

JU Stakeholder Engagement Webinar

April 27, 2017













Agenda for April 27th 2:30PM – 4:00PM EDT

- The April 27th agenda will include presentations and Q&A sessions on the following topics:
 - Overview and Introductions
 - Matt Robison (ICF)
 - System Data
 - John Borchert (Central Hudson)
 - Customer Data
 - Sara Margaret Geissler (Con Edison)
 - Electric Vehicle Supply Equipment (EVSE)
 - John Leana (National Grid)
 - DER Sourcing
 - Deidre Altobell (Con Edison)















2017 JU Stakeholder Conferences

- The intent of the stakeholder conference webinars is two-fold:
 - Provide an opportunity for the Joint Utilities (JU) to inform stakeholders on the 2017 plans and progress of the nine JU implementation teams
 - Solicit feedback and recommendations from stakeholders through Q&A sessions
- Questions can be submitted via the 'chat function' on the webinar interface
- Webinars are open to the public and recordings will be posted following the webinar on the Joint Utilities website: www.jointutiitiesofny.org
- Please contact <u>info@jointutilitiesofny.org</u> if you have any additional questions following the webinar















2016 JU Stakeholder Engagement Overview

- Joint Utilities established an Advisory Group in April 2016 that met monthly and provided guidance on the Joint Utilities' 2016 stakeholder engagement efforts.
- The Advisory Group will continue to meet in 2017. It is comprised of approximately 15 organizations representative of the breadth of stakeholders that are a party to the proceeding.
- The Joint Utilities facilitated 9 Engagement Groups and two conferences held via webinar in 2016 to help inform the filing of the Supplemental Distribution System Implementation Plan (SDSIP) under REV.















2016 JU Stakeholder Engagement Overview

- 2016 stakeholder engagement goals included:
 - Achieve a shared understanding of complex issues
 - Establish collaboration and create progress on the most challenging issues
 - Identify points of consensus
- Stakeholder webinars were held in July, August and September, open to participation by all stakeholders, for the JU to share updates in their development of the SDSIP and to solicit feedback from stakeholders
- The Joint Utilities filed the SDSIP on November 1, 2016. The Filing incorporated input from stakeholders in the Advisory Group and Engagement Groups
- 2016 was focused on forming a plan. Stakeholder engagement in turn was designed to inform that plan through mutual education, sharing of views, and facilitating feedback on proposals.















2017 JU Stakeholder Engagement Purpose & Goals

- In 2017, the Joint Utilities are transitioning to implementation based on commitments in the SDSIP and individual DSIPs.
- Stakeholder feedback on the filing raised a number of detailed suggestions on approach, many of which the JU can work on addressing in ongoing stakeholder engagement.
- 2017 stakeholder engagement goals include:
 - Inform stakeholders of implementation progress
 - Solicit feedback on implementation progress and achieve alignment for moving forward
 - Incorporate stakeholder input into implementation plans where applicable









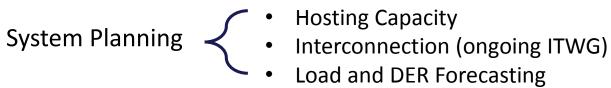


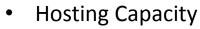




2017 JU Stakeholder Engagement Approach Proposal

The JU have formed 9 implementation teams:

