M. Arthur, P.E.	1996	None	2007	None
1986	None	1997	None	2008	None
1987	None	1998	None	2009	None
1988	None	1999	None	2010	None
1989	None	2000	None	2011	None
1990	None	2001	None	2012	None
1991	None	2002	None		

Pennsylvania PEI Governor's New Product Award			
Year	Small	Medium	Large
1983	Cease Fire Fingertrip Fire Extinguisher <i>Ultec, Inc.</i>	"Torque Tight" Insulation Displacement Connectors <i>CW Industries</i>	WDPF Data Acquisition and Control System <i>Westinghouse Electronics Div</i>
1984	RWB-II Refrigeration Compressor <i>Frick Co</i>	Infrared Video Imaging Camera System <i>Teltron, Inc.</i>	Pool Pak <i>Borg-Warner Air-Conditioning</i>
1985	Not Awarded	Not Awarded	Not Awarded
1986	Data Analysis Software <i>Minitab Inc.</i>	In-Home Liquid Oxygen System <i>Penox Technologies</i>	KYNAR Plezo Film <i>Penwall Corp</i>
1987	Low Cost Low Energy TV Transmitter <i>Acrodyne Industries</i>	Device to Administer Pressure to Relieve Obstructive Sleep Apnea <i>Respironics, Inc.</i>	Improved Surgical Light <i>American Sterilizer</i>
1988	Residual Stress & Retained Austenite Measurement System <i>Denver X-Ray Instr.</i>	XL Ultrasound System <i>Interspec, Inc.</i>	A17 Large A Series Mainframe Computer <i>Unisys</i>
1989	Landfill Surface Sealing Compound <i>Rusmar, Inc.</i>	Liquid Spill Clean Up Material <i>New Pig Corp</i>	AT 400 Series Mobile Hydraulic Crane <i>Grove Mfg Company</i>
1990	Taklman Portable Terminal & TalkNet Workstation <i>Volcollect, Inc.</i>	Wireless Cable Microwave TV Transmitter <i>ITS Corporation</i>	VLR Lime Calcining System <i>Fuller Company</i>
1991	S-1100 Family of Optical Non-Contact Gauges <i>Contrologic, Inc.</i>	Bi-Pop Ventilator Mask <i>Respironics, Inc.</i>	Phased Array Biplane Transpsfofeal Probe <i>ECHO Ultrasound</i>
1992	Silon Wound Dressings – Synthetic Skin Material for Burn Victims <i>Bio-Med Science, Inc</i>	G-FET Centrifuge-Based Dynamic Flight Simulator <i>Environmental Techtonics Corp.</i>	Hydroscan Ultrasound Couplant Sheet <i>ECHO Ultrasound</i>
1993	None	None	None
1994	None	None	None
1995	None	None	None
1996	None	None	None
1997	None	None	None
1998	None	None	None
1999	None	None	None
2000	None	None	None
2001	None	None	None
2002	None	None	None
2003	None	None	None
2004	None	None	None
2005	None	None	None
2006	None	None	None
2007	None	None	None
2008	None	None	None

Pennsylvania PEI Governor's New Product Award			
Year	Small	Medium	Large
2009	None	None	None
2010	None	None	None
2011	None	None	None
2012	None	None	None

Pennsylvania Outstanding Engineering Achievement Award Winner		
Year	Team	Achievement
1996	<ul style="list-style-type: none"> • PENN DOT (District 8-0) • Gannett Flemming, Inc. • Urban Engineers, Inc. • Trumbull Corporation 	SR 581 Connector Project I-81 and US-11 Harrisburg
1997	<ul style="list-style-type: none"> • PENN DOT • Mackin Engineering Co • Michael Baker, Jr. Inc. • Dick Corporation 	Rehabilitation Project of Historic Smithfield Street Bridge, Pittsburgh

Some of the information for Pennsylvania, herein, originally written by Charles J. Tommor, P.E., with C. Kingsley Brown, P.E., John D. Wanner, PSPE Staff, and John G. Woods, P.E. for The First 30 Years¹⁸¹; and Charles J. Tommor, P.E., with C. Kingsley Brown, P.E., W. W. Middleton, P.E., Shari Taylor and John D. Wanner, PSPE Staff, and John G. Woods, P.E. for The Next Seven Years¹⁸².

TEXAS

The Texas Society of Professional Engineers in Industry was formed as a practice division in 1963. At a meeting in January 1963 in Galveston, Texas, engineers employed by industrial firms decided to form their own practice section. The purpose was to provide effective forums for discussion and action by those who are grouped together by their employment in industry. These groups wanted to create a greater bond by sharing problems of common interest. By May 1963, the PEI group had applications from 173 Texas Society of Professional Engineers (TSPE) members. In July 1963, at the Executive Board Meeting, the first slate of PEI Officers was announced. The TSPE Executive Committee had acted as the PEI nominating Committee at their request. Tom E. Devlin, P.E., El Paso, was elected as the first Chairman.

¹⁸¹ Tennant, Otto, The First 30 Years, NSPE, June 1991, pg 71-73.

¹⁸² Rauch, William F., The Next Seven Years, NSPE, June 1997, p 30-34.

Texas PEI Chairs					
1963 - 1964	Tom F. Devlin, P.E.	1980 - 1981	Julius M. Scott, P.E.	1997 - 1998	Pete Carhart, P.E.
1964 - 1965	John R. Birdwell, P.E.	1981 - 1982	Charles R. Kirkley, P.E.	1998 - 1999	Pete Carhart, P.E.
1965 - 1966	F. Norman Woodruff, P.E.	1982 - 1983	Samuel M. Frenkil, P.E.	1999 - 2000	Pete Carhart, P.E.
1966 - 1967	F. Norman Woodruff, P.E.	1983 - 1984	Jarvis W. Ford, P.E.	2000 - 2001	Terry Mayo, P.E.
1967 - 1968	David G. Chase, P.E.	1984 - 1985	William S. Haddock, P.E.	2001 - 2002	Terry Mayo, P.E.
1968 - 1969	David G. Chase, P.E.	1985 - 1986	Eliseo E. Salazar, P.E.	2002 - 2003	Jim Greer, P.E.
1969 - 1970	Jack S. Peiffer, P.E.	1986 - 1987	Allen D. Boger, Jr., P.E.	2003 - 2004	Jim Greer, P.E.
1970 - 1971	Jack S. Peiffer, P.E.	1987 - 1988	Victor M. Mendoza, P.E.	2004 - 2005	Paul Oehler, P.E.
1971 - 1972	Byron J. Nankervis, P.E.	1988 - 1989	Victor M. Mendoza, P.E.	2005 - 2006	Paul Oehler, P.E.
1972 - 1973	Lloyd Piper, P.E.	1989 - 1990	Les Goekler, P.E.	2006 - 2007	James Pappas, P.E.
1973 - 1974	Robert L. Dunson, P.E.	1990 - 1991	George Sarvadi, P.E.	2007 - 2008	James Pappas, P.E.
1974 - 1975		1991 - 1992	George Sarvadi P.E.	2008 - 2009	Keith LaRue, P.E.
1975 - 1976	Gerald J. Kettler, P.E.	1992 - 1993	Richard R. Allred, P.E.	2009 - 2010	Keith LaRue, P.E.
1976 - 1977	Allen Kemp, P.E.	1993 - 1994	Richard R. Allred, P.E.	2010 - 2011	Keith LaRue, P.E.
1977 - 1978	William S. Haddock, P.E.	1994 - 1995	Richard R. Allred, P.E.	2011 - 2012	Keith LaRue, P.E.
1978 - 1979	Thomas L. Duoto, P.E.	1995 - 1996	Richard R. Allred, P.E.		
1979 - 1980	J. L. Pape, P.E.	1996 - 1997	Al Dirnberger, P.E.		

Some of the information for Texas, herein, originally written for The Next Seven Years¹⁸³.

VIRGINIA

The history of Virginia's Professional Engineers in Industry Practice Division (PEI) can be traced to October 5, 1967, when Jim Farley, then state society president; Dick Carden, society executive secretary; and Dick Bidwell, an industry engineer traveled to the PEI Southeastern Region meeting in Nashville, TN. At that meeting, it was learned that Virginia was one of the few states without an industry organization. Noting that other states were achieving significant success in recognizing the professional accomplishments of engineers in industry, the Virginia Society of Professional Engineers (VSPE) decided to establish its own PEI practice division.

A "task force" was appointed to develop the guidelines under which a PEI practice division could be formed. The task force met on March 18, 1968.

¹⁸³ Rauch, William F., The Next Seven Years, NSPE, June 1997, p 41.

PEI Formation Task Force Members, March 18, 1968	
Dick Bidwell	Reynolds Metals Company
Pete Black	Reynolds Metals Company
Larry Caldwell	American Tobacco Company
Claude Kinder	Galeski Photo Center
Don Larcen	D. W. Larcen Company
Bob Evans	Northern Virginia
Fritz Whiting	Reynolds Metals Company
Ralph Carrin	Bristol Iron & Steel Company

This group of engineers from industry set to work immediately to prepare the necessary "Rules of Government and Operation." On June 27, 1968, VSPE's Board of Directors approved these "Rules" and the Virginia PEI practice division was officially established.

Thus formed, Virginia PEI turned its attention to program development. The first significant action taken was the implementation of the very first *Industrial Professional Development Award* (IPDA). This award was presented to Richmond Engineering Company on September 13, 1969. In addition to the IPDA program, initial Virginia PEI efforts concentrated on working with the Virginia PEE practice division to provide and publicize refresher courses for the PE examination. Substantial effort was also devoted to industry visits throughout the state to acquaint engineering employees with PEI. Numerous presentations were made to a variety of audiences on the importance of professional development for engineers in industry. PEI engineers made several appearances on local television to discuss the contributions of industry engineers to public health, safety, welfare and economic well being.

Throughout its early years, Virginia PEI developed objectives and action plans designed to raise public awareness of engineering in general and engineers in industry in particular. Work to establish local PEI chapters throughout the state was begun. Joint programs with other VSPE Practice Divisions were undertaken and articles of interest to engineers in industry were placed in the VSPE magazine, *The Virginia Engineer*. The focus was directed toward professionalism, ethics, engineering responsibility, registration and engineer-employer relationships.

The years since its formation, Virginia PEI has recorded numerous noteworthy achievements. Among the more significant are:

- 1) Worked with the VSPE Legislative Committee to develop the definition of an "Engineer" for inclusion in appropriate state laws.
- 2) Assisted VSPE in conducting on-campus student seminars on engineering ethics.
- 3) Distributed copies of NSPE's brochures on *Engineering Personnel Relations and Engineer/Management Relations* to approximately 500 firms throughout the state.

- 4) Assisted the City of Richmond in developing a new "Richmond City Electrical Code".
- 5) Continued its work in industry relations through industry visits, IPDA awards and encouragement of engineers in industry to become registered.
- 6) In conjunction with the Virginia PEG practice division, presented legislative position on collective bargaining and unionism vs. professionalism.
- 7) Promoted industry recognition through sponsorship of NSPE's Product Award Program.

It is instructive to look back at the list of objectives developed by the founding Virginia PEI Task Force in 1968:

- Adherence to the Code of Ethics for Engineers
- Encourage professional registration
- Support legislation for PE's
- Improve Engineer - Management relations
- Improve employment practices
- Encourage engineers to participate in community affairs
- Cultivate public appreciation of PE in industry achievements
- Avoid technical obsolescence
- Fully support VSPE and NSPE goals
- Acquaint engineering students with opportunities in industry

These precepts are as valid today as they were in 1968. Perhaps this fact, more than anything else, underscores the vision of the engineers of Virginia PEI. Virginia PEI is proud of its past and looks forward to even greater achievements in the future.

Virginia PEI Chairs			
1968 - 1969	Richard L. Bidwell, P.E.	1980 - 1981	John E. Frank, P.E.
1969 - 1970	Richard L. Bidwell, P.E.	1981 - 1982	George M. Boyd, P.E.
1970 - 1971	Richard L. Bidwell, P.E.	1982 - 1983	George M. Boyd, P.E.
1971 - 1972	Richard L. Bidwell, P.E.	1983 - 1984	George M. Boyd, P.E.
1972 - 1973	Richard L. Bidwell, P.E.	1984 - 1985	Valdemar Bodin, P.E.
1973 - 1974	Richard L. Bidwell, P.E.	1985 - 1986	Valdemar Bodin, P.E.
1974 - 1975	Warren J. Thorpe, P.E. Linwood B. Robertson, P.E.	1986 - 1987	George M. Boyd, P.E.
1975 - 1976	W. C. Whitaker, P.E.	1987 - 1988	George M. Boyd, P.E.
1976 - 1977	John P. Hanssen, P.E. James O. Atkinson, III, P.E.	1988 - 1989	George M. Boyd, P.E.
1977 - 1978	James O. Atkinson, III, P.E.	1989 - 1990	George M. Boyd, P.E.
1978 - 1979	James O. Atkinson, III, P.E.	1990 - 1991	Gary R. Keesecker, P.E.
1979 - 1980	James O. Atkinson, III, P.E.		

Some of the information for Virginia, herein, originally written by Gary R. Keesecker, P.E. for The First 30 Years¹⁸⁴.

WASHINGTON

The Professional Engineers in Industry (PEI) Practice Division has been very active and vocal in the Washington Society of Professional Engineers (WSPE) since the practice divisions were started in 1961. The first PEI Governor, Keith McDaniel, eventually became the first PEI National Chairman. WSPE typically holds three State wide meetings per year plus one officer orientation/training meeting. At all of these meetings, PEI and other practice divisions have a two hour segment where the attendees participate in their business session. Many of the initiatives within WSPE are started in these sessions. Since PEI is the second largest practice division in WSPE, its contribution to the vitality of the programs has been of considerable impact.

In the middle 1960's PEI compiled and published a list of Engineering Employers in the State. This list was up-dated in the middle 1970s. The PEI in WSPE had also some success in garnering some National Product Awards including the more recent awards for the Boeing 777 and the Heart Technology "Rotoblator".

