

Item 8.2.3 Attachment

NSPE Self-Assessment / Introspection Taskforce

TF Members: David McCullough, James Currey III, David D'Amico, Ken Discenza, John Hall, Donovan Lajoie, Scott Nodes, Kenneth Phillips, John Rhodes, Charles Samson, Ronald Gaches, Gregory Latreille, Patrick Kunz

Report for October 2012 NSPE Board of Directors Meeting

Purpose of the Taskforce

1. Assess relevancy of 'licensure' or the 'Professional' engineer in today's economic world, both internal to the industry and external (the public). Is the "Professional" engineer antiquated, misunderstood, or irrelevant? Determine public perception and understanding of licensure. Determine threats and opportunities related to licensure. Identify and recommend outcomes.
2. Relative to licensure and the Professional engineer, determine the areas where NSPE should be exerting its influence and the means and methods to achieve desired outcomes. What are we doing now that is not working? What other things can we be doing to create better outcomes with respect to attracting new members and retaining current members?
3. What changes can be made to the Annual Meeting to improve it? Include discussion of making it more attractive to the general membership?

Questions to initiate discussions

1. How relevant is 'licensure' or the 'Professional' engineer in today's economic world, both internal to the industry [organization] and external (the public).
2. Is the 'Professional' engineer antiquated, misunderstood, or irrelevant?
3. Determine public perception and understanding of licensure.
4. Determine threats to and opportunities related to licensure. Identify and recommend outcomes.
5. Determine the areas where NSPE should be exerting its influence and the means and methods to achieve desired outcomes. (Example: Interactions with K-12 and higher education).
6. What are we doing now that is not working? What other things can we be doing to create better outcomes with respect to attracting and retaining current members (with a special focus on younger PEs?)
7. What changes can be made to the Annual Meeting to improve it? Should we go back to making it more attractive to the general membership?

8. What changes, if any, should be made to the NSPE Vision Statement?
9. What changes, if any, should be made to the NSPE Mission Statement?
10. What Components should be included in the NSPE System Organization?
11. How can we make NSPE an Adaptive System?
12. In visualizing NSPE as a System, what should we identify as its Desirable and Undesirable Inputs and its Desirable and Undesirable Outputs?
13. What are the various External Environments that surround NSPE as a whole, and the Internal Environments of each internal component?
14. Who are the Customers (External and Internal) who are impacted by NSPE?
15. How do we measure Customer Needs and Expectations, and to what degree are these being done now, and what should they be in the future?
16. Critical problems exist with respect to National and State interactions (and others); how can we address these? How can we improve the serious communication problems that exist?
17. What are the needed processes, programs, and activities needed to attain an effective, high quality NSPE?
18. How can we devise a means to implement and continuously improve NSPE (the NSPE System)?

Topics to include in the Task Force Report:

1. VISION

What is the Vision of NSPE?

“NSPE is the recognized voice and advocate of licensed Professional Engineers.”

This is the existing vision statement, does it need revision?

- a) Maybe. We should be the voice of the entire engineering profession. We should acknowledge that there are a lot of highly qualified, innovative and ethical engineers practicing every day, without the requirement of a license, and without the benefit of a Code of Ethics, a sworn duty to the public or a network of like-minded peers. We have a lot more in common with them than we have differences. We should embrace these colleagues as Members (but not PE Members) where we can best influence them to get licensed. Shunning or shaming them hasn't worked.
- b) A possible revision for the vision of NSPE could be:

'NSPE is the recognized voice and advocate of the Engineering Profession.' ~~licensed Professional Engineers.~~

2. MISSION

"NSPE, in partnership with the State Societies, is the organization of licensed Professional Engineers (PEs) and Engineer Interns (EIs). Through education, licensure advocacy, leadership training, multi-disciplinary networking, and outreach, NSPE enhances the image of its members and their ability to ethically and professionally practice engineering."

This is the existing mission statement, does it need to change?

a) A more inclusive mission statement might be:

'NSPE, in partnership with the State Societies, is the umbrella organization for all practicing, retired, and accredited degreed engineers. ~~of licensed Professional Engineers (PEs) and Engineer Interns (EIs).~~ Through education, ~~licensure~~-advocacy, leadership training, multi-disciplinary networking, and outreach, NSPE enhances the image of ~~its members~~ the engineering profession and their ability of its members to practice engineering in an ethically ~~ly~~ and professionally ly manner.' ~~practice engineering.~~

b) Another opinion offered from a member not on the task force:

"If NSPE is truly representing ALL engineers – then we would also need to change the name to NES – National Engineering Society. Why is it that we have the word PROFESSIONAL in the name? I think it is because of the extra level of leadership and competency that the licensure implies. I believe that more focus – even though that implies 'less inclusive' will get the general public to understand our profession better."