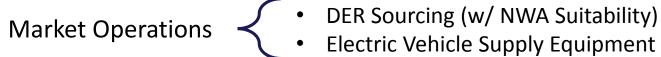




Grid Operations

• Monitoring and Control
• ISO-DSP Coordination









System DataCustomer Data







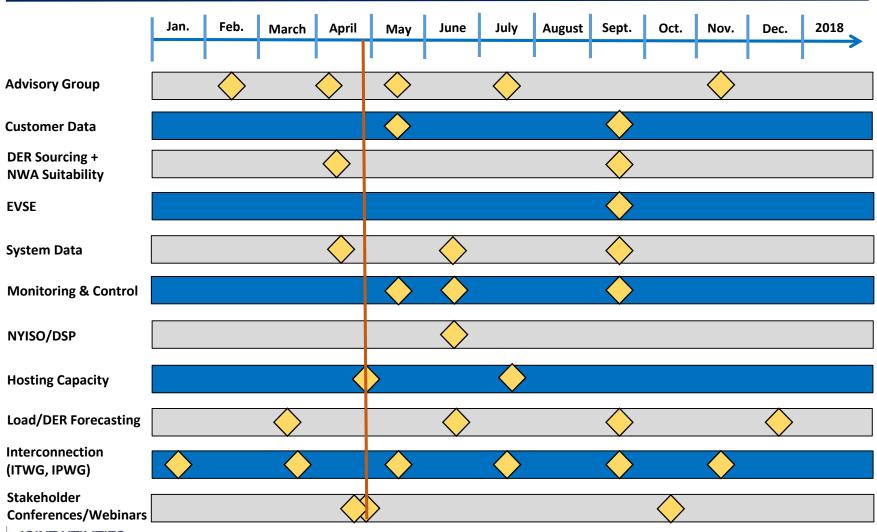








2017 SDSIP Proposed Engagement Plan





JOINT UTILITIES OF NEW YORK

Source: Adapted from the Joint Utilities Supplemental Distributed Implementation Plan, November 2016















Implementation Team Overviews















System Data

John Borchert, Central Hudson















Key Themes from 2016 System Data Discussions

- DER providers expressed a desire for the JU to provide detailed and granular system data, and as frequently as possible to support integration of possible DER solutions
- General agreement that enhancing the transparency of modeling or planning methodologies may reduce the need for specific data request
- JU data availability varies by individual utility, system configuration, technologies employed, and planning needs
- The JU have noted that in addition to providing system data to DER providers, safe and reliable grid operation for which they are responsible will necessitate sharing of information and data from DER providers, and that in general the data requested is driven by the specific DER resource(s) connected to the grid
- General agreement that data security and confidentiality are legitimate considerations accompanying provision of some system data















Key Themes from 2016 System Data Discussions

- General agreement that system data collection and provision will be an evolving process over time as the individual utilities make various capital and other investments to collect and standardize data
- General agreement that DSPs are responsible for system planning and maintaining the reliability, resilience, and safety of the grid, while providing opportunities for DER providers to connect to the grid and offer services
- In response to DER provider requests for some data, understanding the need behind the data request can facilitate the JU in responding.
- General agreement that JU may provide value-added services or information to distributed energy resources















System Data 2017 Implementation Plan

- 1. Enhance stakeholder ability to access and utilize available system data
 - Develop and provide stakeholders an accounting of each utility's currently available data including a description of the location, format, and frequency of such data
 - Highlight utility-specific plans to make data available in consistent and usable format
 - Facilitate stakeholder input on data accessibility, format, priorities for further development of data, and priority elements desired by stakeholders under business development use cases
- 2. System Data Needs Assessment and Update
 - Facilitate stakeholder feedback on utility portals, quality of data supplied, ease of access to information, and other aspects of the stakeholder experience
 - Determine areas where enhanced accessibility and greater transparency may benefit future data and information release
 - Determine what the update frequency should be from a utility perspective and stakeholder use-case perspective















System Data 2017 Implementation Plan

3. System Data Classification

- Develop inventory of system data elements and classification practices, from both utility and user perspective
- Facilitate JU cross-departmental discussion on sensitivity of each data element, including cyber security considerations and requirements
- Develop and propose Terms of Use for specific system data classifications

4. Define basic system data and develop value-added data definition

- Define basic system data that utilities make available today
- Work to develop a common basis for defining "value-added" system data
 - Develop inventory of current JU practices and data definitions
 - Conduct benchmarking study of other utility data definition best practices
- Finalize proposed definition of basic and value-added system data
- Develop rationale and structure for fee-based data and data services
- Facilitate discussion with Stakeholders on JU proposed value-added/basic data definitions and proposed fee structures and revise as may be appropriate















System Data 2017 Stakeholder Engagement

- The system data implementation team will engage stakeholders in 3 meetings during 2017
 - April 20th Meeting #1
 - Information session focused on an overview of the 2017 implementation plan, the objectives and planned outcomes, data availability and stakeholder data needs
 - End of Q2 / Early Q3 Meeting #2
 - Engage with Stakeholders for input on specific implementation efforts underway
 - Focus on stakeholder use cases for current and additional data needs and if the planned implementation meets their needs
 - End of Q3 / Early Q4 Meeting #3
 - Inform and update stakeholders of progress made on implementation efforts presented earlier in the year
 - Share how stakeholder feedback was incorporated into implementation efforts
 - Provide a preview of implementation efforts moving into 2018















