Platform Technology Working Group (WG2)
Meeting Notes May 14, 2014

Administrative

➢ Michael Rieder addressed the Administrative portion of Agenda

WG 1 Committees – Contact Debra Labelle (Debra.LaBelle@dps.ny.gov) to join committee

    a. Markets and Pricing –Tammy Mitchell (Tammy.Mitchell@dps.ny.gov)
    b. Customer Engagement – LuAnn Scherer (LuAnn.Scherer@dps.ny.gov)

➢ Michael Rieder stated that end-use technology will be in Markets and Pricing WG

WG2 Staff Leads - Michael Rieder and Peggie Neville

WG2 Co- Conveners - Con Edison – Brian Horton (hortonb@coned.com); Siemens – David Lovelady (david.lovelady@siemens.com)

- Meet Wednesdays 10 AM – 12 PM
- Tentative conference call or webinar on May 21 and June 4
- Albany, 19th Floor Boardroom on May 28, June 11, 18, and 25

WG2 Subgroup – Microgrids and Community Grids – Matthew Wallace

- Meet Thursdays 10 AM – 12 PM
- Still working on room locations
- Will address all aspects of Microgrids, not just technology

Website Information and Contact Information – to be provided

➢ Peggie Neville announced the 5/22 Symposium

Content

➢ Michael Rieder discussed the guiding principles and functional requirements

Guiding Principles:
- Promote greater use of DER to support system efficiency
- Ensure continued system reliability, resilience, and security
- Encourage open system architectures to maximize customer and third party participation
- Promote platform standardization across utility service areas
- Platform Interface interoperability between 3rd Party provider and customers
- Achieve desired functionality while minimizing costs

- Minimize "stranding" of costs, while recognizing that new platforms and approaches may offer significant system and efficiency benefits
- Employ scalable and flexible technologies

Comments of the Parties

- Guiding principles address both existing and new DER.
- "Platform" includes not just communications, also data management.
- Standardization should focus on interfaces between the platform and customer or third party supplier systems.
- Interfaces with DR/DER might be different for different types.
- Overarching goals for platform are (1) maximizing distribution system efficiency and (2) optimizing network performance (balancing supply/demand, minimizing voltage fluctuations, etc.)
- Parties mentioned that the distribution system efficiency will happen on both the front and back end (utility side).
- Three categories of considerations: functional, technological and economic.
- Scope will be a work in progress and we should be flexible.

➢ Mike Rieder asked all commenter's to follow up with him on their specific comments.

Identify Functionalities Needed:
- Bi-directional power flows (DER presents new system function)
- Real time communications and control (Need for low latency response times)
- Real time balancing of DER
- Maximize efficiencies and participation (Operational, Dynamic System)
- Preserve system reliability
- Preserve system security against cyber threats (Need to maintain and enhance due to protection of an increase in system nodes)
- Increase system resiliency (Storm & Operational)
- Interoperability between DSPPs and the NYISO
- Data management including data analytics, measurements and metrics services

Comments of the Parties

- Issues with analyzing big data. The volume of data generated and needing to be utilized will be overwhelming. How do we plan for the future, what data do we need, and on what time interval?
- Need analytics, measurements and metrics services.
- We need both T&D data and customer usage data. Also will need to address how it is used, by third parties, customers, regulators. etc.
- Real time balancing of customer loads will be needed to optimize system efficiency.

- Data will also be generated by sensors on the system that allow greater visibility of system status.
- Data must flow seamlessly between Distribution System and ISO and be transparent.
- Data management must be accurately measured. Real-time data sets will allow new forms of measuring and verifying DER performance and system operation performance.
- Does functionality encompass technologies needed to provide usage data at the customer level (i.e.; customer usage portals, etc. – technologies across Web, mobile, etc.).
- Use cases can be developed to further refine the functional requirements needed.

➢ Peggie Neville suggested forming subgroups to address some of these topics.

1. **Survey Existing Utility Distribution Systems and Capabilities**

   Utilities will work offline to identify scope and determine what they will present to WG2 on 5/28. No more than 15 minutes.

   - Identify existing utility distribution systems and capabilities.
   - Describe what current systems and methods are being employed to handle increases in DER.
   - Staff should identify a strawman of topics for the utility presentations so that all are consistent.

   Dist. System and Capabilities Subgroup
   Subgroup Lead - Brian Horton (Con Edison), hortonb@coned.com
   Rob Sheridan (National Grid), robert.sheridan@nationalgrid.com
   Laney Brown (Iberdrola USA), laney.brown@iberdrolausa.com
   Mark Holtermann (Central Hudson), MHoltermann@cenhud.com

2. **Survey of standards/protocols**

   Group will give an update at the 5/21 meeting and get feedback from the WG on their scope before presenting their findings at the 6/4 meeting.

   - Identify relevant industry standards and protocols applicable to distribution systems, including efforts related to increased DER penetration.

   Standards/ Protocol Subgroup
Subgroup Lead - David Lovelady (Siemens), david.lovelady@siemens.com
Tony Abata (NYSERDA), awa@nyserda.ny.gov
Deana Dennis (NEMA), deana.dennis@nema.org
Jim Gallagher (Smart Grid Consortium), jgallagher@nyssmartgrid.com
Marty Uczen (Verizon), martin.uczen@verizon.com

Mike Williams (Staff), michael.williams@dps.ny.gov

3. **Survey of technologies available to achieve needed functionalities**
   * John D'Aloia, Brian Fisher, Kelly Connell, David Lovelady

- Identify technologies, both hardware and software, available to achieve functionalities needed for DSPP.
- Identify characteristics of technologies including (1) cost; (2) ability to achieve desired functionalities; (3) compatibility with existing infrastructure; (4) flexibility/upgradability; (5) interoperability; (6) security (7) technical barrier to platform

    Technology Subgroup
    Subgroup Lead - John D'Aloia (Staff), john.daloia@dps.ny.gov
    David Lovelady (Siemens), david.lovelady@siemens.com
    Jim Gallagher (Smart Grid Consortium), jgallagher@nyssmartgrid.com
    Maria Seidler (Dominion), maria.seidler@dom.com
    Marty Uczen (Verizon), martin.uczen@verizon.com
    Matt Anglin (NYISO), manglin@nyiso.com
    John Cerveny (NY - Best), jcerveny@NY-Best.org

➢ Staff will put together a template of technical attributes for uniformity purposes and circulate to subcommittee.

Comments of the Parties

- Parties recognized the need to form a functional requirements subcommittee to address any key functions that were missed, such as; transparent information, transactional markets, along with considering non-functional requirements.
- Coordination with NYISO will be critical
- Third party business rules will need to be developed to guide interactions of the various market participants.
- "Evolutionary" vs. "end-state" approach.
- Key focus should be market enablement
- Need to review commonality and interoperability functions between different devices

4. **Functional Requirements Subgroup**
   Subgroup Lead - Laney Brown (Iberdrola USA),
            laney.brown@iberdrolausa.com
   Stephanie Bailey (Con Edison), BAILEYST@coned.com
   Rob Sheridan (National Grid), robert.sheridan@nationalgrid.com
   Ruben Brown (E Cubed), ruben.brown.ecubedllc@gmail.com
   Maria Seidler (Dominion), maria.seidler@dom.com

➢ WG2 Staff will be mindful of WG issues that cut across topics listed by staff for organizational purposes. Topic Areas will be address during future meetings.