NEW YORK STATE | Department of Public Service

KATHY HOCHUL
Governor

RORY M. CHRISTIAN
Chief Executive Officer

November 15, 2024

Via Electronic Mail
Hon. Michelle L. Phillips
Secretary to the Commission
New York State Public Service Commission
Agency Building 3
Albany, NY 12223-1350

Re: Case 24-E-0165 - Proceeding on Motion of the Commission Regarding the Grid of the Future.

Dear Secretary Phillips,

Attached, for filing in the above-referenced case, is the presentation from the technical conference held today, November 15, 2024, as well as a link to a recording of this meeting. The recording may be accessed at the following link:

Recording of November 15, 2024 Technical Conference

Please feel free to contact me at (518) 408-1441 or Stephanie.McDermott@dps.ny.gov should you have any questions.

Sincerely,
/s/ Stephanie S. McDermott
Assistant Counsel

Developing New York's Grid of the Future Plan

INTRODUCTION AND PHASE 2 OVERVIEW

PREPARED BY

The Brattle Group
DNV

TECHNICAL CONFERENCE
NOVEMBER 15, 2024

Agenda

1. Team Introductions
2. Project Overview
3. 2023 DSIP Assessment
4. Key DSIP Elements Assessment
5. DSIP Regulatory Assessment
6. Next Steps
7. Q&A

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The Core Brattle/DNV Team

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Modeling Lead

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GOTF Study Overview

Phase I:
Grid Flexibility Potential Study

- Quantitative assessment of cost-effective, achievable potential for grid flexibility
- Identify barriers and preliminary options for addressing barriers
- Outcome: Grid Flexibility Study Report

Phase II:
Grid of the Future Plan 1 (DSIP Assessment)

- Review DSIPs relative to current guidance and
- Prioritized elements for DSP development
- Update DSIP guidance for utilities
- Outcome: Grid of the Future Plan (1st iteration)

Phase III:
Grid of the Future Plan 2 (Roadmap)

- Develop roadmap for achieving long-term grid flexibility vision for New York
- Establish framework for updating the roadmap over time
- Outcome: Grid of the Future Plan (updated)

Link @DMM Page: https://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterSeq=73032&MNO=24-E-0165

Link to Grid of the Future Initiating Order: https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={202DF28E-0000-CF13-8DDF-8A223502E3B8}

GOTF Study Overview

Phase I:
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(DSIP Assessment)

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Focus of today's discussion

Phase III:
Grid of the Future Plan 2
(Roadmap)