April 20th System Data Stakeholder Session Recap

- Reviewed 2017 System Data implementation plan
- Reviewed currently available system data and the location, granularity, format and refresh frequency. The system data 'catalog' reflects stakeholder input from 2016
- Reviewed utility-specific examples of data presentment, definitions, interpretation and other characteristics
- Overview of examples was valuable; improved stakeholder awareness of the extent and availability of the data
- A utility-central data portal would improve ease of access; cited National Grid's portal
- Stakeholder interest in having access to additional and more detailed data. The JU cited business use-cases as framework for further discussion
- Stakeholders were interested in working with the Joint Utilities to develop use cases for the next engagement session
- JU discussed potential to provide value-added data; subject to a fee for interested parties
- The Joint Utilities invited stakeholders to send in suggestions of use cases for system data and any questions to info@jointutilitiesofny.org













Overview of JU Currently Available Data

- At the April 20th stakeholder session in NYC, the JU presented their system data 'catalog' of system data currently available. The catalog included Location, Granularity, Format and Refresh Frequency for the following categories:
 - Capital Investment Plans
 - Load Forecast
 - Load Data
 - Distribution Indicator Maps for Hosting Capacity (Stage 1 Indicators)
 - Reliability Statistics
 - Planned Resiliency / Reliability Projects
 - Beneficial Locations
 - DER Already Connected
 - Data in Queue Application DER
 - NWA Opportunities
 - SIR Pre Application Information















System Data -- Q&A Session















Customer Data

Sara Margaret Geissler, Con Edison















2016 Stakeholder Input on Customer Data

- Expressed support for expanded data access and delivery capabilities available via
 Green Button Connect, and inquired about implementation schedules
- Commented that current authorization and enrollment processes are unnecessarily complicated and require information that often seems obscure to customers. The enrollment process should support a positive customer experience through open authorization and a guided set-up process that keeps customers informed about what services and programs they are signing up for, and the third parties they are authorizing to see their data
- Several use cases for aggregated data were presented by stakeholders
- Stakeholders within the customer and system data engagement groups noted that the uniform aggregated data set would likely be useful or necessary to include in NWA solicitations. Stakeholders also noted that DER providers may eventually be able to obtain data access authorizations from individual customers in a given area and create their own aggregations















2016 Stakeholder Input on Customer Data

- Utility tariffs should be available in a machine-readable format, for ease of access and updating, to support reconstructing a customer's bill. The utilities should closely monitor efforts to develop national standards
- Stakeholders would find it valuable if utilities made whole-building aggregated usage data available state-wide, with support for automated request and uploading to Energy Star Portfolio Manager
- Some stakeholders strongly urged the JU against adopting a 15/15 privacy standard for aggregated data on the grounds that it is overly restrictive and will prevent many entities, particularly small building owners, from complying with existing laws and/or benchmarking their buildings for energy efficiency purposes















Customer Data 2017 Implementation Plan

- 1. Form a JU Customer Data Working Group
 - Share and update JU members on status and outcomes from utility-specific demonstrations, projects and initiatives, focusing on how utility Customer Data has been or may be utilized by authorized 3rd parties and other stakeholders
 - Consult with JU working groups (e.g. System Data and Distribution Planning)
 regarding evolving customer data issues, data requests and processes
 - Engage periodically with stakeholders and PSC Staff
- 2. Monitor and Evolve Customer Data Anonymity Standards
 - Continue monitoring the utility industry to identify best practices for implementing anonymity standards, including:
 - Processes developed, exception handling, utility-specific implementation of regulatory standards
 - Stakeholder engagement process (if any) used during implementation planning and development
 - Implementation roadmaps
 - Develop a JU perspective on existing standards in light of stakeholder comments on SDSIP, possible evolution paths and exception processes















Customer Data 2017 Implementation Plan

- 3. Customer Data Aggregation Requests
 - Develop inventory of customer data aggregation requests and processes used to accept, track and respond to requests
 - Identify, define and prioritize aggregation requests and develop an inventory of more "standard" requests and any "non-standard" requests to date and over time, that are of high-value for stakeholders
 - Identify what, if any, opportunities exist to "automate" aggregation requests, including the potential for standard processes and request portal(s)
 - Facilitate stakeholder engagement and solicit feedback on aggregation request inventory, standard aggregation request processes and potential for enhanced availability via a portal or other automation approach
- 4. Evaluate the Potential for Additional Customer Data Beyond GBC
 - Identify additional data fields beyond GBC standard
 - Facilitate stakeholder engagement and solicit feedback on possible additional data sets including business use-case inventory
 - Prioritize additional customer data sets and develop a roadmap for development as the GB Alliance standards evolve















