NARUC Center for Partnerships & Innovation Webinar Series

Regulatory Innovation with Stakeholder Involvement

Moderator:
- **Wally Nixon**, AR Public Service Commission

Speakers:
- **Sharon Allan**, Smart Electric Power Alliance
- **Susan Mora**, Pepco
- **Naza Shelley**, DC Public Service Commission
Today’s Speakers

Sharon Allan  
Chief Innovation Officer  
SEPA

Susan Mora  
Director, Utility Initiatives  
Pepco

Naza Shelley  
Attorney Advisor  
DC Public Service Commission
What is a MEDSIS?

• It is the comprehensive DC Commission initiative to foster regulatory and technology innovation, with the goal of accelerating the District’s transition to a smart, modern, customer-centric, and clean energy system without compromising affordable rates, safety and reliable service.

• Currently in Phase 2, six working groups have been tackling key grid modernization topics, like non-wires alternatives to traditional grid investments, distributed energy resource integration, and alternative ratemaking mechanisms.
MEDSIS (Formal Case 1130) Timeline

- **2015**
  - June 12 - Order 17912 opens MEDSIS
  - Oct 1 - MEDSIS workshop #1
  - Nov 19 - MEDSIS workshop #2

- **2016**
  - **Learning & Definition**
    - March 17 - Order 18144, MEDSIS Workshop #3 on April 28
    - March 23 - Order 18148 $21.55

- **2017**
  - **MEDSIS Vision**
    - Jan 25 - Order 18673. Accept Commission Staff Report/comment
    - Feb 28 - MEDSIS Town Hall Mtg
    - Mar 9 - Order 18717 Reply to Staff Report extended
    - Oct 19 - Order 19143, Public invited to comment on report

- **2018**
  - **Stakeholder input**
    - Feb 14 - Order 19275 MEDSIS Vision Statement Adopted
    - March 1 - RFP for consultant
    - June 5 - SEPA awarded contract
    - June 27 - SEPA completed Phase 1 of MEDSIS contract
    - Aug 9 - Order 19432 SEPA to start 6 working groups (Phase 2)
    - Aug 20 - Phase 2 begins with launch of working groups
    - Sept 26 - Order 19692, NWA work group to consider Utility ownership of DERs and define a ‘smart inverter’

- **2019**
  - **Recommendations**
    - April 12 - Draft Recommendations released to public for comment.
    - April 25/26 - Public meeting on MEDSIS draft recommendations
    - Final Report delivered to Commission

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Unique Aspects of MEDSIS Stakeholder Working Groups

• **Full transparency** – Meetings recorded and posted, workspace captures emails and work products, and meeting minutes are fully documented with stakeholder stated positions

• **Stakeholder Driven** -- Consultant runs the process but the stakeholders are making the recommendations and inputs to the Commission

• **Actionable Outputs** -- Meetings are interactive and not run as a full day of presentations to drive dialogue, proposals, and net out where agreements and disagreements exist to arrive at recommendations

• **High Engagement** -- Over 217 registered interested parties with over 100 participants each month
Stakeholder Process Diversity & Commitment
DIAA:
- Identify the guiding principles and measurable objectives for charting out a common framework for MEDSIS in the District.

NWA:
- Develop recommendations for the Commission to consider addressing utility ownership of DERs, including but not limited to energy storage devices.
- Articulate opportunities and make recommendations to the Commission regarding Pepco’s distribution system planning process for collaboration to promote NWA consideration.

Rate Design
- Identify alternative regulation and rate designs that advance the MEDSIS vision.

Customer Impact:
- Identify methods to ensure customer engagement and availability of data across all customer groups.

Microgrids:
- Determine the adequacy of the Commission’s current microgrid regulations to meet the MEDSIS vision and recommend improvements.
- Create a taxonomy that classifies the different types of microgrid applications and business use-cases.

Pilots:
- Define governance for funds
- Define process for awards
Status of Process

- Held a Public Town Hall Meeting April 25/26
- Draft Version.91 released May 8, 2019
  - Stakeholder comment period open till May 22nd
  - 500+ pages
  - 32 Recommendations
  - 10 Learnings
- Final Report will be submitted to the Commission May 31
- Town Hall meeting will be held in June 13 5pm-7pm
- Commission intends to rule by end of July
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Pepco Participation in the Process

• Active in all 6 working groups
• Used opportunity to listen and seek understanding from various stakeholders
• Shared perspective on the potential impacts of various stakeholder concepts with eye to balancing competing forces:
  ➢ Sustainable vs. Affordable
  ➢ Interactive vs. Secure
  ➢ Well-Planned vs. Non-Discriminatory (Competitive)
• Took input to draft a key strawman that the group iterated upon to make it a group recommendation
Foundational Utility Operations and Principles Impacted by Growth DERs

• Load forecasting must consider if/how DER production may offset load growth
• System need identification must include consideration of system stress from DER and ways to increase hosting capacity
• System investment should consider how DER could be used to defer or replace traditional approaches to meeting system needs
• Revenue and regulatory models must account for new utility services to DER-customers, higher utility costs due to more complex planning and operations and Non-Wire Alternatives to system investments
• While resilience may be improved by DERS; utility security, event readiness and response planning become more complex in a DER rich environment
• Customer communications, education, and offerings must evolve
• Interactions with 3rd parties—energy supply, customer services
Distribution System Planning – Key Considerations