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DSIP Background

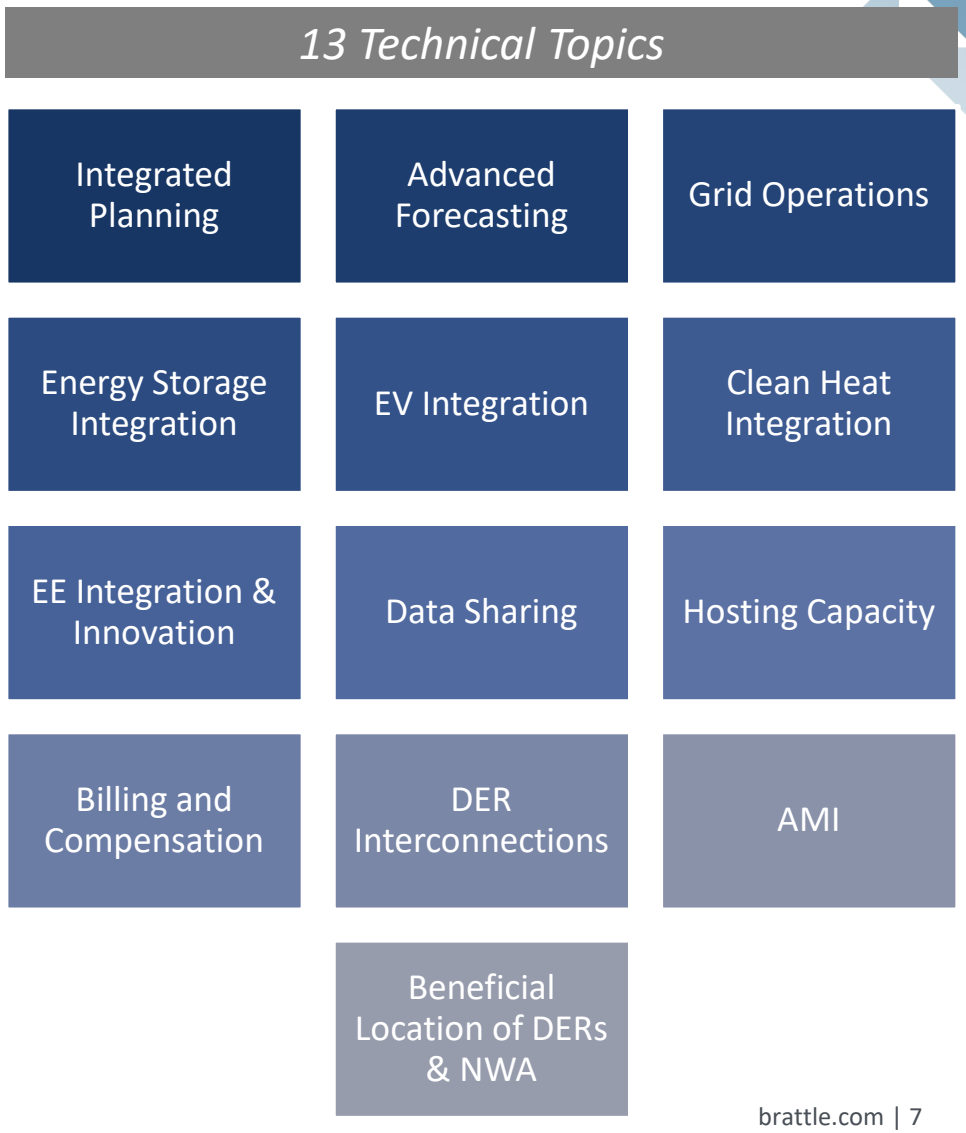
DSIP History: As Part of the 2015 REV proceeding, the utilities were required to file a Distributed System Implementation Plan (DSIP) bi-annually starting in 2016

DSIP Purpose: Describe the progress and plans for implementing a Distributed System Platform (DSP) enabling a transition to the grid of the future

DPS DSIP Guidance: Ensures consistency in the filings and includes prompts across 13 technical topic areas

- 4 general prompts are common across technical topics
- Up to 15 specific prompts that are unique to each technical topic

The Order included a review of the current DSIPs and the overall process including the guidance



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2023 DSIP Assessment

Assessment objectives

- Review 2023 DSIPs for alignment with DPS guidance
- Review DPS guidance (organization, prompts, etc.) in context of DSIP response to identify areas of improvement
- Develop actionable and useful feedback for improving future DSIPs and the process

Assessment Approach

- Development of a consistent review process by subject matter experts
- Simple and easy to follow scoring to understand the DSIPs alignment with the DPS guidance
- Rationale to support scoring feedback
- 1:1 meetings with each utility to give and receive feedback

The assessment is not determining the impact or maturity of the solutions put forth since the DSIPs are primarily progress reports of activities undertaken relative to the technical topics.

2023 DSIP Assessment Scorecard

Assessment Approach

Purpose of Scorecard

Determine the alignment of each DSIP with the DPS guidance and provide useful rationale / feedback.

Format of Scorecard

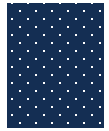
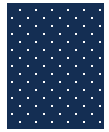
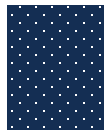
Each scorecard represents a review of one utility's DSIP. It is organized into an introduction / summary tab and 13 additional tabs for each technical topic described in DPS guidance.

Scoring

Check	Rating	Description
/		Information not provided
X		Some evidence indicating that that DSIP has followed the DPS guidance.
X		Sufficient evidence that DSIP has followed the intent of DPS guidance
X		Good job, nice discussion of ideas. The plan is robust, believable, and follows industry best practice.