Customer Data 2017 Stakeholder Engagement

- The Customer Data implementation team will engage stakeholders in two meetings during 2017:
 - May 22 Meeting #1
 - Information session focused on an overview of the 2017 implementation plan, objectives and planned outcomes
 - End of Q3 Meeting #2
 - Inform and update stakeholders of progress made on early implementation efforts
 - Gather stakeholder feedback on further implementation planning
 - Provide a preview of activities moving into 2018















March 9th DSIP Commission Order

Aggregation Data Privacy

- Submit a filing within 90 days of this order, in Case 16-M-0411, containing proposed building energy management and benchmarking data standard(s) for the Commission's consideration
 - The Utilities must work with Staff and interested entities to develop an approach to address a standard(s) that specifically addresses aggregated whole building data outside of New York City.
 - That method shall consider, among other things, a standard that addresses limited access (e.g., building owner/manager/agent access), non-disclosure arrangements, and/or end user consent that is consistent with nationally recognized open standards and best practices.
 - The Utilities should also consider a standard for supplying aggregated whole building data to the public.
 - The Utilities are directed to propose building energy management and benchmarking data standard(s) within 90 days of this Order, which will be subject to future Commission action.















Customer Data -- Q&A Session















Electric Vehicle Supply Equipment (EVSE)

John Leana, National Grid















2016 EVSE Stakeholder Engagement

- Three Stakeholder Engagement Sessions in 2016
 - JU reviewed current utility efforts on REV and EVSE demonstration projects and explored potential EV-related areas for JU collaboration
 - JU and Stakeholders discussed Principles for Utility Involvement in EV infrastructure
 - JU overview of EV adoption forecasting approaches
- Key Takeaways from 2016 Stakeholder Engagement Sessions:
 - Stakeholders encouraged the JU to collaborate both among the JU and with a broad base of stakeholders since many aspects of the EV industry are outside the realm of traditional utility business and operations
 - Stakeholders support JU outreach and education opportunities to utility customers for EV-related topics and to use demonstration projects to inform JU planning and promote EV adoption in high density urban areas as well as suburban environments
 - JU and Stakeholders agreed that an EV Readiness Framework would advance how the utilities currently incorporate EVs into their planning activities and help accelerate demonstration projects
- Stakeholders informed JU EVSE approach and commitments in the SDSIP are incorporated in the JU's 2017 EVSE initiative and implementation plan















EVSE 2017 Implementation Efforts

- Utilities are advancing EV demonstration and pilot projects
- Utilities are continuing to work with regional groups, associations and governments to advance EV initiatives and infrastructure awareness
- In the November 2016 SDSIP filing, the JU committed to developing a joint EV Readiness Framework within 12 months of completion of the comment process for the SDSIP filing
- The JU effort to develop the EV Readiness Framework will begin in June 2017, with an initial in-person stakeholder engagement session planned for Q3 2017
- The JU is targeting Q1 2018 to have the EV Readiness Framework developed which will incorporate stakeholder feedback from the Q3 2017 engagement as well as input from a planned early Q1 2018 engagement session
- Continuing utility-specific activities and stakeholder input informed our 2017 EVSE 2017 Implementation Plan















EVSE 2017 Implementation Plan

- Form a utility working group to collaborate on EV and EVSE issues in New York. This group will meet with stakeholders on a periodic basis to share and inform utility plans, beginning with the development of the EV Readiness Framework.
 - The joint EV Readiness Framework will inform subsequent individual utility initiatives
- Design and conduct individual utility engagement activities with local governments and municipalities
- Continue to participate in groups such as the East Coast Utility EV Initiative
- Continue to support the identification and implementation of EV demonstration and pilot projects















Draft EVSE 2017 Stakeholder Engagement

First Session – Late Q3, 2017

- Review outcomes of 2016 stakeholder engagement discussions
- Provide an overview of the 2017 implementation plan:
 - Update stakeholders on JU working group collaboration efforts
 - Review utility-specific engagement activities with local governments
 - Review utility-specific demonstration and pilot projects
 - Overview status of the development of the EV Readiness Framework and initial draft
- Solicit feedback from stakeholders on the EV Readiness Framework draft