• **Customer-focused** means that priorities need to be:
  • First – Reliability
  • Second – Affordability
  • Third -- Delivering on policy goals

• **Stakeholder-informed means**
  • Information flow has to be bi-directional
  • Utility has to be open to both big ideas and specific solutions

• **Utility-driven because utility is accountable for the system and must:**
  • Identify the problem to be solved
  • Consider concepts put forward by internal and external experts
  • Define the specific solution best suited to the system as a whole
  • Manage the risk
  • Control the asset
PHI’s Current Distribution System Planning Process

- Load Forecast
- Distribution System Capability Analysis
- System Recommendation
- Capital Budget Plan Released

Stakeholder Reaction
MEDSIS Collaborative Distribution System Planning and NWA Consideration Process

**UTILITY ACTIVITY**
- Utility & stakeholder workshops on Load Impacting Factors RFI
- Locational Constraints Report, RFP prep

**STAKEHOLDER ACTIVITY**
- Load Impacting Factor RFI issued by utility
- Load Impacting Factor RFI responses submitted by stakeholders
- Locational Constraints RFI Report and Locational Constraints RFI issued by utility
- Locational Constraints RFI responses submitted by stakeholders
- NWA RFPs issued by utility
- NWA RFP responses submitted by stakeholders
- NWA selections announced by utility

**JOINT ACTIVITY**
- NWA contracting and/or construction

Illustrative – For Discussion Purposes Only
Possible Business Models to Test in Demos/Pilots

<table>
<thead>
<tr>
<th>Pilot Title</th>
<th>Storage Ownership</th>
<th>Storage Control for Grid Reliability</th>
<th>Storage Operation in Wholesale Markets</th>
<th>Application to Rate Base</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-Use 1</td>
<td>Utility</td>
<td>Utility</td>
<td>Utility</td>
<td>Storage investment less revenues from wholesale transactions</td>
</tr>
<tr>
<td>Multi-Use 2</td>
<td>Utility</td>
<td>Utility</td>
<td>3rd party</td>
<td>Storage investment less revenues from 3rd party lease for wholesale transactions</td>
</tr>
<tr>
<td>3rd Party Ownership</td>
<td>3rd party</td>
<td>Utility</td>
<td>3rd party</td>
<td>Utility payment to 3rd party for priority access to storage for grid reliability</td>
</tr>
<tr>
<td>Virtual Powerplant</td>
<td>Customer, utility or 3rd party</td>
<td>Utility via aggregator</td>
<td>3rd party or DSO/utility (if at all)</td>
<td>Utility payment to aggregator for priority access to storage for grid reliability Storage investment or customer rebate if utility owns or helps finance storage units</td>
</tr>
</tbody>
</table>

Illustrative Storage Example – For Discussion Purposes Only
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MEDSIS Next Steps

• The Commission intends to issue an order approximately 60 days after receipt of the Final Report

• Phase 3: Implementation of working group recommendations

• Phase 4: Pilot Phase
  • Approximately $21M for pilots
Medsis Pilots

Diagram of the MEDSIS Pilot Phase:

1. MEDSIS Working Groups
   - WG Reports
   - PSC Review/Order

2. MEDSIS WG Recommendations
   - Approved Pilot Topics

3. Draft Process
   - Call for Papers
   - Submittals
   - MEDSIS Principle Screening
   - Screened Pilot Projects

4. Selection Process
   - Release RFP & Receive Submittals
   - RFP Screening

5. Implementation Process
   - Approved for Scoring
   - Proposals Scored
   - Selected Proposals

6. Monitoring & Reporting
   - Contract Negotiations
   - Approved to Implement
   - Design & Engineering
   - Implement
   - Execution

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MEDSIS Summary

• Within the MEDSIS Initiative the Commission has issued multiple rulemakings – including adopting definitions for various distributed energy resources.
• The Commission has updated interconnection rules to facilitate more efficient interconnection of DERs like Solar PV.
  • The District currently has over 7000 RPS-qualified solar energy systems with over 4000 of those systems located in the District.
  • The MEDSIS WGs are developing recommendations for the Commission to consider and rule upon
• Commission will issue an order based upon the consideration of recommendations from the stakeholder process.
Previous and Upcoming CPI Webinars
2nd Thursdays, 3-4pm ET / 12-1pm PT

Previous Webinars – all presentations can be found on our website

• March 14, 2019: Evolving Approaches to Electricity System Planning
• April 11, 2019: Lessons Learned in Applying Performance Incentive Mechanisms
• May 16, 2019: Stakeholder Involvement in Integrated Distribution Planning

Upcoming Webinars – join us again!

• June 13, 2019: Energy Efficiency and Emerging Technology: How State Programs Can Drive Innovation and Deliver Benefits?
• July 11, 2019: The 411: Cybersecurity Fundamentals that Drive Infrastructure Resilience

Register at: www.naruc.org/cpi