Community Resilience Panel:
Energy Standing Committee Meeting

MEETING DATE: November 9, 2015
TIME: 1:45 pm EST to 4:15 pm EST
LOCATION: National Institute of Standards and Technology (NIST), Gaithersburg, MD
ISSUE DATE: December 4, 2015

ATTENDEES:

Attendee	Affiliation
Ronda Mosley (Chair)	PTI
Steve Cauffman	NIST
Ryan Franks	National Electrical Manufacturers Association (NEMA)
Erich Gunther	EnerNex
Leon Kempner	Bonneville Power Administration
Stuart McCafferty	GridIntellect LLC
Julia Philips	Argonne National Laboratory
Tim Roxey	NERC
Haujian Shi	Pepco Holdings Inc
E. Scott Tezak	TRC
C. Jerry Wong	DHW Engineering LLC

DISTRIBUTION: Attendees and Energy Standing Committee

NOTES BY: Stuart McCafferty, GridIntellect LLC

1. Welcome and Introductions

Ronda Mosley (Chair) led introductions of the participants and reviewed the goals for the meeting. She also asked if anyone would be willing to take on the role of Vice-Chair for the standing committee. Julia Philips volunteered to take on this position.

2. The conversation began among the participants regarding the Community Resilience Panel

The discussion started with respect to Priority Action Plans (PAPs) and whether they need to be called PAPs or whether they could be called something else. The answer is no, the name is not carved in stone and it is essentially a project work plan for the standing committee. Next, the group asked what the scope of the audience the standing committee would be developing products to support. It was explained that products developed by the energy standing committee would be intended for a number of different audiences, such as community leaders and standards development organizations.

The group then asked who would be responsible for addressing interdependencies. It is envisioned that individuals within the standing committees will address these challenges by forming working groups with other standing committees, and potentially forming an additional standing committee.

3. **Discussion of first question for report-out: What are the largest gaps and needs within your sector that need to be addressed in resilience planning and guidance products?**

The first gap identified was power restoration communication. That is, individuals and critical facilities need to know how long they will be without power as well as how long they can operate without power. There are also "crawlers" that look for outage information and disseminate it to the public so they are aware who is having their power restored.
Participants also discussed the fact that reliability standards also ignore major events. This resulted in the question of "What metrics do we need to capture these type of events?" Furthermore, cyber and physical security are now huge concerns that need to be better addressed.

The need for improved situation assessment and mutual aid is also needed to recover more rapidly when a hazard event does occur. It was noted that public safety information is not shared with utilities whose repair crews may not be able to get to damaged areas. It was also noted that it is challenging to know who the appropriate people to come into damaged locations are and ensure that they are properly credentialed. Mutual aid agreements can be improved by including information to make them more effective such as identifying what tools are needed since not everything is compatible. The challenge then becomes to determine an effective way to dispatch the mutual aid. Perhaps the largest gap identified in this discussion was that cyber security mutual aid does not exist. Communication between utilities and communities was also identified as a gap. Participants stated that many local communities struggle to get clean communication from their power utility.

Participants discussed the need to prepare prior to a disaster occurring to avoid problems as much as possible. The group was interested in using lessons learned from prior disasters to plan for future events, and engaging the right stakeholders to work together. It was discussed that having a "playbook" on how to use your capabilities, resources, and assets would be useful for security and first responders.

There was also discussion of the need for regulatory reform because resilience costs money, which needs a different regulatory model that allows rate recovery for resilience investments. Everyone buildings to the minimum requirements since building beyond that level is typically not considered to be recoverable. Moreover, 30 year technology amortization schedules do not fit the rapid technology changes happening on the grid.

The question was then asked: "Are renewables a risk to resilience?" The group felt that storage is good (particularly thermal and kinetic), but needs to be as close to the load as possible.

It was also noted that generation, transmission, and distribution are not homogenous. That is, they are often operated by different companies who are designing their systems to different levels of resilience, but perhaps they should all have similar levels. The challenge is how to ensure this happens.

4. **Discussion of the second question for report-out: Identify significant interdependencies and gaps with other sectors that impact resilience.**

The group discussed interdependencies briefly. It felt that transportation, communication, and the social (policy) standing committees had the greatest interdependencies with the energy standing committee.

5. **Discussion of the third question for report-out: How do we address the needs and gaps we identified?**

Participants felt that more detailed gap analysis is needed with the end-game in sight to develop specific requirements to affect policy, standards, guidelines, and best practices. The group felt that case studies would be a useful tool to understand and communicate what actions are needed.

6. **Discussion of the fourth question for report-out: Are there others we need to engage to help us address these needs? Others may include SMEs/groups not at the meeting in your sector or SMEs/groups from other sectors.**

The participants listed the following as stakeholders that they would like to engage in this standing committee:

- NARUC
- NASEO
- Director of Utility Variable Integration Group (UVIG)
- NERC CIPC
- Local government officials and municipally-owned utilities

7. **Discussion of the fifth question for report-out: What are existing codes, standards, guidance, goals, and/or protocol that have been published, or are in-process, in your respective sectors?**

There was only limited time at the end of the meeting to discuss this question. However, the participants identified permitting as a significant challenge to putting a resilience system in place. The group also noted that many codes, standards, and guidance are provided in the NIST Guide as a good starting point.