Second Session – Early Q1, 2018

- Review current draft of EV Readiness Framework which incorporates stakeholder comments from Q3 2017 session
- Provide a preview of implementation efforts moving into 2018, including utility specific initiatives guided or informed by the EV Readiness Framework
- Solicit feedback from stakeholders EV Readiness Framework and 2018 initiatives















EVSE -- Q&A Session















DER Sourcing

Deidre Altobell, Con Edison















2016 Stakeholder Input on NWA Suitability Criteria

- Agreement between stakeholders and utilities that projects can be categorized as suitable for NWA and those not suitable for NWA
- Well-designed suitability criteria can be valuable tool to provide an efficient way to engage NWAs
- Stakeholders and utilities agreed that NWA suitability can be guided by criteria related to the type of work, the timeline of the need and the size of the solution.
 - Load relief projects and some subset of reliability / resiliency projects are likely to provide the best early opportunities for NWAs to compete
- Stakeholders requested more utility-specific details associated with the contents of the NWA suitability criteria in terms of how these criteria will be incorporated into utilities' planning process, so that the greatest opportunities for soliciting feasible NWA solutions can be identified
- Stakeholders suggested planning can evolve to explicitly consider infrastructure projects that meet public policy, and other goals not tied to the current planning design criteria.
 - To the extent that these become planning guidelines, they can be incorporated as NWA suitability categories















2016 Stakeholder Input on DER Sourcing

- Stakeholders suggested the procurement process be as streamlined and transparent as possible
- Developers find detailed demographic information very helpful
- The JU should provide a single "portal" where NWA opportunities would be posted, in addition to the existing practice of using the individual utility websites
- The rules for DER participation in multiple programs should be clarified, since some DERs may require multiple revenue streams to be financially viable
- Stakeholders suggested JU standardized commercial and operational performance standards
- Stakeholders expressed interest in gaining insight into the utilities' evolving NWA process
- Stakeholders supported the JU's proposed refinements to the NWA procurement process (e.g., the bidder pre-qualification process), and offered additional suggestions
- Stakeholders believe the utility should include the cost of the "traditional solution" in the NWA opportunity solicitation















DER Sourcing 2017 Implementation Plan

1. Form a JU NWA Procurement Working Group

- Utilities share status and outcomes of their projects and initiatives, focusing on how utility procurements processes, standards, requirements may be evolved and improved
- Consult with other JU working groups regarding evolving procurement-related data issues, data requests and processes
- Engage periodically with stakeholders and PSC Staff

2. Evaluate potential for NWA Procurement standardization

- Develop options for use of a centralized portal to post NWA opportunities
- Identify and develop standardized data sets for NWA procurements
- Evaluate opportunity for NWA bidder pre-qualification
 - Business objectives, requirements, standards
 - Use-case scenarios and applicability
- Develop commercial and operational performance standards
- Conduct benchmarking of other utilities and emerging best practices













DER Sourcing 2017 Implementation Plan

3. Evaluate opportunities for low-income customer participation

- Identify candidate areas in each utility service territory, including characteristics and constraints
- Develop an inventory of potential utility demonstration projects which may present opportunity for LMI participation
- Engage with appropriate customer groups/stakeholders to preview demonstration project plans, objectives and timing as well as periodically update stakeholders on progress and results of demonstration projects

4. NWA Suitability Criteria Matrix

- Develop and publish utility-specific NWA suitability criteria
- Develop a process and timeline for annual review of potential updates or changes to utility-specific NWA suitability criteria















DER Sourcing 2017 Stakeholder Engagement

First Session – April 20th

- Reviewed outcomes of 2016 stakeholder engagement discussions around NWA Suitability Criteria
- Provided an overview of the 2017 implementation plan for DER Sourcing, the objectives and planned deliverables
- Informed stakeholders of the NWA process from identifying the opportunity to award/contract
- Informed stakeholders of the outline of the NWA Suitability May 8th Filing

Second Session – End of Q3/Early Q4

- Update stakeholders on progress of implementation efforts presented earlier in the year
- Share how stakeholder feedback was incorporated into implementation efforts
- Preview of implementation efforts moving into 2018
- Engage with customer groups/stakeholders to preview demonstration project plans, objectives and timing of low-income customer participation (LMI)