3. NSPE SYSTEM

It is important to picture NSPE as a System. Our study, would facilitate our consideration of not only the internal needs of each component of NSPE but also the needs of the interactions that exist, or should exist, between all the components. Otherwise, we risk looking at each component in isolation from other components. NSPE components should include at least:

- a) State Societies
- b) Chapters
- c) Individual Members
- d) Practice Divisions
- e) Regions

- f) Committees/Councils
- g) Staff
- h) Special Committees/Task Forces

Some further aspects that need attention include:

- a) NSPE must be an 'Adaptive System,' to be able to respond in a way that is favorable to changing environmental conditions. It is important that NSPE function effectively in its changing environment. (See 4. below.)
- b) We need to see NSPE and its functioning components as systems with Inputs and Outputs, these may include both 'desirable' and 'undesirable' items.
- c) An important concept is the recognition that a given system or subsystem may have output that becomes input to another system or subsystem.
- d) What things are we doing now that are not working? What other things can we be doing to create better outcomes with respect to attracting new members and retaining them?
 - (i) Not working
 1. Policy statements not communicated outside of the NSPE family (preaching to the choir)
 2. Expensive annual meetings with little reason to attend
 3. Free pdh's as a membership inducement. Don't give away what we should be selling
 4. Influencing public policy
 5. Continuing focus on governance.
 - (ii) Should be doing...
 1. We should be working to create/shape the image of the profession through the K-12 education system by incorporating engineering into the curriculum. Had we done this in the late 1950's, early 1960's when America was ripe for such a concept, our profession today would be better understood and held in higher esteem. (See my NSPE blog post at <http://community.nspe.org/blogs/k-12/archive/2011/10/27/three-eight-good-reasons.aspx>)
 2. Op-ed columns on engineering issues (NY Times, Washington Post, etc)
 3. Facebook page with frequent posts that will be shared by the general public, such as photos of engineering marvels, engineering puzzles, humorous pieces, etc. See <https://www.facebook.com/pages/USA-Science-Engineering-Festival/133949023335104> for excellent examples.
 4. Partner with states to market state pdh's, with member discounts and state/national revenue sharing.
 5. Find more non-dues revenue sources.
 6. Partner with others to influence public policy, particularly those who have money, but need our prestige.
 7. What are the System Requirements (SRs) —quantified services and/or products—and System Requirement Relative Weights (SRRWs)?
 8. What are the areas in which NSPE should be exerting its influence and the means and methods to achieve desired outcomes?

- e) What are the System Requirements (SRs) –quantified services and/or products—and System Requirement Relative Weights (SRRWs)?
- f) What are the areas where NSPE should be exerting its influence and the means and methods to achieve desired outcomes?

4. ENVIRONMENTAL ASSESSMENT

We should identify the various Environments that Interact with the components of the NSPE System. These would include both External Environments that surround the NSPE System as a whole, and Internal Environments of each internal component. Examples might be:

- a) The potential member pool
- b) The economy
- c) Public perception and understanding of licensure.
- d) Public perception of and attitude toward “Professional” as it relates Engineers.
- e) Are “licensure” and/or “Professional” engineer relevant in today’s economic world, both to engineering and to the public?
- f) Is the “Professional” engineer antiquated, misunderstood, or irrelevant?
- g) What are the threats to and related opportunities to licensure? What are recommended outcomes?

What is the environment (economic, cultural, etc.) in which NSPE operates?

- a) Cultural
 - (i) Society is becoming more socially conscious and sensitive, but less personally involved.
 - (ii) People are connected virtually, not personally.
 - (iii) We are all more distracted.
 - (iv) We are all “busy”, that is, our days are fully occupied.
 - (v) People are less inclined to join, to give time, or to give money to organizations.
 - (vi) Society is less enamored with labels, e.g., there are more political independents (even though as a practical matter, in most jurisdictions, that restricts voting in primaries), churches are dropping denominational affiliations from their names.
 - (vii) There is no privacy. Everything is public and everyone has access.
- b) Economic
 - (i) Society wants value and often equates value with low price.
 - (ii) Professional services are becoming more of a commodity (bidding for professional services, design-build where contractor takes the lead)
 - (iii) Capital is scarce.