On September 15, 2007, or thereabouts, Practice Divisions were disbanded and removed from the WA SPE Bylaws.

¹⁸⁴ Tennant, Otto, The First 30 Years, NSPE, June 1991, pg 74-77.

Washington PEI Governors					
1962 - 1963	Keith McDaniel	1977 - 1978	Jim Fuller	1992 - 1993	Chuck Cable
1963 - 1964	Keith McDaniel	1978 - 1979	Jim Fuller	1993 - 1994	Milt Tiede
1964 - 1965	Keith McDaniel	1979 - 1980	Bob Bronder	1994 - 1995	Milt Tiede
1965 - 1966	Harold Nelson	1980 - 1981	Bob Bronder	1995 - 1996	Bob Macduff
1966 - 1967	George Hoke	1981 - 1982	Chuck Rehkopf	1996 - 1997	Bob Macduff
1967 - 1968	George Hoke	1982 - 1983	Chuck Rehkopf	1997 - 1998	Glenn Landguth
1968 - 1969	C.T. Cunningham	1983 - 1984	Dennis Reiter	1998 - 1999	Glenn Landguth
1969 - 1970	C.T. Cunningham	1984 - 1985	David Attwood	1999 - 2000	Milt Tiede
1970 - 1971	Fred Fleming	1985 - 1986	David Attwood	2000 - 2001	Glenn Landguth
1971 - 1972	John Bohn	1986 - 1987	Joe Walker	2001 - 2002	Glenn Landguth
1972 - 1973	Ted Wright	1987 - 1988	Joe Walker	2002 - 2003	Bob MacDuff
1973 - 1974	Ted Wright	1988 - 1989	Chuck Cable	2003 - 2004	Bob MacDuff
1974 - 1975	Tom Herron	1989 - 1990	Chuck Cable	2004 - 2005	Bob MacDuff
1975 - 1976	Tom Herron	1985 - 1986	Chuck Cable	2005 - 2006	Milt Tiede
1976 - 1977	Jerry Kopp	1991 - 1992	Chuck Cable	2006 - 2007	Milt Tiede

Some of the information for Washington, herein, originally written for The Next Seven Years¹⁸⁵.

WISCONSIN

Presented to an industrial employer of engineering manpower for outstanding contribution to the advancement and improvement of employment practices.

Wisconsin Industrial Professional Development Recipients		
1960	Falk Corp	Milwaukee
1961	FWD Corp	Clintonville
1962	Wisconsin Public Service Corp	Oshkosh
1963	Wisconsin Telephone Co	Milwaukee
1964	Wisconsin Power and Light Co	Madison
1965	None	
1966	F. Hurlbut Co	Green Bay
1967	None	
1968	Allis Chalmers Mfg Co	Milwaukee
1969	None	

¹⁸⁵ Rauch, William F., The Next Seven Years, NSPE, June 1997, p 13-14.

Wisconsin Industrial Professional Development Recipients		
1970	None	
1971	None	
1972	None	
1973	American Appraisal Co	Milwaukee
1974	Ansul Corp	Marinette
1975	None	
1976	Wisconsin Electric Power	Milwaukee

Wisconsin Professional Engineers in Industry Award Recipients			
1963	Arthur Moody, P.E.	1989	Donald C. Wood, P.E.
1965	Lewis Sheerar, P.E.	1990	Robert W. Davenport, P.E.
1966	John Gammell, P.E.	1991	Dale I. Hanson, P.E.
1967	Norman Moser, P.E.	1992	James R. Carpenter, P.E.
1968	Frederick Mackie, P.E.	1993	Glen R. Schwalbach, P.E.
1969	Arthur Graettinger, P.E.	1994	Donald R. Voigt, P.E.
1970	Perry Wilder, P.E.	1995	Neil Lien, P.E.
1971	Wayne Hunnicutt, P.E.	1996	Roger L. Varner, P.E.
1972	Alexander McConnell, P.E.	1997	Ronald Mosnik, P.E.
1973	Philip Sikes, P.E.	1998	Gene Olson, P.E.
1974	John Rouman, P.E.	1999	Dale Cherney, P.E.
1975	Robert Holder, P.E.	2000	Nandakumaran Paruvakat, P.E.
1976	Richard McRoberts, P.E.	2001	None
1977	Joseph Kuranz, P.E.	2002	None
1978	Harry Stumpf, P.E.	2003	None
1979	Jack Nelmark, P.E.	2004	None
1980	Frederick Longfield, P.E.	2005	None
1981	James M. Ritter, P.E.	2006	None
1982	Donald J. Helfrecht, P.E.	2007	None
1983	Herbert Pritzlaff, P.E.	2008	None
1984	Robert H. Bath, P.E.	2009	None
1986	Mark R. Rhyner, P.E.	2010	None
1987	Glen R. Schwalbach, P.E.	2011	None
1988	Glen E. Jablonka, P.E.	2012	None



Presentation of the first Wisconsin SPE Industrial Professional Development Award to the Falk Corporation was made at the recent annual meeting of the State Society. Past WSPE President William J. Urban (L), representing the Falk Corporation; B.G. Elliott, WSPE Awards Chair (Center); and Richard S. Falk, Secretary of the Corporation (Right). (Photo from American Engineer).

CHAIR REPORTS

1994 - 2012

Many of the Chairs over the previous 2 decades had prepared annual reports for the NSPE Board of Directors as part of their duties. These reports are in the Chair's own verbiage, but provide insightful information of accomplishments and other news not found elsewhere in PEI annals. Each Chair since Gale Sights was invited to submit a report.

CHAIR REPORT 1994 - 1995

GALE SIGHTS, P.E., F.N.S.P.E.

Following the 1994 Summer PEI governors meeting, the PEI Executive Board met in Kansas City, Kansas to launch the 1994-1995 year. The meeting was very well attended with all newly elected officers present as well as many interested state governors. It was decided that several key areas would be focused upon for the following year. Several of the key issues were:

- 1) Retention and strengthening of representation of Governors from each state and territory of NSPE, complete with goal setting and reporting.
- 2) Successful Executive Board meetings to be held throughout the year.
- 3) Regeneration of the Congressional Fellow Program
- 4) Scholarship Awards
- 5) Actively Soliciting the support of the Industrial Advisory Group
- 6) Production Of the Career Asset Manager program
- 7) Production of the Guide for the Employed Engineer

GOVERNANCE

PEI RESTRUCTURING

During the 1994-1995 year, a great deal of attention was placed on the position of the practice divisions within the NSPE. Then NSPE President Monty Phillips charged officers Clyde Tipton and Jack Hinton with reaching a consensus among the Society leadership to include the chairs of the practice Divisions. These discussions carried over a period of several years culminating around 1998 with the present structures and financing.

WINTER BOARD OF GOVERNORS MEETING

The Board of Governors met at Houston, Texas January, 15-18, 1995. Regional caucus items focused on the NSPE reorganization. Topics considered were: purpose of reorganization, oversight of funding, core services, and who the primary customers were. PEI continued to follow the cost control initiatives that had been instituted two years previously and continued to operate on a balanced budget with a slight surplus remaining at the end of the year. This surplus was carried forward to future time periods. The Practice Division continued to be concerned that additional grass roots activity is needed and funding needed to be concentrated on service projects rather than governance.

SPRING PEI EXECUTIVE BOARD MEETING

The Executive Board met in Salt Lake City, Utah March 12 & 13, 1995. Program activity was reviewed and planning for the summer Board of Governors meeting was studied and updated.

PROJECTS

RECOGNITION

PEI continued to provide nominations for leadership to NSPE. Gale Sights was recommended to the nominating committee as Southeast Regional VP. Gary Keesecker continued as PEI liaison the L&GA Task Force, and Jack Hinton, Clyde Tipton continued on the NSPE board as Past President, and President. Pat Natale continued as Treasurer, and later went on to become Executive Director of NSPE. Bill Kilcullen was selected as Chairman of the NSPE PAC, which was extremely active at the time. All came from PEI.

Nick Wright, the longtime NSPE director for PEI was recognized for his continued service to the organization over the years. He also announced his long term plan for retirement which came to fruition several years later at the Spokane summer meeting.

LONG RANGE PLANNING COMMITTEE

The Long Range Planning Committee met May 6, and 7, 1995, in St. Louis, Missouri. Members were Rich Berning, Chairman; Gary Finley, Gloria Holt, Edgar Benoit, and Nick Wright. Their report was issued at the summer meeting held in July 1995 in Louisville, KY.

INDUSTRIAL ADVISORY GROUP

The Industry Advisory Group (IAG) met in Washington DC in April 1995. Approximately 15 well respected companies from industry were represented by high level engineering executives. These companies included IBM, 3M Corporation, Eastman Kodak, Untied Technologies, Phillips Petroleum, Xerox, and ATT. A number of items were considered to include Mathcounts, Women in Engineering, The future of Federal laboratories, Intellectual Property agreements, Mandatory Continuing Education (something new at that time) and Future Directions of the National Science Foundation.

SCHOLARSHIP

PEI continued to fund their scholarship for the year granting a \$2500 Scholarship to an undergraduate student in Engineering. The administration of the grant was handled by NSPE. The total endowment for the PEI Scholarship fund remained in the range of \$20,000.

DISTINGUISHED SERVICE AWARD

The PEI Distinguished Service award is presented to an individual who has made an out-standing contribution to advance the causes of the individual engineer in industry or PEI. The 1995 recipient was Bill Lhota P.E. Bill was Executive Vice President of the American Electric Power Service Corporation, parent company for seven electric power utilities operating in the central northwest. Bill was nominated by the Ohio Society of Professional Engineers. Bill was active in NSPE, IEEE, Edison Electric Institute, and numerous trade and legislative organizations.

INDUSTRY VISITATIONS

What was initially an NSPE project became a PEI sponsored project. During the 1994-1995 year there were visits on 84 different industrial companies which employed engineers. 34 follow-up visits were made. Prime contributors to this effort were Rich Berning, Gary Finley, and Mark Brumbach.

INTELLECTUAL PROPERTY AGREEMENT

An initial draft of a proposed intellectual property contract between engineers and their employers was created. Prime drafter of the agreement was Mark Brumbach.

GUIDELINES FOR PROFESSIONAL ENGINEERING EMPLOYMENT

The initial draft of the guidelines for the employed engineer was originated and adopted as a PEI project during the 1994-1995 year. This document has remained since then and is still an active project. Under the direction of Bob Becnel in 2005 the document was revised.

“Glenn Landguth, PE of Washington SPE authored revision 4 of the Guidelines for Professional Engineering Employment document. The new document incorporates changes within the business and industry “environment” and provides a 2005 perspective. The document was approved by the PEI EB and reviewed by NSPE general counsel, Art Schwartz.”

CAREER ASSET MANAGER

The Career Asset Manager was made available to NSPE members at a very reasonable cost. This book enabled an engineer to evaluate his skill sets and experience into a viable set of marketable tools. Added to the book itself, a series of seminars on how to use this product was presented by Doug Benner and Clyde Nagata.

NSPE COMPETITIVENESS POSITION STATEMENT

PEI undertook the project of revising the NSPE Position Statement on Competitiveness. Its thesis was that the policy of NSPE to encourage the development of a comprehensive policy that provided for the economic, national security, social and environmental needs of the nation. This position statement was presented and approved by the NSPE Board of Directors in Louisville KY in June 1995.

CONGRESSIONAL FELLOW

Alex Kelly from Atlanta, whose previous full time job was with ATT, served as an assistant to Representative Fields on The U.S. Congressional Telecommunications Committee for the entire year.

CONCLUDING MAJOR ACCOMPLISHMENTS

A summary of the accomplishments in the past year includes:

- 1) Completion of a successful year. The organization was intact and functioning throughout the entire year.
- 2) The practice continued of leaving a surplus budget for the year.
- 3) PEI agreed to supply funding to assist in the creation of an NSPE video.
- 4) We had an outstanding Congressional Fellow, Alex Kelly from Atlanta.
- 5) A very successful Industry Advisory Group meeting was held in Washington DC.
- 6) At the conclusion of the year, 84 Industry visits had been conducted.

- 7) An electronic database of member information was created at the NSPE Headquarters. This has since been expanded significantly.
- 8) The Internet was just becoming popular, and not many knew how to use it. A standing room only seminar was given for NSPE's first presentation on Internet operations.
- 9) The Engineering Achievement Award was reinstated
- 10) Bill Lohota, Chairman of American Electric Power Service Corporation, was awarded the PEI Distinguished service award.

CHAIR REPORT 1995 - 1996

GLORIA HOLT, P.E., F.N.S.P.E.

The 1995-1996 year could be characterized as a year of defining the practice divisions. It was also a year that PEI finally got everyone on our PEI Executive Board connected to the world wide web. The use of email was a very effective method to communicate and get input to time sensitive issues affecting PEI.

During 1995-1996, PEI leadership spent much of the year debating the crucial question about the fundamental nature of our organization. Would NSPE be most effective by serving its members through strong practice divisions? Or should NSPE serve its members directly, with the practice divisions coordinating projects conceived by NSPE?

The question as I saw it was analogous to that debated in this country in the 1840's and 1850's. To the United States "one nation, indivisible" - a strong central authority supported by states? Or was the U.S. a loose confederation of states, the federal government existing to carry out the those functions (e.g. foreign policy, common defense) which require unity?

It took a civil war to settle that question, in favor of a unified nation with strong states rights. A centralized NSPE could in theory be more "efficient", easier to diagram and administer, and in some respects more economical. On the other hand, a centralized NSPE would not be able to really know its members and their special concerns within the various segments (industry, construction, education, government and private practice) and be able to represent them as effectively. Nor would it have a mechanism to assure an internal voice for the weaker segments on matters where interests might differ.