April 20th DER Sourcing Stakeholder Session Recap

- Stakeholders found the overview of the JU NWA sourcing process useful, particularly timing of identifying NWA opportunities and resulting solicitations
- Stakeholders provided feedback on the types of operational and demographic data that best informs potential bidders. JU noted that future deeper discussion would be useful
- Stakeholders requested utilities consider a broader, bottom-up approach and look at the entire system – not just the Capital Investment Plan – for potential NWA solutions
- JU commented that the approach for NWA and the suitability criteria was developed in 2016 with stakeholder input and is being applied in 2017. Lessons learned this year will inform potential refinements going forward
- Stakeholders expressed interest in incorporating environmental policy goals are part of the planning process
- The group discussed the time frame for developers to respond to RFPs and agreed it depended on the type, size and location of the project but warrants further discussion
- Stakeholders encouraged use of broader channels such as industry associations and conferences to share announcements of upcoming NWA opportunities







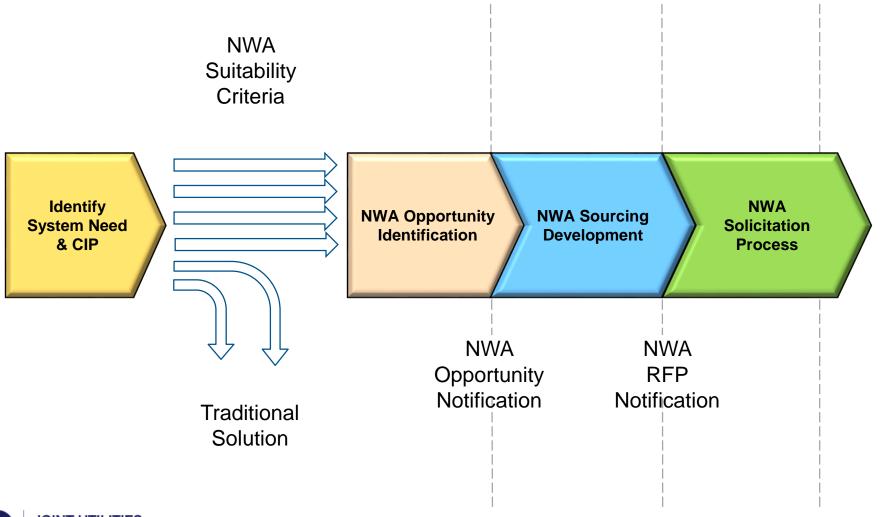








Planning Process and Sourcing Overview

















DER Sourcing -- Q&A Session















Wrap – up















Stakeholder Engagement Webinar Wrap-up

- Please fill out the short survey after the webinar if you have any additional questions or feedback regarding the material or engagement process
- More information regarding 2017 activities of the Joint Utilities can be found online: www.jointutilitiesofny.org
- Please email <u>info@jointutilitiesofny.org</u> with any additional questions or comments

















Please contact info@jointutilitiesofny.org

or

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Appendix: Supplemental DSIP Commitments















System Data – JU SDSIP Commitments

Page	SDSIP Commitments Source: Joint Utilities Supplemental Distributed Implementation Plan, November 2016
	Within the next 12 months, the Joint Utilities envision the following three-step process to enhance the ability to utilize available data:
135	• Step 1 : The Joint Utilities will provide a comprehensive comparison of data available in static filings, such as rate proceedings and capital investment plans to interested stakeholders. The comparison will show each utility's available data sets and include a description of the location, format, and frequency of such data. The Joint Utilities will suggest common formats for the common data elements identified.
	• Step 2: The Joint Utilities will seek stakeholder input on the data formats and their priority for development of the data suggested in Step 1. The Joint Utilities will also seek stakeholder input on priority elements desired by stakeholders in their business development efforts.
	• Step 3: The Joint Utilities will provide a final sample format for data elements accounting for comments received in Step 2. The Joint Utilities will also provide a schedule for provision of new data series in the format as per comments received in Step 2.
135	In the medium- to long term, the Joint Utilities propose an ongoing, annual needs assessment that will seek stakeholder feedback on their portals, quality of data supplied, ease of access to information, and other aspects of the stakeholder experience. The feedback received will be used to
136	determine areas where further accessibility and transparency may benefit future data and information release. The feedback would also provide valuable input into future DSIP filings.
135	Classifying system data based on sensitivity of the information, both as a stand-alone data item and packaged with additional information
135	Defining value-added and basic data including developing potential fee based structures for data services