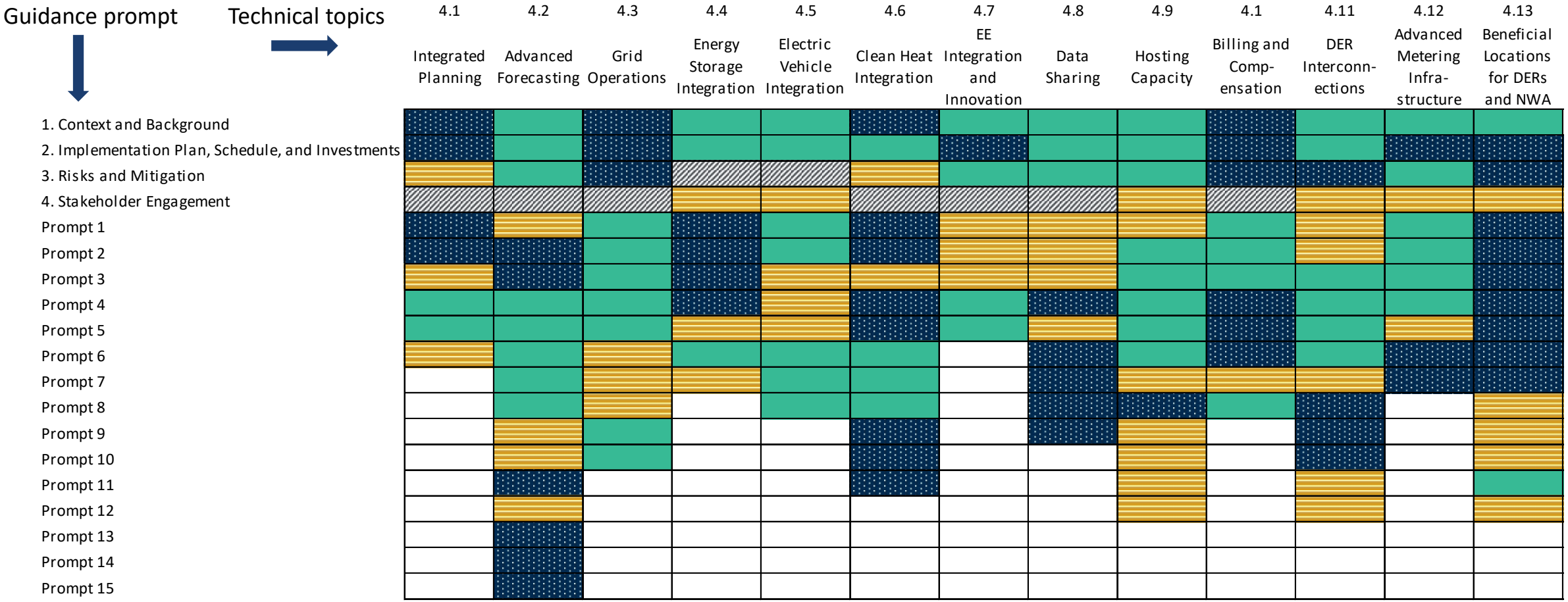
2023 DSIP Assessment Scorecard

The matrix shows an example of a scored technical topic. These individual tabs allow the user to see the scoring to specific prompts and rationale.

Energy Efficiency Integration & Innovation Specific Prompts	Check	Rating	Rationale
1. The resources and capabilities used for integrating energy efficiency within system and utility business planning.	X		A summary and links to other sections for more detail were provided.
2. The locations and amounts of current energy and peak load reductions attributable to energy efficiency and how the utility determines these.	X		A summary of the detail the utility collects was provided.
3. A high-level description of how the utility's accomplishments and plans are aligned with New York State climate and energy policies and incorporate innovative approaches for accelerating progress to ultimately align with the CLCPA.	X		Very little detail was provided.
4. Summary information on energy efficiency programs offered by the utility, with direction to annual filings for more detailed information on energy efficiency programs.	X		Details on multiple programs as well as links to annual reports were provided.
5. Describe how the utility is coordinating and partnering with NYSERDA's related ongoing statewide efforts to facilitate energy efficiency market development and growth.	X		Description of three market-stimulating partnerships was provided.

2023 DSIP Assessment Scorecard

The matrix shows an example **cumulative scorecard**. This cumulative view allows the user to see where the DSIP excels and where there is room for improvement.