Strong practice divisions and a less authoritarian NSPE would probably be more client-centered, have a more complicated structure, and could cost more to administer. It would also

require that each practice division look beyond its own agenda, and look out for the profession as a whole.

In order to get both efficiency and client-orientation a compromise would be required. As Peter Drucker says, from the point of view of the customer, the organization is a null set. Consumers are interested in products and services - not how the organization/corporation is organized. In order to survive and grow, NSPE must provide meaningful services to our members that are directly job and profession related.

During 1995-1996 PEI continued to enhance and expand the work already begun. Our programs had two main thrusts to carry out the PEI mission:

First, we worked very hard to help members who have to deal with an employment environment that has become very user unfriendly. The Career Development project evolved as a way of converting the skills of aerospace engineers in the defense industry into skills which they could use in other industries. During 1995-1996, the focus of Career Development was broadened, because industries were downsizing, industry employers were no longer retraining their own employees, and engineers themselves found that they needed to be responsible for the management of their own careers. PEI viewed this as an opportunity.

In this milieu, PEI moved in specific areas. PEI adapted the IEEE instrument called "Career Asset Manager". It is a step-by-step way of identifying and assessing an individual engineers skills, interests, and experiences such that the engineer can identify his or her strengths and weaknesses and find ways to use the strengths and overcome the weaknesses. The purpose of "Career Asset Manager" is to be a guide for career planning and development as well as a record keeping tool which will assist engineers to take control of their own careers and to find ways for continued professional growth and employment transitions. This was also PEI's first venture into turning a project into a profit center for PEI.

PEI also continued to work on strengthening and building bridges to industry. Our Industry Relations project, sometimes referred to as industry visitation, is a project where state PE leaders, sometimes with a national officer, call on industry leaders to discover the needs of industry which NSPE can address and for us to get industry employers to support their engineers in our programs. For example, in Minnesota we found that 3M was eager to have their engineers work with young people. PEI introduced 3M to "Mathcounts" in January 1990 when we invited Dick Johnson, Manufacturing Director to speak at our winter meeting in San Diego. Dick and 3M saw that "Mathcounts" offered a concrete and effective way for them to reach young people. In the last 6 years, 3M has poured huge amounts of money into supporting 'Mathcounts' in not just Minnesota but all their facilities throughout the country, but also, other NSPE/PEI programs. During 1995-1996, 3M was our national chairman for E-week, and they supported it to the tune of \$600,000.

PEI continues and believes in the Industry Relations project because we believed that unless we tell them, industry leaders will not know that NSPE can provide them with valuable solutions to some of their problems. Because unless we show them, industry leaders will not know that licensed professional engineers are a valuable asset to their businesses. During the 1995-1996 year, the Industry Relations project was broadened to encompass all "employers", not just industry employers.

Other projects which help build bridges to industry include the Governors New Product Award program which recognizes industries for innovative new products, EAL/Education Assistance Limited a project which takes surplus materials from industry and trades it for college tuition credits. We also participated on the Industry Advisory Group meetings where NSPE seeks input from industry leaders on NSPE programs and discuss numerous topics including the changing role of engineers in industry.

PEI also embarked on getting better at telling others what we do. We believed that it was our responsibility to let our members and our employers know the good works we do. we had a need to let others know of our achievements and accomplishments, so that others would want to join us and our employers would continue to support our efforts. PEI began the process of developing a brochures aimed at the industry engineer and another targeted to industry employers.

The 1995-1996 term was a challenging one as PEI tried to accept the challenge of change. Given our experience in recent years of a membership which is declining in numbers and growing older, we recognized that unless we became more efficient, more accountable to our constituents and more effective in our programs, PEI and NSPE would not survive. The caucus groups from Portland and in Boston began the process of identifying new programs and projects which will better meet the needs of our members - the employed engineer.

CHAIR REPORT 1999 - 2000

KAREN PEDERSEN, P.E., F.N.S.P.E.

The PEI Board of Governors met in Spokane, Washington to launch the 1999-2000 year. The meeting was well attended with several State PEI governors in attendance as well as incoming executive board members. The NSPE Board of Directors approved PEI moving to the project team form of organization at the Spokane BOD Meeting. The products and services to be focused in the coming year were:

- 1) Stand-alone seminars
 - Virtual Universities
 - Deregulation of Utilities
 - Activity Based Management
 - Value Engineering
- 2) Mid-Career Transition

- 3) New Product Award
- 4) Guide to the Employed Engineer
- 5) PEI Home Page

GOVERNANCE

PEI RESTRUCTURING

The NSPE Board of Directors approved the project team format in Spokane. As a result the Board of Governors was retired, however, states were encouraged to identify PEI state representatives to provide a source of future leadership and to serve the local members.

The first PEI Strategic Plan had been completed early in 1999. This strategic plan included an objective, strategy, action plan(s) and time lines(s) for each Goal in the Strategic Plan. Project teams were identified from this plan. The Product & Services Project Teams formed were as follows:

- 1) Stand-alone Seminars
- 2) Mid-Career Transition
- 3) New Product Award
- 4) Guide to the Employed Engineer
- 5) PEI Handbook Update
- 6) Home Page
- 7) New Members Contact

Product and Service teams were self selected at the 1999 Annual Meeting in Spokane, Washington. Groups met to review and refine proposed business plans for the 1999-00 budget, to identify volunteers needed for each, and to begin work on detailed assignments and deadlines.

Another major change for PEI was the retirement of Nick Wright after 39 years of service to NSPE. PEI hosted the presentation to send Nick off in style in Spokane. Nick was staff for both PEI and PEC.

PEI EXECUTIVE BOARD 1999-00

The PEI Executive Board was elected for the 1999-2000 year. In keeping with PEI's commitment to continuity in leadership, officers progressed through the chairs, and regional vice chairs served a staggered two year period.

1999 - 2000 PEI Executive Board		
Position	Name	Term
Chair	Karen S. Pedersen	1999-00
Chair-Elect	Richard G. Guthrie	1999-00
Secretary	Douglas E. Benner	1999-00
Immediate Past Chair	Ralph K. Leidy	1999-00
Second Past Chair	Edgar P. Benoit	1999-00
Northeast Vice Chair	John Wood	1999-01
Southeast Vice Chair	Robert W. Emery	1998-00
Central Vice Chair	W. Robert Buell	1999-01
North Central Vice Chair	Chris Herrera	1998-00
Southwest Vice Chair	Richard Bogdanovich	1998-00
Western & Pacific Vice Chair	Clyde H. Nagata	1999-01

FALL MONTHLY PEI EXECUTIVE BOARD CONFERENCE CALLS

The Product and Service teams that were formed in Spokane identified detailed assignments and deadlines for each product (or) service team formed. Four monthly conference calls were held to bench mark progress against business plans.

WINTER PEI EXECUTIVE BOARD MEETING

The PEI Executive Board met in Arlington, Virginia, January 28th at the NSPE Winter Meeting to review progress on Product and Service Development projects. On team recommendations, a revised list of project teams with team leaders was formed and implemented. Stand-Alone Seminars was changed to Seminar Incubator and the Utility Deregulation Seminar was added, as a product of the Seminar Incubator, to the list of teams. NSPE encouraged joint effort among the Practice Division. As a result PEI joined with PEC in the Value Engineering Seminar. The Guide to the Employed Engineer project was turned over to the NSPE Marketing Director to market to other states. Some project teams were added to cover areas overlooked in Spokane. The revised list was as follows:

- 1) Seminar Incubator
- 2) Mid-Career Transition
- 3) New Product Award

- 4) PEI Handbook Update
- 5) PEI Home Page
- 6) New Members Retention
- 7) Industry Relations
- 8) Utility Deregulation Seminar
- 9) Member Statistics
- 10) Sustaining Sponsor
- 11) Value Engineering(PEC)
- 12) PEI Scholarship

The Mid-Career Transition team developed a survey to gain experience from those that had gone through transition. By examining the concerns of those that had gone through the transition, the team were better prepared to anticipate and meet the needs of those that would go through career transition. The results were used to determine the next step.

In addition, PEI expanded the Mid-Career Transition team to be an NSPE project. The following was the team structure determined at the Winter Meeting.

Position	Name
Chair	Clyde H. Nagata
Assistant Chair	Douglas E. Benner
PEI Representative	Terri Helmlinger
PEI Representative	Laura McNeil
PEC Representative	TBD
PEE Representative	TBD
PEG Representative	TBD
PEPP Representative	TBD
NSPE Representative	TBD
Marketing Representative	
Staff	

SPRING MONTHLY PEI EXECUTIVE BOARD CONFERENCE CALLS

Monthly Conference calls were held as required in the spring. The nomination of the 1999-2000 officers was presented at the March meeting. The method of electing these officers took place by mail.

Position	Name	Term
Chair	Richard G. Guthrie	2000-01
Chair-Elect	Douglas E. Benner	2000-01
Secretary	Robert W. Emery	2000-01
Immediate Past Chair	Karen S. Pedersen	2000-01
Second Past Chair	Ralph K. Leidy	2000-01
Northeast Vice Chair	John Wood	1999-01
Southeast Vice Chair	Richard O. Frazee	2000-02
Central Vice Chair	W. Robert Buell	1999-01
North Central Vice Chair	Ronald Hill	2000-02
Southwest Vice Chair	Richard H. Paulk	2000-02
Western & Pacific Vice Chair	Clyde H. Nagata	1999-01

PROJECTS

NEW PRODUCT AWARD

PEI New Product Award Chair, Rob Emery, presented NPA Awards in the Small, Medium, and Large categories at the Awards Banquet in Norfolk, Virginia. To recap, the 1999-2000 NPA Award Recipients are listed below.

Category	Recipient
Small Company	Phototech <i>Universal Air Technology</i> Alachua, FL
Medium Company	PF5 Power Flush & Fluid Exchange System <i>BG Products, Inc</i> Wichita, KS
Large Company	Mercedes Benz M-Class All Activity Vehicle <i>Mercedes-Benz US Intl</i> Tuscaloosa, AL
Mega Company	LOGIQ 700 MR Premium Ultrasound System <i>GE Medical Systems</i> Milwaukee, WI

SEMINAR INCUBATOR

The Project Manager, Rich Bogdanovich, led the Seminar Incubator product. This project was developed to identify topics and methods of producing seminars as independent business opportunities. NSPE was committed to developing and implementing significant, non-dues sources of income through educational products meeting the needs of NSPE members.

PEI SCHOLARSHIP

Scholarships Project Manager, Neal Illenberg, led the effort to award a scholarship to an engineering student, with preference given to children or grand children of NSPE members.

INDUSTRIAL ADVISORY GROUP

The current Chair of PEI, Karen Pedersen, was a member of the Industry Advisory Group. The Industry Advisory Group (IAG) met in Hilton Head, South Carolina in April 2000. Approximately 15 well respected companies from industry were represented by high level engineering executives. These companies included Daimler Chrysler, Tenneco Packaging, Eastman Kodak, Motorola University, McDonnell Douglas, American Electric Power Service Corporation, and ATT. A number of items were considered to include Mathcounts, Women in Engineering, Intellectual Property agreements, and Future Directions of the National Science Foundation.

INDUSTRY RELATIONS

Project Manager, Chris Herrera, arranged an industry visit with Tenneco. Tenneco requested a visit at the IAG meeting. The purpose of this project was to initiate contacts and ongoing communications between chapter, state, and national NSPE leaders and major employers of engineers in support of Society programs, including publications and other supporting material for use in industry contacts.

The local PEI representative arranged an industry visit with a major company in the area of the NSPE Annual meeting. The PEI representative, NSPE President and staff toured the facility and met with the company representative to discuss what NSPE could do for the engineers on staff at the company.

THE GUIDE TO THE EMPLOYED ENGINEER

The PEI Guide to the Employed Engineer led by Neil Illenberg, New York was a product developed in New York that PEI planned to market to the rest of the states. Since NSPE had recently hired a Marketing Director, PEI would market the Guide through NSPE.

SUSTAINING SPONSOR

The Sustaining Sponsor program led by Gloria Holt, was beginning to generate non-dues revenue for PEI and promote firms that sponsor PEI.

PEI HANDBOOK UPDATE

The PEI Handbook was out-of-date. Milt Tiede with staff assistance updated the handbook based on the new organization format. Another significant change was to remove

names and phone numbers and replace with positions. Names and phone numbers change but not positions.

PEI WEBSITE

Project Manager Doug Benner led the project to continue to grow and serve industry engineers. The biggest hurdle as a practice division was to educate the member and non-member on who PEI was and that there was a resource on WEB to learn more about PEI.

NEW MEMBER RETENTION AND MEMBER STATISTICS

Project Manager Bob Buell led the project to continue to improve our member retention and monitor member statistics.

UTILITY DEREGULATION SEMINAR

Project Manager Karen Pedersen led the project to produce a series of seminars at the NSPE Annual Meetings. The purpose of this project was to improve NSPE's role in serving as an information resource to members and state societies.

VALUE ENGINEERING (PEC)

Project Manager, Chris Herrera, led the joint project to produce a seminar at the Norfolk Annual Meeting. This seminar was on an emerging technique to reduce costs in engineering contracts. Value Engineering was becoming a proactive tool to evaluate solutions for design, construction and construction management. Value Methodology can have a number of applications in the industrial sector such as product improvement, reliability of supplier delivery (just-in-time) and even strategic business planning.

NSPE PRACTICE ISSUES NETWORKING ROUNDTABLES

This Networking Roundtable was planned for the Norfolk Annual Meeting. This was a joint project effort among all Practice Divisions.

The purpose of the Roundtable Discussions was to provide the general NSPE member an opportunity for peer networking through discussion forums, NSPE introduced networking roundtables by area of practice: construction, education, government, industry and private practice. Attendees were allowed to participate in the roundtable of choice. This meeting was the birthplace of Software Engineering effort in PEI and NSPE.

NEW PRODUCT PROGRAMS COMMITTEE

Project Manager Richard Guthrie led the committee to discover and evaluate new projects that would bring value to the member of NSPE.