How is the environment likely to change during the planning period being considered?

- a) Absent a global or national crisis that would change the paradigm, the above trends will continue.

5. CUSTOMERS

If we consider “Customers” to be any persons or group impacted by the NSPE System, then one way to measure quality is “meeting or exceeding customer needs and expectations.” Further, any individual or group may at a given time serve as a customer, processor, or supplier. Thus we need to answer the questions:

- a) Who are the Identified Customers (ICs) and what are the Identified Customer Relative Weights (importance) (ICRWs)?
- b) What are the Customer Requirements (Needs and Expectations) (CRs)?

Are “licensure” and/or “Professional” engineer relevant in today’s economic world, both to engineering and to the public.

- a) Can there be an engineering “profession” without licensing?
- b) Without licensing, who can claim to be an engineer, anyone?
- c) Without licensing, what constitutes engineering?
- d) Without licensing, who can speak with authority to the people who make the rules?
- e) Without licensing, who will be responsible to look out for the PUBLIC interest?

Is the “Professional” engineer antiquated, misunderstood, or irrelevant?

- a) Antiquated or irrelevant?
- b) Misunderstood? (Non-understood might be more on point.)

What is the public perception and understanding of licensure?

- a) The public is largely oblivious to PE licensing.

What are the threats to and related opportunities to licensure? What are recommended outcomes?

- a) Specialty certifications are a threat in that they dilute the value of the PE, and can put non-engineers on an equal footing with engineers (in the area of the certification).
- b) Growth of industry exemptions to licensure.

6. ANNUAL MEETING

What changes can be made to the Annual Meeting to improve it? Should we go back to making it more attractive to the general membership?

- a) Current Annual Meeting is designed for training of State Leaders, Governance and Ceremony...all good things.

- b) Meeting is not attractive to the general member. In fact, the appearance is that the general member is not wanted at this meeting.
- c) Members of the Task Force state that there is staff resistance to changing the format of the meeting.
- d) This Task Force believes that the meeting needs to have broader appeal.
- e) The informational sessions, even for State Leaders, should be multi-tracked so that leaders who have for example already done "People Mapping" several times can have an alternative session in which they can learn other things.
- f) A standing committee that includes NSPE leadership (especially the NSPE Board's "Member-at-Large") and NSPE members needs to be formed to re-invent the Annual Meeting.
- g) It is understood that this type of change takes time as NSPE is already committed to three future sites for its meetings: Minneapolis (2013), Washington, DC area (2014) and Hawaii (2015). Certain changes (such as multiple tracks) can be implemented sooner than an entire overhaul.
- h) Allow for ala-carte registration for general members, particularly local members.
- i) Stop promoting the Annual Meeting to the general member until we have something for the general member. We say on the web page "Each year, the NSPE Annual Meeting brings together engineering colleagues, clients, and vendors to make important connections at vibrant locations around the country."

7. PROCESSES

What are the Required Processes (RPs) to accomplish all the proposed Task Force actions?

8. NSPE DELIVERY SYSTEM

What is the best Delivery System (DS) to provide the Required Processes (RPs)?

9. IMPLEMENTATION, MAINTAINING, AND IMPROVING THE REQUIRED DELIVERY SYSTEM (DS)

- a) How do we accomplish this?
- b) It is suggested that the general approach is to adopt the Deming Continuous Improvement Model, PIAA (or PDSA):

PLAN (This is what we are doing now.)

IMPLEMENT the PLAN

ANALYZE the results of the IMPLEMENTATION

ACT

- c) This should occur in a continuous cycle.

10. APPENDIX A: Data to support Task Force Recommendations

- a) Historical membership trends

11. APPENDIX B: State Society Data

- a) Data to help evaluate State Society linkages with National and with each other.
- b) Data to compare "small-membership societies," "medium-membership societies," and "large-membership societies."

12. APPENDIX C: Other data supporting Task Force Conclusions.

Annual Meeting discussions:

Excuse frequent references to Florida's meeting. Some suggestions to improve the NSPE Annual Meeting. These are in no particular sequence. They are all important.