Customer Data – JU SDSIP Commitments

Page	SDSIP Commitments
147	The Joint Utilities will form a Customer Data working group, which will meet periodically to share outcomes from utility-specific projects and initiatives, as well as to report on its findings to stakeholders and Staff. This group will consult with and include as necessary utility representatives from the Grid Operations and Distribution System Planning functions for consistency.
147	Monitor and evolve the anonymity standard for aggregated data, and engage periodically with stakeholders to share ideas and gather input
147	Develop a common process for tracking aggregated data requests and responses. This will allow the group to identify, define, prioritize, and schedule for implementation requests for non-standard aggregations that are of high value to stakeholders
145	The Joint Utilities commit to work together to develop specifications for transmitting any additional data fields beyond what is provided through the current Green Button Connect standard. Current and future stakeholder input will help to inform the Joint Utilities' consideration of additional data sets.
147	Share learnings from individual utility REV and other demonstration projects
147	The Joint Utilities will continue to participate in the EDI Collaborative working group.











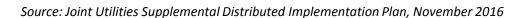




EVSE – JU SDSIP Commitments

Page	SDSIP Commitments
115	The Joint Utilities will develop a joint EV Readiness Framework, which will inform subsequent individual utility initiatives, within 12 months of completion of the comment process for this Supplemental DSIP filing
117	The utilities will continue to support the identification and implementation of EV demonstration and pilot projects
118	The Joint Utilities commit to forming a utility working group to collaborate on EV and EVSE issues in New York. This group will meet with stakeholders on a periodic basis to share and inform utility plans, beginning with the development of the EV Readiness Framework.
118	Finally, the utilities will design and conduct individual utility engagement activities with local governments and municipalities.
118	At the regional level, the utilities will continue to participate in groups such as the East Coast Utility EV Initiative.











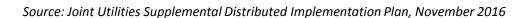




DER Sourcing – JU SDSIP Commitments

Page	SDSIP Commitments
108	Specifically, the Joint Utilities will form an NWA procurement working group that will implement the proposed actions and further develop standardized practices over time (where appropriate)
107 - 108	The Joint Utilities will also pursue opportunities to present NWA opportunities at a centralized location, such as the REV Connect portal
108	Develop standard data sets for short-term and longer-term NWA procurements
108	Implement bidder pre-qualification requirements and standards, where applicable
108	Implement commercial and operational performance standards
108	The working group will meet with stakeholders at least once a year to share Joint Utilities' plans and solicit input and feedback
108 - 109	The Joint Utilities plan to progress toward enabling low-income customer access to DER by engaging with these customers and testing the resulting findings in a demonstration project environment















ISO-DSP – JU SDSIP Commitments

Page	SDSIP Commitments
92	The stakeholders agreed that the near- to medium-term coordination areas identified by the Joint Utilities, which include standardization of communication protocols, increased information sharing on net-metered type of resources, and enhanced forecasting capabilities, are steps in the right direction to improve efficiency of current coordination.
93	The stakeholders were supportive of quarterly discussions between NYISO and the Joint Utilities. Stakeholders also expressed their interest in receiving annual updates on the NYISO and Joint Utilities discussions.
135	 The Joint Utilities propose to engage with NYISO on a quarterly basis to discuss upcoming coordination issues. Proposed topics for regular discussion will include: Information exchanges between the utility and NYISO on content, format, and timing, and communication method; Short-term forecasting (for operational purposes including real-time, day-ahead, week-ahead) of net load and autonomous DER behavior; Long-term forecasting for planning purposes as highlighted in the "Continued Coordination with NYISO" discussion under the <i>Load and DER Forecasting</i> section; Ability to forecast system impacts of NYISO dispatches of DER (<i>i.e.</i>, "feasibility" of NYISO dispatches); Standard market jurisdiction and operations interface development between utilities and NYISO; and Situational awareness, such as monitoring, data types and granularity, and methods of communication. Operating procedures to monitor and control the dispatch of DER in normal and emergency conditions (real time and contingent).











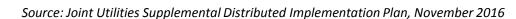




Monitoring and Control – JU SDSIP Commitments

Page	SDSIP Commitments
83	As a part of this continued collaboration and beginning in January 2017, the Joint Utilities will meet every two months discuss important issues, such as the adoption of emerging protocols, an implementation timeline for the monitoring and control standards, and enforcement procedures.
83	Stakeholders identified and raised several points in the initial engagement sessions that warrant further discussion and consideration. These topic areas include communication protocols, inverter technology capabilities, and visibility into the development of monitoring and control standards. Conversations with stakeholders will be part of an overall continuing engagement process envisioned to cut across multiple areas.

