CONCLUDING MAJOR ACCOMPLISHMENTS

A summary of the accomplishments in the past year includes:

- Transformation of PEI from a Board of Governors organization to a Products and Services organization.
- Publication of a new PEI Handbook to reflect the change in organization.
- The creation of the NSPE Practice issues Networking Roundtables.
- Joint sponsored seminar Value Engineering.
- Utility Deregulation seminar series.
- Marketing and distribution of a new Guide to Employed Engineer.
- Creation of new projects and process to create more new projects.
- Retirement of Nick Wright after 39 years of service to NSPE.

CHAIR REPORT 2001 - 2002

DOUGLAS E. BENNER, P.E., F.N.S.P.E.

It was decided that several key areas would be focused upon for the following year. Several of the key issues were:

- 1) Reorganization of PEI to comply with NSPE restructuring.
- 2) Align all projects with NSPE Strategic Plan
- 3) Implement a PEI Young Engineer's Group
- 4) Support the new Mid Career Transition Task Force efforts.
- 5) Actively seek continuing support of the Industrial Advisory Group
- 6) Maximize communications with PEI members
- 7) Continue PEI as an economically self sustaining economic unit

GOVERNANCE

At the NSPE Leadership Workshop on September 16, 2000 a NSPE process was started to align projects with the NSPE Strategic Plan. Practice Divisions no longer provided composite Annual Reports to the Board of Directors; rather they reported on results aligned with NSPE Goals. This section identifies most PEI Projects and some of their key outcomes as they relate to NSPE goals. Full Project Reports were published on the PEI Home Page portion of the NSPE web site; these reports also indicate project deliverables and some target dates.

STRATEGIC PLANNING

Goal 1.2 Encourage those who are not specifically required by statutes to be licensed to choose licensure as a legal, public, and personal declaration of their educational and professional achievement.

- 1) PEI Industry Visit Project continues. The overall project was absorbed into the NSPE Enterprise Membership Program which frequently incorporated industry visits.

Goal 1.5 Promote the use of NSPE membership as the universally recognized indication of those committed to the ethical, competent, and professional practice of engineering.

- 1) Same response as in Goal 1.2

Goal 2.2 Publicize major achievements of engineering and engineering professionals.

- 1) PEI expanded its New Product Award first by updating the application and secondly by placing the new application on its web site. A new logo was developed for this program.

Goal 2.4 Develop a campaign to enhance the recognition and stature of engineering professionals in the workplace.

- 1) PEI was assigned the Professional Employment Issues Task Force. This Task Force recommended several areas for further study, based on member interest surveys. A review of these recommendations resulted in recommendations for new projects where appropriate and in compliance with the NSPE Strategic Plan.
- 2) PEI began efforts for revision and re-publication of the NSPE Employment Guidelines. The 1989 publication was updated and submitted for approval by other associations.
- 3) PEI provided for on-line signup for Sustaining Sponsors

- 4) PEI continued its Professional Development Award which recognizes employers of engineers who have made outstanding contributions to the advancement and improvement of the engineering profession through employment policies and practices. Further, PEI promoted expansion of this program to regions and states that have not participated.

Goal 3.1 Improve NSPE's role of serving as an information resource to members and state societies.

- 1) The PEI Home Page Project continued to provide information to the engineers in industry. It will also encourage members to become involved in projects.
- 2) The PEI Division of the Missouri Society of Professional Engineers conducted a survey of its members about their interests and about programs. The results were published on the MSPE web site and distributed to the PEI Executive Committee.

Goal 3.3 Promote awareness of engineering and provide educational programs for pre-college students.

- 1) The PEI Scholarship continues to provide one scholarship per year to an undergraduate and/or graduate student in the Engineering field of study. The goal is to further the educational opportunities of a student studying to become an engineer. The scholarship is available to any student but preference is given to children of NSPE members. The amount of the scholarship is \$2,500.00 and is for one year. The program was modified to allow any NSPE member to be a sponsor.

Goal 3.4 Develop and implement career planning and career development programs.

- 1) PEI Mid Career Transition Program was developed to assist mid-career members and others to develop their qualifications and abilities to obtain career goals and provide support for major shifts in mid-career path. This program also provided a variety of services, including job placement, mentoring, educational opportunities, training sessions and peer networking.
- 2) The Career Asset Manager publication continued to be offered at a discount. This document assists the young engineer in career planning and interview planning. Sales of this product are continuing.

Goal 3.5 Develop and implement a career-growth mentoring program that includes bridging the gap between earning an engineering degree and becoming licensed.

- 1) PEI members continued to participate in the NSPE mentoring section on the NSPE web site.
- 2) PEI recommended action on Software Engineering Licensing. PEI coordinated generation of a position statement and plan of action, including review by the L&GA Committee. This program was destined to be a multiple year project.

- 3) PEI continued to support the Industry Advisory Group in its deliberations which include multiple issues. One meeting was conducted in Alexandria, and another joint meeting with the Education Advisory Group (nicknamed the Dean's Council) in Sannibel, FL. Encouraging licensure in industry is a key NSPE objective in these meetings.

Goal 3.7 Develop business plans for each NSPE program, product, and service.

- 1) PEI continued to support and participates with the NSPE Products & Services Committee, and continued to develop new products and services with other PDs.
- 2) Most major PEI projects have a business plan; all future projects will follow the Model Business Plan.

Goal 3.8 Publicize the benefits of NSPE membership with specific focus on younger engineers and students, including the use of the World Wide Web.

- a) The PEI Home Page Project continued to provide information to the engineers in industry. It also is used to encourage members to become involved in projects
- b) At the July 2002 PEI Executive Committee Meeting the PEI Bylaws were modified to add a young engineer to the PEI Executive Committee.

Goal 3.9 Evaluate and expand educational programs for engineering professionals.

- 1) PEI developed an educational program for NSPE's Convention, in conjunction with other Practice Divisions.
- 2) PEI actively encouraged more active role in NSPE regional meetings by providing roundtable discussions and speakers.

Goal 3.10 Develop ideas and programs to facilitate networking opportunities for today's environment.

- 1) PEI sponsored the Mid Career Transition Program to assist mid-career members and others to develop their qualifications and abilities so as to obtain career goals and to provide support for major shifts in mid-career path. This program also provides a variety of services, including job placement, mentoring, educational opportunities, and peer networking.

Goal 5.1 Develop a streamlined governance structure for the Society.

- 1) PEI has reorganized to eliminate it's Board of Governors in a manner that emulates the NSPE restructuring.

Goal 5.8 Improve communications of programs and activities throughout the Society.

- 1) PEI continues to use it's communication projects, including the PEI home page web site for two-way communications and support to regions and states. A monthly PEI newsletter was sent via internet to all PEI members that provided an internet address.
- 2) Goal 5.9 Strengthen the partnership between national, state, and chapter organizations.
- 3) See response to Goal 5.8.

Goal 5.10 Improve the use of technology to enhance member awareness, involvement, participation, and efficiency of Society operations.

- 1) See response to Goal 5.8.

Goal 5.12 Eliminate programs that cannot be linked to the Strategic Plan.

- 1) PEI reviewed and continues to review programs to keep, add, or eliminate in accordance with NSPE's Strategic Plan.

PEI EXECUTIVE BOARD

The PEI Executive Board was selected for the 2001-2002 year is shown. In keeping with PEI's commitment to continuity of leadership, officers progressed through the chairs, and regional vice chairs normally served a staggered two year period.

2001 - 2002 PEI Executive Board	
Position	Name
Chair	Douglas E. Benner
Chair-Elect	Rob Emery
Secretary	Johnnie Theriac
Immediate Past Chair	Richard Guthrie
Past Chair	Karen Pederson
Northeast Vice Chair	Neal Ilenberg
Southeast Vice Chair	Richard Frazee
Central Vice Chair	Rick Buchanan
North Central Vice Chair	Ron Hill
Southwest Vice Chair	Richard Paulk
Western & Pacific Vice Chair	Clyde Nagata

PEI Executive Board Meetings		
Date	Function	Location
July 28, 2001	Executive Board Meeting	Detroit, MI
November 29, 2001	Executive Board Meeting	Teleconference
January 17, 2002	Executive Board Meeting	Washington, DC
July 14, 2002	PEI Young Engineer's Group Meeting (First)	Orlando, FL
July 14, 2002	Executive Board Meeting	Orlando, FL

PROJECTS

EDUCATION ASSISTANCE LIMITED

This is a program to facilitate industry donation of surplus lab equipment to nearby colleges and universities. It is operated by a third party organization, and NSPE participation has been dropped. PEI decided to discontinue this as a project.

INDUSTRY VISITATION PROGRAM

This became a part of the NSPE Enterprise membership Program.

PEI HANDBOOK

The PEI Handbook, a reference manual for PEI operations at the national, regional, and state levels, is published on the PEI Home Page. Updates and corrections were made to this handbook.

INDUSTRIAL ADVISORY GROUP

A meeting was conducted in Alexandria, VA on October 12, 2001. A second meeting was conducted in Sannibal Harbor, FL on April 5 and 6, 2002. The second meeting was a joint meeting with the Education Advisory Group (nicknamed the Dean's Council). Encouraging licensure for all engineers in industry is a key NSPE objective in these meetings. It appears that the only way to achieve this goal is to provide evidence that licensed engineers are more cost-effective for industry than are non-licensed engineers.

Issues discussed at these meetings included the Enterprise Membership program, National Engineers Week, Mathcounts, leadership training, engineering ethics, the "outcomes" model for engineering licensure examinations, activities of the National Science Foundation, developments in engineering education, updated definitions of members of the engineering team, and engineering public relations and public image

SCHOLARSHIP

PEI continued to fund their scholarship for the year granting a \$2500 Scholarship to an undergraduate student in Engineering. The 2001 winner was Orion Crisafulli of Kailua, Hawaii, who was attending Princeton University. The 2002 winner was Michael Geruso of Providence, Rhode Island, who was attending Virginia Tech.

CAREER ASSET MANAGER

Sales of the Career Asset Manager document were very weak. The product was promoted on the NSPE web site. States and chapters were encouraged to purchase copies to use as awards for enticing new members who were new college graduates.

CAREER TRANSITION TASK FORCE

The multi-faceted program administered by Lee Hecht Harrison continued to operate albeit with underwhelming success. A marketing firm was considered to promote the program, but was found to be cost prohibitive. Seminars were scheduled, but drew insufficient participants. New product delivery methods and marketing schemes were under development.

LICENSURE OF SOFTWARE ENGINEERS

As a result of a seminar on the subject, it was decided to prepare and issue a position paper on the subject. The concept is complex and controversial. Nevertheless, the protection of the public health, welfare and safety seems to be at stake. A task force including Kathryn Gray and Bob Becnel was commissioned for further study.

SUSTAINING SPONSOR PROGRAM

This program continued as a major revenue producer. The number of sponsors was increased to 138.

NEW MEMBER LETTERS

This program had been neglected. A list of new PEI members since September 2000 was developed and letters of welcome and encouragement for participation in PEI were sent to these new members. The program continued.

DEREGULATION OF UTILITIES

This project was a series of panel discussions to keep members informed of latest developments in evolving deregulation of utilities. The deregulation process had adversely affected engineering employment in these industries, because of downsizing and outsourcing of engineering work.

Because the utility deregulation process matured and became better understood (but not necessarily accepted by the engineering community), the need for frequent seminars on this subject abated. Consequently, this program was discontinued.

PEI REPRESENTATIVES TO NSPE COMMITTEES AND TASK FORCES

The following assignments were made:

Position	Name	Position	Name
Board of Ethical Review	Gale Sights	Membership	Gene O'Brien
L&QP		Mentoring	Doug Benner
Model Engineering Licensure Law	Jack Hinton	Product and Services	Rob Emery & Gene O'Brien
Communications	Gene O'Brien	LG&A	Gale Sights
Honors Awards	Ron Hill	Audit Review	None
MathCounts	None	Constitution & Bylaws	None
Public Relations	None	Interprofessional Relations	None
Convention Development	None	Policy Review	None
Continuing Education	Peter Lewis	Resource Management Task Force	Doug Benner
Diversity	Gloria Holt	Strategic Planning	Terri Helmlinger

CONCLUDING MAJOR ACCOMPLISHMENTS

The results for this year are stated above. There were a few other miscellaneous accomplishments:

- Completion of a new PEI logo
- Improvements to the PEI Scholarship rules and administration
- Improvements and frequent updates to the PEI home page
- Improvements were made to the process for procurement of meaningful articles to be published on the PEI page of the Engineering Times newspaper.
- Advancement of the concept of Licensure for Software Engineers, including a start of discussions with NCEES.
- Successful Industry Advisory Group meetings.
- Officially opposed the proposed merger of NSPE and Practice Division accounts and funds, based on the belief that this would eliminate all the advantages of the profit center concept.

CHAIR REPORT 2002 - 2003

ROBERT W. EMERY, P.E., F.N.S.P.E.

Johnnie Theriac, PEI Chair-elect, and Clyde Nagata, PEI Secretary, led an effort during the winter meeting to develop a PEI strategic plan and determine the effectiveness of PEI in meeting NSPE's strategic goals. The PEI Executive Board Summer Meeting was held in San Antonio, July 13, 2003. At the PEI Executive Board Summer Meeting, members broke works groups and discussed ideas to increase revenue for PEI during the July meeting.

PROJECTS

CAREER TRANSITION PROGRAM

The career transition team worked with NSPE Products and Services task force to develop survey questions about member's needs in regards to career planning and career transition. The results of the survey helped set direction for this project.

YOUNG ENGINEERS ADVISORY GROUP

The Young Engineer Advisory Group named Michael Vinarcik as chair. The group will be focused on three projects during a 6 month period: 1) Start a Young Engineer article recurring in Engineering Times, entitled "Why Am I a PE?" for publication, 2) Help sponsor science fair awards at high school level with NSPE logo/name, 3) Develop Young Engineer/Board of Ethical Review Challenge possible at the University level.