Make it Member Friendly - We have little to offer rank and file NSPE members. The Annual Meeting idevoted almost exclusively to organizational meetings and leader training. FES has over 600 members in its Orlando chapter alone, yet in 2010 we did not extend an invitation to attend the meeting because there was little or nothing in the program to promote. Compare to Page 4 of the attached FES Annual Conference brochure which includes a poker tourney, a cookout, a number of college/alumni receptions, a large exhibit hall (which pays for a substantial portion of the meeting), practice section breakfasts, a general session with an outstanding keynote speaker, numerous concurrent educational sessions (with and without pdh's), student activities, a cruise, a banquet, golf and a fun and family friendly closing dinner. During the meeting there are raffles and a silent auction. There is a lot to attract members who are not on one of our boards or committees. We typically draw 400 paid registrants. Unregistered spouses and kids probably add at least 200 more.

Make it Member Friendly Part 2 - FES has an Annual Meeting Steering Committee that plans and organizes the meeting content. As a result, our meetings are member-centered. The committee actually meets at the conclusion of the Conference to do an on-the-spot evaluation. We also put an evaluation sheet in every member packet. Without this forum, the only kind of feedback you get tends to be negative. People complain about what they don't like, more than they compliment what they do like. Over time, we develop meetings that cater to malcontents.

Make it Family Friendly - FES always holds its meetings at a resort with access to the beach. This attracts spouses and kids, but doesn't pull them away from the facility. We also have a number of events that are family-friendly. In my 35 years attending FES Annual Meetings, it was always my wife and kids who complained if I missed attending one year. If NSPE is going to get younger, we need to attract families.

Make it Fun - We like FES to be considered the Fun Engineering Society. We usually have a fun theme for each meeting. Some of our events have been costumed. We sometimes hire professional entertainers for family events (murder mystery troupe, musicians, comedians, etc).

End Segregation - For three years running, we had young engineers from Florida attend the NSPE meeting, and I NEVER SAW THEM AT THE MEETING. The young engineer track doesn't seem to intersect with the old engineering track. I suspect that the interest group track is the same. It's great that we have a interest groups. It would be better if they we actually had a chance to interact with them. We should have at least ONE GENERAL MEMBER SESSION, where all attendees are together in one room. Otherwise, we have no sense of who is there. The session should have a motivational/inspirational speaker. We have had some great ones at FES. I can't remember the last time we had a dud. (Our committee vets them carefully.

Involve Member States - Two years ago, we met in Florida, but you'd hardly know it from the agenda. There was no welcome from Florida's leadership. There was no outside event planned. I believe we should make an effort to involve the host state and/or chapter in some way. For instance, the local Chapter could have managed the outreach event, had it been asked. The members should leave a city/state with at least some sense of having visited there.

Get with the Program - There was no published agenda for the leader training sessions. None of us knew what was in store for us. It is much better to tell us in advance. We might be able to better contribute if we have some advance warning.

One Size Does Not Fit All - Most of the leader sessions are geared toward new leaders. At least half of the attendees in San Diego had been through the People Map before. I would venture at least half did not need Association 101 or the Advocacy session. Having said that, every one of those sessions has value for novices. The answer is concurrent sessions. See the attached FES brochure. There are four separate educational tracks occurring simultaneously. At NSPE, our concurrent sessions could include Young Engineers, Interest Groups, Affinity Groups, Seasoned leaders, novice leaders, etc. I'd like to know when and where those other groups meet, so I can choose to attend. Had a Young Engineers meeting been in session during Association 101, I would have much preferred the Young Engineers group. If a member is frustrated about not being to attend overlapping sessions, great! If we leave them wanting, they're more likely to come back next year.

A Prophet in His Own Country... - We have tremendous talent within our ranks. I'm sure Frank Rudd from Florida could do an Advocacy presentation far more interesting, informative and practical than what we heard in San Diego. I say this because I've heard Frank do it in Florida. Our lobbyist Jon Johnson also does an excellent presentation. Together, they are a great tag team. Ditto Association 101. I'd rather hear from a seasoned State Society Exec about how to run my group than from an outsider. We should look within our own organization for talent before we pay outside consultants.

Give Us a Reason to Attend - I am not the only leader who has left an NSPE meeting questioning the value (and cost) of my attendance. I would like to think that every leader in every session would either Get (learn something of value) or Give (teach something of value).

Put the Outreach back - The Design Squad activity in Las Vegas was fun and rewarding, as it was in Orlando, St. Louis and in Portland. I know there were complaints about being "ambushed" (or words to that effect) in St. Louis and being forced to work with the kids. I believe this is a result of not having

announced the activity in advance. Put it back into the meeting time frame and allow members to opt out.