Hosting Capacity – JU SDSIP Commitments

Page	SDSIP Commitments Source: Joint Utilities Supplemental Distributed Implementation Plan, November 2016
61	The Joint Utilities have begun an interim step that provides additional data and improved consistency in the indicator maps. The updated indicator maps will be released by early 2017 with an expanded set of data and greater alignment on the methodology and approach.
64	All utilities will have completed an analysis of hosting capacity at the feeder level for at least 50 percent of the circuits on their system and will publish the results of these analyses on their respective websites by the end of 2017. The selection of target circuits for this milestone will be based on the availability of data and circuit models needed to carry out the analysis and the level of solar PV developer interest in the corresponding areas of each utility's territory.
65	The move to advanced hosting capacity analysis is tentatively scheduled to begin in late 2017, but that timeframe is contingent on the resolution of queue management issues and the development of an enhanced version of the EPRI DRIVE tool that is capable of incorporating the impacts of interconnected DER into sub-feeder-level hosting capacity calculations. EPRI expects to have this enhanced tool available by mid-2017.
71	The Joint Utilities will continue to advance efforts toward implementing a streamlined approach for calculating hosting capacity. Future efforts for advancing hosting capacity analysis will occur both among the utilities and through stakeholder engagement.
71	The Joint Utilities have agreed to continue stakeholder engagement efforts by hosting at least one meeting annually. The Joint Utilities acknowledge that elements of hosting capacity analysis will evolve and continued stakeholder engagement will provide a forum for collaboration on future progression of this analysis. In particular, the Joint Utilities have initially identified three areas for further discussion: 1) further identification and evaluation of solutions for increasing hosting capacity; 2) potential additional use cases for hosting capacity; 3) cost allocation structure for future efforts to increase hosting capacity.













Load and DER Forecasting – JU SDSIP Commitments

Page	SDSIP Commitments
39	Moving forward, the Joint Utilities will coordinate both internally and externally to facilitate efforts in enhancing the forecasts and the distribution planning processes.
46	NYISO and the Joint Utilities have established a task force that will meet at least quarterly to identify changes that need to be made to existing coordination processes and establish a process for information sharing and protocols. These enhanced coordination efforts between NYISO and utilities will help maintain the consistency of load forecasting results so that the impact of DER on net load will be better reflected in NYISO's zonal forecasts and its related planning processes.
46	The Joint Utilities will validate and benchmark the developer forecasts to further inform their views on market trends related to the rate and locations of DER adoption.
47	To engage with stakeholders in further enhancing forecasts, the Joint Utilities commit to host six engagement group meetings by the middle of 2018 and then annually from 2019 to 2021 to focus on the utilities' roadmaps for the continued development of long-term load and DER forecasts. Stakeholder input will facilitate efforts by the utilities to align on common objectives and outcomes for forecasting. Additionally, the Joint Utilities will solicit input from stakeholders on potential use cases for 8760 forecast data.
47	The Joint Utilities will maintain the ongoing communication & coordination with NYISO to evaluate the possibility of pursuing scenario analysis by identifying possible approaches for the development of DER and load growth scenarios and exploring the potential value of such an approach.















Interconnection – JU SDSIP Commitments

Page	SDSIP Commitments
75	The Joint Utilities are committed to working in parallel to achieve automation of the various components of the interconnection process in the timeframes outlined in the IOAP roadmap.
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76	The Joint Utilities will work closely with IPWG to develop future interconnection plans, including any changes to the interconnection process. The IPWG's goal is to explore non-technical issues related to the processes and policies relevant to the interconnection of DG in New York. Specifically, it has developed proposals for interconnection queue management of DG and associated cost sharing mechanisms.
76	The Joint Utilities will work closely with ITWG to develop future interconnection plans, including any changes to the interconnection process. The ITWG seeks to maintain a collaborative approach among the utilities, Staff, NYSERDA, and developers in addressing the technical components of the DG interconnection process while also providing reliability and safety.
83	The Joint Utilities will meet every two months to discuss important issues related to Monitoring & Control standards, which requires collaboration with the ITWG and other Joint Utilities' working groups to maintain consistency. The coordination shall entail reviews of technical standards, as well as to identify implementation instruments, and to develop a timeline to amend and revise these identified instruments to enforce the expanded monitoring and control framework. It is anticipated that reviews with the ITWG will be on a quarterly basis beginning the second quarter of 2017. Updates regarding the discussions will be provided in the subsequent DSIP filings by the utilities.