Several Young Engineers profiles were featured in the Engineering Times within the PEI Section. This was a project worked out with ET in order to feature Young Engineer members in 4-6 issues throughout the year.

The PEI YEAC continued to explore ideas of taking information from the BER and developing a minicourse that can be presented to college engineering students. PEI YEAC members communicated with Tau Beta Pi (Engineering Futures Program) and other organizations with a strong student chapter presence to initiate a program highlighting ethics.

INDUSTRIAL EXEMPTION

PEI reviewed its position on the industrial exemption. The Executive Board strongly supported promoting engineers in industry to become licensed and promote this effort in a cooperative manner with industry. PEI will be reviewing recent legislation that has been passed or is being considered regarding the industrial exemption. The Attorney General from Texas had recently issued an interpretation.

MEMORANDUMS OF UNDERSTANDING

Curtis Beck led an effort to determine if PEI can develop a cooperative agreement with other industrial organizations such as the National Association of Manufacturers that would provide mutual benefits to both organizations. Curtis spoke with Pat Natale about potential partnerships and also asked for suggestions on getting started.

INDUSTRY VISITS DURING NSPE WINTER MEETING

PEI attempted to conduct some industry visits during the winter meeting in San Francisco. Clyde Nagata looked into this effort by working with representatives in the Western Region to develop a list of potential companies.

INDUSTRY ADVISORY GROUP

In November 2002, the Industry Advisory Group of NSPE met in Seattle, WA. The Industry Advisory Group is composed of vice president level engineering managers from major corporations across America. This group helps to provide direction to NSPE as policies and programs are developed. During the meeting, the IAG developed a paper entitled: The Changing Role of Engineering: Engineering Vision for the New Millennium. The paper establishes the basis for a vision of the future of engineering over the next 10 years. This vision will help establish the basis of the image that NSPE would like to see for the engineering profession. During the NSPE Winter meeting, the PEI executive board reviewed the paper to help establish new programs or products for our members.

INTERNATIONAL ENGINEERING AND SCIENCE FAIR

The PEI Executive Board voted to sponsor an award at 400 local engineering and science fairs. The awards will be distributed through the International Engineering and Science Fair. PEI will be sending a metal/certificate along with NSPE promotional material to all award recipients. The NSPE/PEI awards will be given at the high school level competition. As part of the program, NSPE will receive the names of the winning students. To help with future recruitment and increase awareness of the value of engineering, PEI is working on a proposal to have the recipients receive NSPE publications and student membership entitlements for 1 year. The PEI EB is working to partner with the membership committee on this recruiting effort.

Erin Garcia has been working with the NSPE Membership Department to develop a PIN system so that teachers can go into the NSPE web site to enter information about science fair recipients. This information will be used to allow the science fair recipients to receive a year's subscription to Engineering Times and become honorary student members. Erin has also been working with Mike Vinarcik, PEI-YEAC chair, to find an NSPE logo pin that can be sent to all science fair recipients.

NSPE INDUSTRY PROFESSIONAL DEVELOPMENT AWARD

The NSPE Industry Professional Development Award is presented to the nominated industrial employer of engineers that has made outstanding contributions to the

advancement and improvement of the engineering profession through its employment policies and practices. The purpose of the award is to recognize those companies with the best engineering employment practices, and to encourage all companies to adopt progressive policies and practices. The deadline for submissions was February 15, 2003.

SOFTWARE ENGINEERING TASK FORCE

In its first year, the PEI Software Engineering Task Force sponsored a seminar at the San Antonio Meeting, "Emerging issues; Licensure and Software Engineering." A white paper is also planned that will explore ideas on licensure in the software engineering industry.

PEI SCHOLARSHIP

There were nine entries. The winner was determined prior to the PEI Executive Board Meeting which was held July 13, in San Antonio, TX.

MENTORNET MOU

NSPE, due to an initiative set forth by the PEI YEAC, signed a memorandum of understanding with MentorNet. MentorNet is an organization dedicated to encouraging women to pursue technical careers by pairing female students with mentors from industry. The memorandum will enable NSPE to provide topic areas, such as licensure and ethics, for MentorNet discussion boards as well as giving NSPE recognition on the MentorNet web site and with their general membership.

PEI NEW PRODUCT AWARD

PEI accepted applications for the 2003 NSPE/PEI New Product Award. The purpose of the NSPE/PEI New Product Award program is to recognize the full spectrum of benefits that come from the research and engineering of new products. These include employment, economic development, strengthening of the nation's competitive position internationally, and contribution to the public's standard of living. The deadline for submissions was February 15, 2003. Seven entries were received for the PEI NPA. The 2003 recipients are listed herein.

Category	Recipient
Small Company	The UroCycler® <i>UroSolutions, Inc.</i> Orlando, FL
Medium Company	The SMART Trac™ System <i>CEM Corporation</i> Matthews, NC
Large Company	E4600 Disk Storage System <i>LSI Logic Storage Systems</i> Wichita, KS
Mega Company	MK20e/MK25 Electronic Brake Systems (EBS) <i>Continental Teves</i> Morgantown, NC

CHAIR REPORT 2003 - 2004

JOHNNIE THERIAC, P.E.

GOVERNANCE

2003 ANNUAL MEETING

The PEI Executive Board and YEAC both held well-attended meetings during the NSPE annual meeting in San Antonio in July. Primary focus for the Executive Board was brainstorming for revenue generation projects and developing YEAC activities. Jonn Nebbe, PE was selected to be Chair of the YEAC with Jennifer Harrell, EIT was selected as Chair-Elect.

PEI RULES OF GOVERNANCE

The PEI Rules of Governance had been updated through the efforts of PEI Chair-Elect Clyde Nagata, PE to coincide with the format developed by NSPE and also to incorporate a PEI Young Engineer member to the PEI Executive Board. These rules were approved by the PEI Executive Board. A marked up version of the rules have been provided to the NSPE BoD for any follow-up action necessary.

2004-2005 PEI BUDGET

Clyde Nagata, P.E.; Bob Becnel, P.E.; and Erin Garcia put a great amount of effort in developing PEI budget for 2004-2005. Considerable emphasis was placed on revenue generation. This resulted in some long standing projects that were inactive to be sunsetted. A main focus in the months following was revenue generation within PEI. PEI will also be

working with the other Practice Divisions to develop methods generating revenue for the NSPE Practice Divisions as a group.

2004 ANNUAL MEETING

The following will be the NSPE PEI Executive Board for 2004-05. They will officially take office during the summer meeting in Hawaii.

Position	Name
Chair	Clyde Nagata, P.E., F.NSPE
Chair-Elect	Bob Becnel, P.E.
Secretary	Kevin Cooper, P.E.
Immediate Past Chair	Johnnie Theriac, P.E.
Northeast Vice Chair	Neal Illenberg, P.E.
Southeast Vice Chair	Jorge Pardo, P.E.
Central Vice Chair	Rick Buchanan, P.E.
North Central Vice Chair	Jonn Nebbe, P.E.
Southwest Vice Chair	Carlos Garza, P.E.
Western & Pacific Vice Chair	Curt Beck, P.E., F.NSPE
YEAC Representative	Jennifer Harrell, E.I.T.

PROJECTS

LICENSURE OF SOFTWARE ENGINEERING

PEI continued to lead the way on project of licensure of software engineers via the leadership role on the project team by PEI Secretary Bob Becnel, PE. A great conference session was held during the annual convention. Interaction with several other organizations such as ABET, NCEES, IEEE and ACM to has occurred to work toward the establishment of a Software Engineering exam.

PEI SCHOLARSHIP

The PEI scholarship committee led by PEI Northeastern Regional Vice Chair Neal Illenberg, PE selected Ms. Emily Snyder a mechanical engineering student attending Cedarville University as the Scholarship winner.

SCIENCE FAIRS

The annual Intel Science fairs were held in October and provided visibility of NSPE through the efforts of the PEI YEAC. There were NSPE PEI sponsored-award recipients at each of the fairs. In addition to the awards and certificates, the recipients received a free subscription to Engineering Times.

MENTORNET

Through the efforts of the PEI YEAC, NSPE has created an alliance with MentorNet. MentorNet is a one-on-one online mentoring service that addresses the retention and success of women in engineering and science.

PEI YEAC WEB PAGE

The PEI YEAC developed their own web page. Check it out! <http://test.nspe.org/pei/pi1-yeac.asp>

ENGINEERING TIMES ARTICLES

PEI YEAC members were very active in getting articles published in the PEI section of ET. In particular, articles highlighting the individual members and other young engineers as to why they became involved in engineering and NSPE were very informative and well received.

SUSTAINING FIRMS

Since the start of the year, PEI launched a new Sustaining Firms program with three levels of participation - Platinum, Silver and Gold. In addition, "Individual" contributors program has been initiated. Through early June 25 Sustaining Firms and 25 Individual sponsors have been received.

ASCET MOU

PEI Western and Pacific Regional Vice Chair, Curtis Beck, PE helped draft a memorandum of understanding between the American Society of Certified Engineering Technicians (ASCET) and NSPE PEI. The purpose of the MOU is to cooperate in a mutually beneficial manner to encourage engineering technicians and technical professionals with engineering degrees to pursue interests in and higher levels of understanding of the professional engineer licensure process. This MOU has been revised since previously proposed at the Fall 2003 NSPE BoD meeting.

The MOU was submitted to NSPE BoD for action at the April 24, 2004 Board meeting. Subsequently, it was signed by President Teresa Helmlinger, PE, F.NSPE and by the ASCET President. ASCET and PEI are in the process of implementing the proposed plan in the MOU.

NSPE-PEI "INNOVATIVE ENGINEERING AWARD"

Through the efforts of the PEI YEAC, students (8th to 12th grade) from more than 400 science fairs will be recognized by NSPE-PEI with the awarding of "Innovative Engineering Award" for their science projects this year. Over 200 of the recipients have registered with NSPE to receive a free one-year subscription to Engineering Times. In addition, they receive a certificate and a unique lapel pin.

Expectations were that the program will be even better the next year. Considerable amount of positive press resulted from this project. In addition, articles about the program and some of the recipients were planned for future editions of the Engineering Times.

NEW PRODUCT AWARD

PEI sponsors the New Product Award to recognize new innovative products that have been introduced to the public in the past 5 years. This year a total of nine entries for the four categories (Small, Medium, Large and Mega) have been submitted from the States of Florida, Missouri, North Carolina and Texas. The recipients were selected in May with the awards being presented at the Summer National meeting in Hawaii.

Category	Recipient
Small Company	Staged Nutrient Released Controller Fertilizer <i>Florikan E.S.A. Corporation</i> Sarasota, FL
Medium Company	Scorpion-Rugged Notebook <i>DRS Tactical System, Incorporated</i> Palm Bay, FL
Large Company	Bioreactor-Ready Bottom Liner System <i>Jones Edmunds & Associates, Incorporated</i> Gainesville, FL

WELCOME LETTERS

The Regional Vice Chairs and the Chair of the PEI-YEAC continue the tradition to send welcome letters to new members of NSPE that are identified as being associated with Industry. The correspondence consists of a welcoming letter to encourage them to participate in PEI activities and other NSPE activities.

CHAIR REPORT 2004 - 2005

CLYDE H. NAGATA, P.E., F.N.S.P.E.

The PEI EB met in Hawaii to launch the 2004-2005 year. The meeting was very well attended with several State PEI representatives in attendance as well as past and present board members. In addition, several members attended via a telephone bridge as they could not attend in person.

The meeting focused on several key issues that would become focus areas for the 2004-2005 year:

- 1) First, concern was the dwindling PEI and NSPE membership.
- 2) Second, concern was fundraising for PEI as each Practice Division no longer received funds from NSPE.
- 3) Third, concern was how to increase PEI Volunteers.

As a result of the meeting, short and long range initiatives were highlighted and assignments made as noted below:

- 1) Dwindling PEI Membership..... VC
 - a) Use ASCET MOU as a tool..... Curt Beck
 - b) Use local PEI members to contact and change PD affiliate to PEI VC
 - c) Establish virtual chapters..... VC
 - d) Identify a company representative that is a PEI member to distribute pamphlets to prospective NSPE members VC/PEI Staff
 - e) Utilize PEI Regional Vice Chairs to outreach with States and Chapters..... VC
 - f) Nebbe took the action item to review membership possibilities with Beta Tau.
- 2) PEI Fundraising
 - a) Develop instructor-led and on-line seminars Bob B/Cooper
 - b) Take over NPA in states that currently do not have an active PEI organization
 - i. Revamp versus direct NSPE fee sharing.
 - ii. Public relations NSPE support.
 - iii. Emery, Garcia, Nebbe and Buchanan agreed to review revamping the NPA.
 - c) Convert CAM program to an electronic medium and update. Also, look into developing web-based personal development and PDH tracking tool.... Bob B/Becnel
- 3) Problem in Getting Volunteers

- a) Through new members VC
- b) Contacting existing members..... VC
- c) Develop projects with passionAll/PEI Staff
- d) Build on projects we are already doing
 - i. Science award – expand program and make presentation.....Mike V.
 - ii. Intel Science FairMike V.
 - iii. Offer rewards to members PEI Staff
 - iv. Update website..... Doug Benner
 - v. Develop industry registry or take lead in initiating.....Nagata
 - vi. Review feedback that comes into NSPE's membership department.
- e) Ensure that any and all PEI calls are routed to Erin.....PEI Staff
- 4) New Product Award (NPA)..... Buchanan
 - a) Request additional advertising from previous recipients.
 - b) Advertising could be on the web, ET or in the form of sustaining firms.
- 5) Sustaining Sponsor/Individual Becnel/Staff
 - a) Capture in a letter to sponsors
 - b) Request sponsorship of Science Fair Awards
 - c) Send out letters to previous NPA recipients.
- 6) IAG Members Nagata
 - a) Distribute Enterprise Program literature.
 - b) PEI can recognize revenue in the first year of a company's use of the Enterprise Program.
- 7) Resume Service as discussed in the July 2003 Meeting MinutesPEI Staff
- 8) Engineering Criteria Database Bob Becnel
 - a) How this would differ from the Registry concept

- b) What is IEEE doing
- 9) PEI Value Presentation to presentation to SSEC.....Nagata/Staff
 - a) Coordinate PD value presentations with other PD's.
 - b) Reference Pardo's SE presentations
 - c) Define what "interaction" means
- 10) PEI State Support..... VC
 - a) Organizing
 - b) Mentoring
 - c) Develop YEAC
- 11) Should YEAC have a rotational cycle on the YEAC EBHarrell
- 12) Promote Voluntary Dues PEI Staff
 - a) E-mail to members to urge them to consider voluntary PEI dues on dues statement
 - b) Urge NSPE to fix web-based dues form
 - c) Target those that have their company pay dues.
- 13) Reinstigate Industry Tours and Visitations..... Becnel/ Staff
 - c) Target the Chicago 2005 Conventions. Suggestions were Motorola, Lucent and Tootsie Roll.
 - d) Becnel will contact Illinois State PEI
 - e) Visitation setups up company's upper management to meet with NSPE President.
 - f) Tour is simply a factory or plant visit.
- 14) PDH's..... VC
 - a) Promoting.
 - b) Offering
 - c) Working through MOU's.