Meet the Candidates - When we have multiple candidates for office, I'd like to see an informal session where the Delegates can meet and converse with the candidates. It could be for an hour after a reception, or in lieu of a reception.

Begin and End with a Bang - Every Annual Meeting should begin and end on a high note. The General Session with an inspirational speaker works great at the beginning. Florida ends with a party.

Make the Regions More Regional - Six regions meeting simultaneously in one room does not work. It hasn't worked in any of the past 4 or so years we've been doing it. As Engineers, we pride ourselves on learning from our failures. What haven't we done that here?

Side Tours/Trips - Schedule at least one organized off-site event, as we did this year in San Diego, in Boston, Denver and Portland. They were well attended. I got to know a lot of other state leaders, and their spouses, on these trips. If unity is important, fellowship is critical.

HoD Meeting Suggestions, BIG and small

Aside from elections, there is little purpose in the HoD meeting. What we do is largely ceremonial or perfunctory. If we are to have such a meeting (and perhaps we will not as a result of the RfR), there should be more substance. Using the HoD Listserve to exchange ideas or vet initiatives might be a means of building up to a meaningful annual meeting, as was done with the Continuity Task Force recommendations and to a limited degree, with RfR. (The afternoon RfR session was far more significant than the HoD meeting.)

Out of respect to the candidates, the Tellers should report election results as soon as they are available, not wait for a prearranged slot in the agenda.

I certainly respect our international colleagues, but why do we need to hear about their organization, goals and aspirations, but we hear little of what goes on in our own committees and programs. For instance, we heard nothing from the Foundation.

Put state and delegate names on BOTH sides of the table placards.

Sorry if this comes across as a rant. I don't mean it that way. I respect each of you as a leader and I am indebted to you, as is our entire profession, for the commitment you have made on our behalf. My only aim is to make NSPE better.

Self-Assessment/Introspective Task Force
Notes from and Related to September 10, 2012 Teleconference

NSPE needs to create an improved awareness of what our organization does.

- We need to look at how to improve internal communications of successes such as the Drilling Safety Rule". Note that this information was picked up by the Professional Engineers of Oregon and posted on its web site: <http://www.oregonengineers.org/>. How many other states posted this?
- When NSPE sends such information out, it should also include suggestions on how the news should be spread. For instance, NSPE could ask states to send the news to all of its chapter presidents and post on its web site, Facebook page, etc.
- Externally, NSPE needs to send such news to other aligned organizations. The Strategic Partnerships Task Force is looking at improving existing and developing new partnerships with other organizations. This can be discussed with that Task Force as well.
- More emphasis should be place on public relations and outreach. A bottleneck at NSPE is staff time to accomplish this. A national organization of a prominent profession needs to dedicate more time to this effort.
- It may be useful to establish/activate a Public Relations/Outreach Committee that can assist in this effort. Recall that at one of our national meetings, we had a presentation by Jeff Crilley and received his book, *Free Publicity*. You can check this out at http://www.amazon.com/Free-Publicity-Reporter-Secrets-Getting/dp/0972647406/ref=sr_1_1?s=books&ie=UTF8&qid=1347310111&sr=1-1&keywords=free+publicity. The point being: The need for improved public relations is not a new one but rather one that needs to be re-emphasized so that it gets proper prioritization after we formulate on plans related to the *Race for Relevance*.
- The Delivery Systems, Communications & Technology Task Force is looking at how to better address dissemination of information as well.

The NSPE Annual Meeting/Conference needs to be improved.

- Current Annual Meeting is designed for training of State Leaders, Governance and Ceremony...all good things.
- Meeting is not attractive to the general member. In fact, the appearance is that the general member is not wanted at this meeting.
- Members of the Task Force state that there is staff resistance to changing the format of the meeting.
- This Task Force believes that the meeting needs to have broader appeal.
- The informational sessions, even for State Leaders, should be multi-tracked so that leaders who have for example already done "People Mapping" several times can have an alternative session in which they can learn other things.
- A standing committee that includes NSPE leadership (especially the NSPE Board's "Member-at-Large") and NSPE members needs to be formed to re-invent the Annual Meeting.
- It is understood that this type of change takes time as NSPE is already committed to three future sites for its meetings: Minneapolis (2013), Washington, DC area (2014) and Hawaii (2015). Certain changes (such as multiple tracks) can be implemented sooner than an entire overhaul.