NSPE announced it had appointed a Future Direction Task Force (FDTF) that would look into the NSPE organization and recommend any changes. Due to the efforts of the FDTF, much of my time and energy was focused on ensuring that the recommendations of the FDTF would not adversely impact PEI and if it did, sought clarifications and develop mitigation plans. Some of the action items noted above would be placed on hold due to the possible outcome of the FDTF that could affect our efforts in 2004 - 2005.

GOVERNANCE

2004-05 NSPE PEI EXECUTIVE BOARD TRAINING

Beginning in 2004-2005, A PEI binder with all applicable information was included so all Board Members had an easy reference manual. In addition to the manual, training was conducted at the July '04 meeting on several topics.

PEI RESTRUCTURING

PEI Chairman worked with the other 4 Practice Divisions to jointly examine the recommendations of the FDTF, issue letters of concern, request clarifications and eventually meet with key members of the FDTF. Key issues were Practice Division representation on the BOD, HOD and the handling of reserve funds.

PEI EXECUTIVE BOARD 2004-2005

The PEI Executive Board was selected for the 2004-2005 year and the makeup of the new board is shown below. In keeping with PEI's commitment to cultivating leadership within, the PEI EB is comprised of 50% from the PEI YEAC including the next Chair-Elect.

2004 - 2005 PEI Executive Board	
Position	Name
Chair	Clyde Nagata
Chair-Elect	Bob Becnel
Secretary	Kevin Cooper
Immediate Past Chair	Johnnie Theriac
Past Chair	Rob Emery
Northeast Vice Chair	Neal Illenberg
Southeast Vice Chair	Jorge Pardo
Central Vice Chair	Rick Buchanan
North Central Vice Chair	Jonn Nebbe
Southwest Vice Chair	Carlos Garza
Western & Pacific Vice Chair	Curtis Beck
YEAC Chair	Jennifer Harrell

YOUNG ENGINEERS ADVISORY COUNCIL (YEAC)

New PEI YEAC Chair Jennifer Harrell stepped down and Samuel Sudler III, took over as Chair.

GOVERNANCE

The PEI YEAC held telephone conference meetings throughout the year. The 2004-2005 PEI YEAC Executive Board is shown below:

2004 - 2005 Professional Engineers in Industry YEAC Group	
Position	Name
Chair	Samuel Sudler III
Chair-Elect/Secretary	VACANT
NSPE YEAC Liaison	Mike Vinarcik
Immediate Past Chair	Jonn Nebbe
Northeast Vice Chair	Phyllis Duke
Southeast Vice Chair	Vacant
Central Vice Chair	Mike Vinarcik
Central Vice Chair	Ray Still
North Central Vice Chair	Jonn Nebbe
Southwest Vice Chair	James Mathis
Western & Pacific Vice Chair	Kelly Johnson

PROJECTS

NEW PRODUCT AWARD

The 2003-2004 NPA Awards were presented to the Small, Medium, and Large categories at the Ice Breaker Reception in Hawaii. To recap, the 2003-2004 NPA Award Recipients are listed below.

For the Small Company Category, the recipient is Florikan E.S.A. Corporation in Sarasota, FL for their “Staged Nutrient Released Controller Fertilizer”. This product controls the release of nitrogen, phosphorous and potassium components of the fertilizer during different stages of the crop cycle in a cost effective and environmental friendly manner.

For the Medium Company Category, the recipient is DRS Tactical System, Incorporated in Palm Bay, FL for their lightweight “Scorpion-Rugged Notebook” computer. This computer is built to be very rugged to survive outdoor usage by organizations, including the military, where toughness and reliability are mandatory.

For the Large Company Category, the recipient is Jones Edmunds & Associates, Incorporated in Gainesville, FL for their Bioreactor-Ready Bottom Liner System. This innovative product replaces the traditional leachate collection lateral pipes and necessary surrounding gravel and geotextile wrap as the bottom line for municipal solid waste landfills, resulting in better performance.

To recap, the 2004-2005 NPA Award Recipients recognized in Chicago, the recipients are listed below.

For the Small Company Category, the recipient was Universal Separators, Inc. for their product “SmartSkim Vertical System.” This product is the first open channel vertical gravity separation system for skimming and capturing floating oils from industrial fluids. Due to its unique design this system can be used in tight spaces, requires little maintenance, uses no consumables and significantly reduces waste treatment costs.

For the Medium Company Category, the recipient was Awareness Technology, Inc. for their product “ChemWell 2910.” This product is a user-programmable laboratory analyzer which automatically processes both biochemistry and enzyme – immuno assays for clinical diagnostic applications. The use of microwell technology allows this instrument to perform multiple functions essentially combining two instruments into one improving its flexibility and cost effectiveness.

For the Large Company Category, the recipient was Badger Meter, Inc. for their product “Orion Radio Frequency Meter Reading System.” This product is an Automated Meter Reading device with innovations in advanced receiver design, use of GPS mapping and leak detection features. This radio frequency meter reading system improves the meter reading

process by significantly increasing meter reading speed and insuring accurate data collection.

SCIENCE FAIR AND NSPE-PEI "INNOVATIVE ENGINEERING AWARD"

Through the efforts of the PEI YEAC, nearly 500 students (8th to 12th grade) from science fairs across the country will be recognized by NSPE-PEI with the issuance of an "Innovative Engineering Award" for their science projects. All recipients that registered with NSPE received a certificate and a unique lapel pin for their achievement.

SCHOLARSHIPS

Scholarships Project Manager, Neal Illenberg, P.E., led an effort to reorganize the program to align the Scholarships within the requirements set forth by the Future Directions Task Force and the Future Directions Task Force Action Plan.

Applications for this year's PEI Scholarship program, that awards \$2,500 to an undergraduate student pursuing an engineering degree at an ABET University, were due no later than June 1, 2005.

The Scholarship Committee lead by Neal Illenberg, P.E. selected Lisa Burton for the Professional Engineers in Industry Scholarship. As selected, Ms. Burton will receive \$2500 to attend Duke University to work on her Mechanical Engineering degree.

SUSTAINING SPONSOR AND INDIVIDUAL SPONSOR

The Sustaining Sponsor program continues to generate non-dues revenue for PEI and promote firms that sponsor PEI. The program was restructured. Part of the Individual Sponsor portion of the program included a drawing at the end of year for a GPS. The winner was Donald L. Henderson, P.E. from Sugarland, TX.

The newly launched PEI Sustaining Sponsor program included three levels of participation - Platinum, Silver and Gold. In addition, an "Individual" contributors program was initiated. Sustaining Firms and Sponsors Project managers, Barry Nakamoto, P.E. and Clyde Nagata, P.E., FNSPE, and Erin Garcia-Reyes, PEI Staff, continued to fine tune this program. PEI presented the benefits of and worked with the NSPE webmaster to secure a "hot link" off of the nspe.org website to its Sustaining Firms as part of "Find a Firm".

The total Sustaining Sponsor (company) Membership for 2005 was 20 and totaled \$3,500 in revenue and there were 17 Individual Sponsors who contributed \$ 2,700. The 2006 Sustaining Sponsor campaign will launch in January and in May for the Individual Contributors.

ASCET NICET

Curtis Beck, PE worked with the American Society of Certified Engineering Technicians (ASCET) to develop a relationship and seek possible opportunities to educate technicians of

the opportunities of what licensure could mean. An MOU was developed between NSPE and ASCET. Curtis has effortlessly pushed this issue with last year's NICET Board and this year's NICET board as well as the ASCET Board of Director's. The objective of the meeting in Chicago survey will be to discuss alternatives to implement the MOU.

RECOGNITION

At the request of President-Elect Gray, PEI recruited and submitted a full list of nominees for NSPE Committees and Task Forces. In the past year, PEI has utilized nominees for these positions to present updates and articles for our *PEI e-news* publication. This procedure had been a successful communication tool to bring forth attention to the PEI EB the important of the NSPE Committees and Task Forces.

REVIEW

A summary of the accomplishments in the past year includes:

- PEI participation on the FDTF
- Successful teaming of Practice Division VPs to address concerns of Practice Divisions to the NSPE leadership and leaders of the FDTF
- Continuation of the Scholarships and New Product Award projects
- Continuation of improving the Sustaining Sponsor and Individual Sponsor Programs
- Continuation of the YEAC
- Supported the recommendations of the FDTF and successfully proposed and revised the new NSPE ByLaws to include a second PD position on the NSPE BOD.

The new PEI Executive Board as shown below was installed in Chicago at the PEI EB meeting.

2005 - 2006 PEI Executive Board	
Position	Name
Chair	Bob Becnel
Chair-Elect	Kevin Cooper
Secretary	John Wall
Immediate Past Chair	Clyde Nagata
Past Chair	Johnnie Theriac
Northeast Vice Chair	Andy Russo
Southeast Vice Chair	Jorge Pardo
Central Vice Chair	Mike Vinarcik
North Central Vice Chair	Jonn Nebbe
Southwest Vice Chair	Carlos Garza
Western & Pacific Vice Chair	Barry Nakamoto
YEAC Chair	James Mathis

CHAIR REPORT 2005 - 2006

ROBERT G. BECNEL, P.E., F.N.S.P.E.

The PEI EB met in Chicago to launch the 2005-2006 year. The meeting was very well attended with several State PEI representatives in attendance as well as past and present board member. In addition, several members attended via a telephone bridge as they could not attend in person.

Several key highlights:

- 1) A new PEI Rules of Governance and Operation (Bylaws) was approved for NSPE BOD action, which was subsequently tabled by the NSPE BOD due to on-going NSPE restructuring.
- 2) The most noteworthy accomplishment is that 3 of the 6 incoming PEI Executive Board members were current/former PEI YEAC members as well as President-Elect Cooper, PE. PEI has continued to be committed to the mentoring and leadership aspects of our newer Engineers.
- 3) Subsequent to the meeting, assignments have been made to Board members to take responsibility to bring to fruition the main items we focused upon. Regional Vice Chairs will be taking a stronger role at regional meetings emphasizing PEI's role in world of professional engineering.

PEI has established the following focus areas that are to be emphasized in the 2005-06 year:

Area 1: Transition PEI to the new FDTF model

Area 2: Outreach to state PEI organizations

Area 3: Mentoring and leadership opportunities for PEI members

Area 4: Products and services that promote and support PE's in Industry

GOVERNANCE

2005-06 NSPE PEI EXECUTIVE BOARD TRAINING

Beginning in 2005-2006, PEI conducted comprehensive orientation and leadership training within PEI directly focusing on new and current EB and YEAC EB members. This past summer's program was a pilot and the will be an ongoing effort. It is important to provide adequate training and expectations for new volunteers to make their experience with PEI more enjoyable and effective and understand the FDTF model.

PEI RESTRUCTURING

PEI Chair-Elect, Kevin Cooper, P.E. led PEI's efforts in working with the other 4 Practice Divisions to re-align themselves within the new FDTF model. Preliminary planning is nearing completion on defining a new mission, vision and goals of the PD's under the new alignment. Rick Buchanan, and Bob Becnel also played a minor role in the restructuring.

PEI SECRETARY

PEI Secretary Rick Buchanan stepped down in January. John Wall, P.E., current DC PEI Chair, agreed to step in and replace Rick and assume role of Chair-Elect after the Boston Convention. Rick will be greatly missed and provided a lot of expertise and success towards our NPA. "We look forward to John filling the role and preparing to become the PEI Chair in 2007-2008," stated Bob Becnel.

PEI EXECUTIVE BOARD 2005-2006

The PEI Executive Board was selected for the 2005-2006 year. In keeping with PEI's commitment to cultivating leadership within, the PEI EB is comprised of 50% from the PEI YEAC including the next Chair-Elect.

2005-2006 PEI Executive Board	
Position	Name
Chair	Bob Becnel
Chair-Elect	Kevin Cooper
Secretary	John Wall
Immediate Past Chair	Clyde Nagata
Past Chair	Johnnie Theriac
Northeast Vice Chair	Andy Russo
Southeast Vice Chair	Jorge Pardo
Central Vice Chair	Mike Vinarcik
North Central Vice Chair	Jonn Nebbe
Southwest Vice Chair	Carlos Garza
Western & Pacific Vice Chair	Barry Nakamoto
YEAC Chair	James Mathis

PRACTICE DIVISION RESTRUCTURING AND HOD MEMBER

PEI Chair-Elect, Kevin Cooper, P.E. led PEI's efforts in working with the other 4 Practice Divisions to re-align themselves within the new FDTF model. This effort included publishing a position paper under the guidance of a consultant. The position paper looked at synergies and commonality among the Practice Divisions. The paper was entitled *VPPD 2006-2007 Plan*.

Additionally, this same group agreed on who would serve the initial term as the respective Practice Division Board of Directors and House of Delegate member. Since Kevin Cooper will be the 2006-2007 PEI Chair, he would be the first HOD member representing PEI. PEI would name a Board of Director representative during the 2007-2009 term.

NSPE PEI EXECUTIVE BOARD RETIREMENTS

Jorge Pardo, P.E. retired at the end of the 2005-2006 year from the Executive Board after serving 2 terms as Southeast Regional Vice Chairman. Rick Frazee, P.E. will replace Jorge. Jorge will focus on his new duties as State PEI Chairman.

Clyde Nagata, P.E. retired at the end of the 2005-2006 year from the Executive Board after serving as Vice Chairman of the Western & Pacific Region, Secretary, Chairman-Elect, Chairman and Past Chairman.

"Jorge and Clyde's contributions, leadership and professionalism has served PEI well during a period of many changes within NSPE. I am grateful for their help along the way," remarked Bob Becnel.

YOUNG ENGINEERS ADVISORY COUNCIL (YEAC)

New PEI YEAC Chair Mathis, PE, rebuilt and reorganized the YEAC group from the ground up over the Summer 2005 time frame. Mathis put the group back on course with monthly teleconferences, recruitment of new members to fill the regional Vice Chair slots, and continued support of the PEI EB.

GOVERNANCE

Current Chairman, James Mathis has agreed to serve another year into the 2006-2007 year. Additionally, Rob Emery, P.E., former PEI Chair, has agreed to serve as a special mentor for the YEAC group in 2006-07. Rob was the founder of the PEI YEAC and has a special fondness for the group. Rob will be focusing on further expanding the College Outreach Project, possibly setting up a BLOG, and establishing an Ethics-related Project.

2005 - 2006 Professional Engineers in Industry YEAC Group	
Position	Name
Chair	James Mathis
Chair-Elect/Secretary	Carlos Garza
NSPE YEAC Liaison	Michael J. Vinarcik
Immediate Past Chair	Samuel G. Sudler III
Northeast Vice Chair	Cullen M Flanders
Southeast Vice Chair	Vacant
Central Vice Chair	Jeffrey Henkle
Central Vice Chair	Ray Still
North Central Vice Chair	Jonh Nebbe
Southwest Vice Chair	Richard Willoughby
Southwest Vice Chair	Greg Brauntz
Western & Pacific Vice Chair	Kelly Johnson

UNIVERSITY OF CENTRAL FLORIDA PLAN

PEI Vice Chair for the Southeast Region, Jorge Pardo, PE was involved with discussions with the University of Central Florida (UCF) in building an insightful new program that was structured in several multi-age categories. This program was evaluated as a potential PEI project in the near future.

The proposal revolved around an engineering related competition, simple in nature (ex: poster contest) at the K-12 level. Follow it with a more challenging competition (ex: essay on engineering topic) at the high school level. Then tie it to the existing engineering project competition at UCF. The competition and administration would be fully on-line with a local engineer school visit to the competing teams.

“The greatest benefit I see from this effort is the early introduction (K-12) with follow-up to High School, continuation into college competition and then eventual spill over into New Product Award competition at the professional level,” commented Jorge Pardo.

TEXAS A&M PROJECT

PEI YEAC Chair, James Mathis, P.E. and the entire PEI YEAC planned an initiative that would encourage YEAC members to contact local universities in an effort to learn what resources they need to create and/or maintain a current NSPE Student Chapter. Several universities, including Texas A&M and the University of Florida, have been contacted.

Initial contact had been made with Dr. James at Texas A&M in regards to establishing a PEI YEAC College Outreach Program. PEI YEAC Chair, James Mathis, PE and the entire PEI YEAC are currently planning an initiative that would encourage YEAC members to contact local universities in an effort to learn what resources they need to create and/or maintain a current NSPE Student Chapter. Several universities, including Texas A & M and the University of Florida, have been contacted.

Verbal agreement had been made with Dr. Ray James of Texas A&M to sponsor an NSPE PEI YEAC Chapter on the campus in order to promote the YEAC Outreach Project. This is a project, headed by James Mathis, P.E., to further develop relationships among PEHE, the NSPE Chapter and PEI to serve college engineering students. PEI’s focus is to mentor and help students understand the importance in licensure in Industry, where licensure is not always mandatory.

STATE OUTREACH

In an effort to Outreach to States, PEI has dedicated a monthly teleconference and PEI newsletter article for a particular region. All 6 regions will be highlighted throughout the year with State and Chapter PEI leaders reporting on activities within a particular Region. The purpose and goal is to provide these individuals an opportunity to speak directly with the PEI EB and promote their activities.

Through feedback from a recent SSEC Report and the Future Directions Task Force, PEI is aggressively addressing outreach to the local and State PEI organizations. Part of the outreach has been conduct by PEI Regional Vice Chairs who personally invite State Chairs and other local PEI members to monthly teleconferences. This has been successful and has given State Chairs the opportunity to address the entire PEI Executive Board. Moreover, we have been featuring a particular region each month to underscore state and local PEI activities within that region. This feature has been covered in the monthly *PEI e-news*.

PROJECTS

NEW PRODUCT AWARD

PEI Chair (then Chair-Elect) Becnel, P.E. presented NPA Awards in the Small, Medium, and Large categories at the Ice Breaker Reception in Chicago. To recap, the 2004-2005 NPA Award Recipients are listed below.

For the Small Company Category, the recipient was Universal Separators, Inc. for their product "SmartSkim Vertical System." This product is the first open channel vertical gravity separation system for skimming and capturing floating oils from industrial fluids. Due to its unique design this system can be used in tight spaces, requires little maintenance, uses no consumables and significantly reduces waste treatment costs.

For the Medium Company Category, the recipient was Awareness Technology, Inc. for their product "ChemWell 2910." This product is a user-programmable laboratory analyzer which automatically processes both biochemistry and enzyme – immuno assays for clinical diagnostic applications. The use of microwell technology allows this instrument to perform multiple functions essentially combining two instruments into one improving its flexibility and cost effectiveness.

For the Large Company Category, the recipient was Badger Meter, Inc. for their product "Orion Radio Frequency Meter Reading System." This product is an Automated Meter Reading device with innovations in advanced receiver design, use of GPS mapping and leak detection features. This radio frequency meter reading system improves the meter reading process by significantly increasing meter reading speed and insuring accurate data collection.

For the 2005-2006 year or NPA Awardees, applications were collected February 15, 2006 and judging commenced. Judging continued until early May. The recipients were to be awarded differently as in the past. In the past, the NPA Awards were presented at the Ice Breaker during the Summer Convention. Going forward, the NPA Award presentation location varied among recipients and coordinated with the State PEI Chairs.

2005 – 2006 PEI New Product Award Entries			
Category	Company	Product	Sponsor
Small	Alibre Inc.	Alibre Design Xpress	N/A
Small	Giralt Enterprises, Inc.	Aluminum Picket Handrail	Florida Engineering Society
Small	Energeneccs, Inc.	ESP-Motor Monitor & Controller	Wisconsin Society of Professional Engineers
Small	GeoAge, Inc.	GeoAge Mobile Response System (MERS)	Florida Engineering Society
Small	Nexicor, LLC	KoolGlide® Carpet Seaming System with Sinch Technology®	Ohio Society of Professional Engineers
Medium	FIGG	Cable Stayed Bridge Cradle System	N/A
Medium	Quantum Devices, Inc.	Quantum Warp 10®	Wisconsin Society of Professional Engineers
Medium	Mercury Marine	Marine Switches	Florida Engineering Society
Large	Hunter Engineering Company	DSP600 Digital Imaging Alignment Sensors	Missouri Society of Professional Engineers
Large	BRP US Inc.	Evinrude® E-TEC®	Wisconsin Society of Professional Engineers
Mega	Rockwell Automation	MCS-E3 Solid-State Overload Relay	Wisconsin Society of Professional Engineers
Small	Alibre Inc.	Alibre Design Xpress	N/A

2005 – 2006 PEI New Product Award Recipients			
Category	Company	Product	Sponsor
Small	Nexicor, LLC	KoolGlide® Carpet Seaming System with Sinch Technology®	Ohio Society of Professional Engineers
Medium	FIGG	Cable Stayed Bridge Cradle System	N/A
Large	Hunter Engineering Company	DSP600 Digital Imaging Alignment Sensors	Missouri Society of Professional Engineers
Mega	Rockwell Automation	MCS-E3 Solid-State Overload Relay	Wisconsin Society of Professional Engineers

NPA Project Manager, Rick Buchanan, PE, also, was engaged in planning and reorganizing the program to align the New Product Award within the requirements set forth by the Future Directions Task Force and the Future Directions Task Force Action Plan.

SCIENCE FAIR AND NSPE-PEI "INNOVATIVE ENGINEERING AWARD"

Through the efforts of the PEI YEAC, students (8th to 12th grade) from more than 500 science fairs across the country will be recognized by NSPE-PEI with the issuance of an "Innovative Engineering Award" for their science projects. All recipients that registered with NSPE received a certificate and a unique lapel pin for their achievement.

SCHOLARSHIPS

Scholarships Project Manager, Neal Illenberg, PE, led an effort to reorganize the program to align the Scholarships within the requirements set forth by the Future Directions Task Force and the Future Directions Task Force Action Plan.

Applications for this year's PEI Scholarship program, that awards \$2,500 to an undergraduate student pursuing an engineering degree at an ABET University, were due no later than June 1, 2006.

The Scholarship Committee lead by Neal Illenberg, PE and North Central Vice Chair, Jonn Nebbe, PE selected Lisa Burton for the Professional Engineers in Industry Scholarship. As selected, Ms. Burton will receive \$2500 to attend Duke University to work on her Mechanical Engineering degree.

INDUSTRY TOUR AND VISITATION

Northeast Vice Chair Russo, PE led the renewal of the PEI Industry Tour and Visitation Program. Andy worked with the 2006 Summer Meeting Planning Committee in planning a location, coordinating logistics and arranging for a visitation with NSPE leaders and the selected industry leaders.

In its commitment to re-establish an annual Industry tour & Visitation, PEI sponsored the tour of Deer Island during the Boston Convention. Participants of the tour earned PDH credit. As previously promoted, PEI plans for this to be a regular staple at the Summer Meeting and the year's Tour is a learning process that will be fine tuned going forward. Industry Tour & Visitation Project manager Andy Russo has been involved and worked among the Deer Island Senior Management, MSPE planning committee, C&MTF, PEI and Polly Collins in coordinating this event.

GUIDELINES FOR PROFESSIONAL ENGINEERING EMPLOYMENT

The PEI EB led by Glenn Landguth, PE of Washington SPE authored revision 4 of the Guidelines for Professional Engineering Employment document. The last iteration of this document was revision 3, circa 1989. The new document incorporates changes within the business and industry "environment" and provides a 2005 perspective. The document was approved by the PEI EB and reviewed by NSPE general counsel, Art Schwartz.

SUSTAINING SPONSOR AND INDIVIDUAL SPONSOR

The Sustaining Sponsor program continues to generate non-dues revenue for PEI and promote firms that sponsor PEI. A year prior, the program was restructured. Part of the

Individual Sponsor portion of the program included a drawing at the end of year. This year's drawing included a 1 year membership renewal for NSPE. The winner was Donald L. Henderson, P.E. from Sugarland, TX.

In the past year, the Sustaining Firms program was changed to include three levels of participation - Platinum, Silver and Gold. In addition, "Individual" contributors program has been initiated. There were over 25 Sustaining Firms and 36 Individual sponsors for the 2005-2006 year. This is a positive improvement over the prior Sustaining Firm program.

The PEI Sustaining Sponsor program included three levels of participation - Platinum, Silver and Gold. In addition, "Individual" contributors program has been initiated. To date there are 22 Sustaining Sponsors. 7 of these sponsors are new contributors. This is a positive improvement over last year's Sustaining Sponsor program. The campaign for PEI Individual Contributors has just begun.

Sustaining Firms and Sponsors Project managers, Clyde Nagata, PE and Barry Nakamoto, PE, continue to fine tune this program. Recently, PEI presented the benefits of and worked with the NSPE webmaster to secure a "hot link" off of the nspe.org website to its Sustaining Firms as part of "Find a Firm".

The total Sustaining Sponsor (company) Membership for 2005 was 20 and totaled \$3,500 in revenue and there were 17 Individual Sponsors who contributed \$ 2,700. The 2006 Sustaining Sponsor campaign will launch in January and in May for the Individual Contributors.

ASCET NICET

Curtis Beck, PE worked with the American Society of Certified Engineering Technicians (ASCET) and developed a survey to be distributed to PEI members to query their firm's interest in further utilizing ASCET certified and NICET trained technicians. Curtis has effortlessly pushed this issue with last year's NICET Board and this year's NICET board as well as the ASCET Board of Director's. The survey was distributed to all PEI members via email in December. Early statistics indicate over 175 responses.

PEI WEBSITE

A complete overhaul of the PEI Website had begun. All content was in the process of being reviewed including removing old url's and verifying all content. The speed of which this is completed is dependent on the Webmaster, but the plan is for Chairman Becnel to complete everything by the end of his term.

As a final task completed by Becnel upon departing as PEI Chair, a full content update of the PEI website was provided to NSPE to publish. This was a content update only and not a re-design. However, this was a major content update that consolidated all of PEI's official publications and organized them under well-defined categories.

PEI IT RESOURCES

Worked with NSPE IT Department to create listservs for internal use and improve communication among PEI project managers, the PEI YEAC Executive Board and the PEI Executive Board. The listserv offered a convenient and reliable mechanism of Board communication be redistributed in a timely fashion.

PEI BLOG

A BLOG for the purpose of promoting PEI and communicating with members had been discussed and continues to be a topic of interest for the Executive Board.

PEI HANDBOOK

Completed work on a complete rewrite of its PEI Handbook. The Handbook is 70+ pages of useful and detail information on the inner workings of PEI. The document serves as a one stop resource for new PEI members to understanding how PEI serves NSPE. The document was posted on the PEI website and entitled *PEI Handbook, 2006-2007 Edition*.

SOFTWARE ENGINEERING TASK FORCE

The PEI Software Engineering Task Force had completed a Recommendation for a Computer and Software Engineering Licensure Path for submittal to the Licensure for Qualification and Practice Committee. Prior to submitting the document, a request for comments and peer review was conducted with over 4 dozen professionals in industry, government, private practice and academia. The paper was approved by the PEI EB, and presented to the L&QP Committee for subsequent approval with eventual approval by the NSPE BOD. Mark Ciechanowski, P.E., the PEI delegate on the LQ&P had agreed to guide the document through the Committee. Mark also served on the Software Engineering Task Force.

RECOGNITION

PEI NOMINATIONS

At the request of President-Elect Miller, PEI recruited and submitted a full list of nominees for NSPE Committees and Task Forces. In the past year, PEI has utilized nominees for these positions to present updates and articles for our *PEI e-news* publication. This procedure had been a successful communication tool to bring forth attention to the PEI EB the important of the NSPE Committees and Task Forces.

PEI STAFF RECOGNITION

Five year PEI Staff Manager veteran, Erin Garcia-Reyes, was presented a special PEI Award in Washington DC in January for her dedication, tireless support and loyalty to Professional Engineers in Industry. Needless to say, PEI is thrilled to have Erin remain part

of our family for the duration of five years. We look forward to five more years. The award was presented during our January PEI EB meeting.

ROB EMERY'S NOMINATION TO FELLOW

As a NSPE Board of Director member, PEI Chair nominated Robert Emery, PE of Tennessee to the Council of Fellows at the Spring 2006 meeting. Rob served as the 2002 – 2003 PEI Chairman and was the founder of the PEI YEAC. Rob exemplified what a Fellow should represent. His stature as Fellow would help to further assist the YEAC.

REVIEW

The following remarks were delivered as part of prepared remarks that Chairman Becnel made in Boston after handing the gavel over to Kevin Cooper: "I am proud to have served with a great group of professionals serving diverse disciplines, experience levels, industries, and geography. The accomplishments made this year exceeded my original expectations. We dealt with a lot of adjustments in the past 12 months and everyone pitched in to get through this year of transformation. I am extremely fortunate to have had the support of Erin Garcia from NSPE and Kevin Cooper, Chairman-Elect. I also would like to thank John Wall for joining the PEI EB in mid-stream this year to serve as our Secretary and next year's Chair-Elect. Lastly, I'm extremely grateful for Clyde Nagata's wisdom and mentorship for never allowing me to make a wrong turn this past year".

MAJOR ACCOMPLISHMENTS AND REVIEW FOR 2005-06

A summary of the accomplishments in the past year includes:

- Transformation of PEI from Practice Division to Interest Group
- Restructuring of the Scholarships and New Product Award projects
- A 40% increase in NPA applicants and revenue
- A new YEAC Outreach project with Texas A&M
- The continued representation of the PEI EB by 50% of its members originating from the PEI YEAC
- Leadership and orientation training established at the Summer Meeting PEI EB
- Publication of a new PEI Handbook

- Revival of the Industry Tour at the Summer Meeting
- Publication of a new *Guidelines to Employment for Professional Engineers* paper
- Publication of a *Recommendation for Computer and Software Licensure* path
- Creation of new projects
- Nomination of Rob Emery to the Council of Fellows
- Improved outreach to each State's PEI Chairman by actively inviting them to address PEI EB meetings

Focus areas that were emphasized in the 2005-06 year by PEI included 1) transition to the new FDTF, 2) outreach, 3) mentoring and leadership, 4) products and services that promote and support professional engineering. These goals were met and exceeded in a year that presented a lot of change for PEI.

PEI EB KICK OFF TO 2006-07

The new PEI Executive Board was installed at the PEI EB meeting on Saturday, July 8. "I am confident and encouraged of Kevin Cooper's ability to continue to lead PEI and serve as our first House of Delegate member," complemented Bob Becnel. PEI had spent several months preparing for the transition, both on paper and via teleconferences. Outgoing Chairman Becnel assisted Kevin in planning his Annual Operating Plan. Kevin served as the PEI point man on the VPPD Plan with the rest of the VPPD Committee and is intimately familiar with the restructuring process that ensued.

2006-2007 PEI Executive Board	
Position	Name
Chair	Kevin Cooper
Chair-Elect	John Wall
Secretary	Andy Russo
Immediate Past Chair	Bob Becnel
Past Chair	Clyde Nagata
Northeast Vice Chair	Cullen Flanders
Southeast Vice Chair	Rick Frazee
Central Vice Chair	Mike Vinarcik
North Central Vice Chair	Jon Nebbe
Southwest Vice Chair	Carlos Garza
Western & Pacific Vice Chair	Barry Nakamoto
YEAC Chair	James Mathis

CHAIR REPORT 2006 - 2007

J. KEVIN COOPER, P.E., F.N.S.P.E.

GOVERNANCE

PEI EXECUTIVE BOARD 2006-2007

The PEI Executive Board hosted a 3-Hour Virtual Winter Meeting in January 2007, and conducted the normal monthly conference call for March 2007. As part of the January and March calls, the Board brainstormed ways to increase participation in the PEI Programs, with the goal of increasing membership and providing value to existing members.

The following summarizes the major activities of the PEI Executive Board and the PEI Young Engineers Advisory Council (YEAC).

2006 - 2007 Executive Board	
Position	Name
Chair & HOD Delegate	Kevin Cooper
Chair-Elect	John Wall
Secretary	Andy Russo
Immediate Past Chair	Bob Becnel
HOD Delegate Elect	Clyde Nagata
Northeast Vice Chair	Cullen Flanders
Southeast Vice Chair	Rick Frazee
Central Vice Chair	Mike Vinarcik
North Central Vice Chair	Jon Nebbe
Southwest Vice Chair	Carlos Garza
Western & Pacific Vice Chair	Barry Nakamoto
YEAC Chair	James Mathis

PROJECTS

CAREER ASSET MANUAL

PEI posted the Career Asset Manual on the NSPE Website for members to download for free. Members can still purchase the paper version through the NSPE catalogue.

YEAC

The YEAC launched the "University Outreach Initiative." In September, YEAC Chairman, James Mathis worked with the Texas Society of Professional Engineers State Society, Brazos Chapter, and University staff to re-establish a student chapter at Texas A&M University. As a result, 49 new student members joined NSPE, out of 50 students that attended the kick-off meeting. Other potential schools that the group is considering working to establish a student chapter include Penn State and Purdue. This project is a great example of a national / state partnership as well as interest group / state society partnership.

In addition, the YEAC is reviewing the existing Student Chapter Handbook that is posted on the NSPE website, and incorporate lessons learned from the A&M student chapter establishment.

PEI HISTORY PROJECT / WEBSITE UPDATE

Bob Becnel, PEI Past Chair, began a project to compile the history of PEI into one master document. In addition, he is planning to update this document, and make it available for download from the NSPE website. Finally, Bob is spearheading a complete overhaul of the PEI Website. All content is being reviewed and updated.

PEI COLLEGE SCHOLARSHIP PROGRAM

PEI accepted applications from college students for its annual scholarship program. This scholarship provides a one-time \$2500 grant to a student that is currently enrolled in an undergraduate or graduate engineering program and is considering a career in industry. Applications were due April 1, 2007.

NEW PRODUCT AWARD

PEI received applications for the annual new product award program. PEI modified the scoring criteria for 2007 to provide additional preference for products that involved a professional engineer. This modification was made based on the suggestions in the Future Directions Task Force Report.

In addition, PEI worked with the 2007 Convention Task Force and the 2007 Educational Foundation to determine the appropriate venue for presentation of the New Product Award at the Denver Convention.

CHAIR REPORT 2007 - 2008

ANDY RUSSO, P.E., F.N.S.P.E.

AWARDS & RECOGNITION

Industry New Product Awards & Engineering Education Excellence Award were given during an open session breakfast with a speaker at the Annual Conference in Portland. All New Product Award winners had been offered the chance to display their product as part of a showcase. Although certain states no longer participate in the program as in the past, there has been an increase in the number of award entrees.

2007 - 2008 New Product Award Winners			
Category	Company	Product	Location
Small	Sopogy, Inc.	SopoNova4.0	Honolulu, HI
	Salazar Machine & Steel, Inc.	Produce Bin Washer GCS©	Immokalee, FL
Medium	AuthenTec, Inc.	AES1510	Melbourne, FL
Large	InSinkErator	The Evolution Series™ Residential Food Waste Disposers	Racine, WI
Mega	Cummins Emission Solutions (CES)	Cummins Particulate Filter (CPF)	Stoughton, WI

The PEI Scholarship Winner was PEI Scholarship Kevin Eichinger, University of Wisconsin-Madison who received the amount of \$2,500 for school.

OUTREACH

NSPE & PEI are cofounders of The National Software Engineering Consortium, along with NCEES, IEEE, and other organizations. The Consortium is working towards the development of a national Software Engineering Licensure exam. They have developed an executive summary and purpose statement to send to all state boards of licensure. The goal of the group is to get the exam developed by Spring 2011. A very informative December PE magazine article was written about the initiative. This consortium grew out of the PEI Computer and Software Engineering Task Force's recommendations for computer and software engineering licensure and a July 2007 Software Engineering Summit in Denver.

PEI is looking at improving/increasing their participation in the Intel International Science and Engineering Fair participation and making better use of the great entries that they receive, tracking of students. They have reached out the NSPE Education Foundation to become more active with this program. Additional synergy may exist as Intel is the 2009 co-chair of Engineers Week along with NSPE.

PEI and along with PEPP continue to recruit, retain, encourage, listen to, and more importantly fund young engineers activities as an integral outreach for the future.

CHAIR REPORT 2008 - 2009

JOHN WALL, P.E., F.N.S.P.E.

AWARDS & RECOGNITION

Industry New Product Awards & Engineering Education Excellence Awards were given during a luncheon on July 17, 2009 with other Honor Awards in NSPE. The PEI awards included the New Product Award and the reinstated PEI Distinguished Service Award (DSA). The DSA winner was Douglas Benner, P.E., F.N.SPE who was nominated by Bob Becnel.

2009 New Product Award Winners			
Category	Company	Product	Location
Small	HydroMentia	Algal Turf Scrubber	Ocala, FL
Medium	Catalyst Combustion Corp	Heated Catalyst System for Cooking Odors	Bloomer, WI
Large	AAON	Digital Precise Air Control System	Tulsa OK
Mega	Kohler Co	Kohler Express™ Vanity	Kohler, WI

The PEI Scholarship Winner was PEI Scholarship Caleb Sieck, Oklahoma, who received the amount of \$2,500 for school.

OUTREACH

NSPE & PEI are cofounders of The National Software Engineering Consortium, along with NCEES, IEEE, and other organizations. The Consortium is working towards the development of a

national Software Engineering Licensure exam. They have developed an executive summary and purpose statement to send to all state boards of licensure. The goal of the group is to get the exam developed by Spring 2011. A very informative December PE magazine article was written about the initiative. This consortium grew out of the PEI Computer and Software Engineering Task Force's recommendations for computer and software engineering licensure and a July 2007 Software Engineering Summit in Denver. A SELC workshop was conducted on July 19, 2009.

PEI continues their participation in the Intel International Science and Engineering Fair which reaches over 500 students each year. PEI is now creating synergy with the Junior Engineering Technical Society, Inc. (JETS) and making better use of the outstanding project entries that they receive. In addition, PEI has reached out to the NSPE Educational Foundation in an effort to have the Foundation become more active in this initiative.

PEI YEAC has been working to recruit students/establish NSPE student chapters at the University of Houston, the University of Connecticut, and the University of Oklahoma.

CHAIR REPORT 2012 - 2013

STEVE HUTTI, P.E., F.N.S.P.E.

The PEI EB met in San Diego to launch the 2012-2013 year. The meeting was very well attended with several State PEI representatives in attendance as well as past and present board member. In addition, several members attended via a telephone bridge as they could not attend in person.

Several key highlights:

- 1) PEI, now an Interest Group was being scrutinized by the NSPE Executive Board as part of the Race for Relevance evaluation.
- 2) The Industry Advisory Group (IAG) re-establishment and Industry Visits were being planned.
- 3) Funding levels were significantly cut and the Interest Groups had to tighten their belts.

PEI was challenged in many ways during the 2012-13 year:

- NSPE funding issues
- Questioning the Relevance (existence) of Interest Groups
- Many states do not have PEI groups and/or representation

- IAG and Industry Visits never materialized
- What are the PEI value statement and the business case for whatever funding PEI requests? This is the topic that will continue into the next term.

PEI RELEVANCE

PEI Board had to deal with every changing view of the relevance of Interest Groups to the NSPE organization and to its membership.

IAG/INDUSTRY VISITS

A letter was drafted to send to Industry inviting them to re-join a revamped IAG but not takers. Also, planned Industry Visit during annual meeting in Minneapolis did not happen.

GOVERNANCE

2012 – 2013 PEI Executive Board		
Position	Name	Term
Chair	Stephen Hutti	2012-13
Chair-Elect	Austin Lin	2012-13
Secretary	Frank Fong	2012-13
Immediate Past Chair	Curtis Beck	2012-13
Northeast Vice Chair	Thomas Kesolits	2012-14
Southeast Vice Chair	Stanley Nurnberger	2012-14
Central Vice Chair	Howard Jones	20xx-yy
North Central Vice Chair	Donald Mitchell	20xx-yy
Southwest Vice Chair	Neerali Desai	20xx-yy
Western & Pacific Vice Chair	Thomas Smailus	20xx-yy
YEAC Chair	Peter Pisasale	2012-13

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