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Key Elements Inputs

1

Secondary Research

- Best practices in grid modernization, distribution planning and DSO frameworks
- Leading US industry organizations including PNNL, NREL, DOE and EPRI
- UK/Europe best practice review

2

State & Legislative Requirements

- CLCPA requirements
- Metrics that apply to distribution for solar, storage, EVs and BTU reductions

3

Regulatory Proceedings

- Active proceedings that indicate priority efforts / key barriers

4

Phase 1: Grid Flexibility Study

Quantitative Outcomes	Study provides insights into untapped potential

5

Phase 1: Grid Flexibility Study

Qualitative Outcomes	Industry interviews and survey results detailing areas of need

6

GOTF Proceeding Context

- Guiding principles
- DPS guidance for DSIPs
- Stakeholder engagements

Key Elements Objective

- Identify and prioritize the elements that must be timely implemented to support achievement of New York State's decarbonization objectives

Guiding Principles

- Guide Distributed System Platform (DSP) investments as a progression that meaningfully contributes to a decarbonized grid
- Build off existing work and activities in NYS (regulatory, working groups, etc.)
- Provide a flexible framework that drives outcomes, capabilities and vision for all NYS utilities

Key Elements Framework Example

Outcomes/Goals
Future Update: connect framework to outcome/goals identified in Phase 3 Roadmap.

Maturity Spectrum

4	Capabilities & Mechanisms	Capabilities & Mechanisms	Capabilities & Mechanisms	Capabilities & Mechanisms	Capabilities & Mechanisms	Capabilities & Mechanisms
3	Capabilities & Mechanisms	Capabilities & Mechanisms	Capabilities & Mechanisms	Capabilities & Mechanisms	Capabilities & Mechanisms	Capabilities & Mechanisms
2	Capabilitie Mechanisr					pabilities & echanisms
1	Capabilities & Mechanisms	Capabilities & Mechanisms	Capabilities & Mechanisms	Capabilities & Mechanisms	Capabilities & Mechanisms	Capabilities & Mechanisms
0	Capabilities & Mechanisms	Capabilities & Mechanisms	Capabilities & Mechanisms	Capabilities & Mechanisms	Capabilities & Mechanisms	Capabilities & Mechanisms
	Key Element	**Key Element**	**Key Element**	**Key Element**	**Key Element**	**Key Element**

Capabilities: required abilities for each stage of a grid mod journey
Mechanisms: business operations, technologies, etc. to enable those capabilities

Key Elements: a logical grouping of smart grid related characteristics

Key Elements Framework Applications

1

Assess 2023 DSIPs

- Complete a forward-looking assessment of the DSIPs to determine starting point on maturity spectrum

2

Inform Guidance Updates

- Support recommendations for strengthening and focusing guidance

3

Support Phase 3 Roadmap

- Provide first draft of a framework that reflects progression and goals

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Regulatory Assessment

Assessment objectives

- Determine how the regulatory environment is supporting or hindering the activities in the DSIPs or more broadly the utilities developing a Distributed System Platform (DSP)
- Understand the scale of impact that those barriers / support have for executing DSIP activities.
- Allow DPS to see where policy is supporting these goals and where policy is not aligned.

Assessment Approach

- Develop comprehensive barriers and tailwinds that impact the goals of the DSIPs
- By barrier and tailwind, assess the level of impact created based on a regulatory review of activities in NYS.

This assessment is not a review of individual DSIPs. The assessment looks at the regulatory environment comprehensively.

Regulatory Assessment

Example of a regulatory barrier assessment.

Item #	Barrier	Barrier Description	Impact	Rationale	Supporting Info	General Topic	Technical Topics
1	Project Cost Allocation	Complexity in determining costs are shared when adding DERs to the systems. System needs should determine the types of services needed and the locational benefits of DERs. This complexity is leading to slower integration, unclear signals for system needs, and suboptimal use of DERs.	High	There is no clear methodology to assign value to the different needs. Each utility is using different approaches resulting in unclear procurement signals.	Cost allocation of multi-value project: Stakeholders recognized "the difficulty of allocating costs of a multi-value project between growth and reliability purposes". However, concerns were raised about the Joint Utilities using their judgement to distinguish between the drivers for project investments. Case 15-E-0751: Value of Distributed Energy Resources (VDER): Demand response is valued as part of the broader Value Stack methodology, which assigns specific values to different components of DER contributions, including energy, capacity, environmental, and distribution system values. Reference: “Staff proposes to base a DRV credit on the marginal cost of service (MCOS) studies developed by utilities to value peak demand reductions in the Dynamic Load Management proceeding.”	Cost allocation Project valuation	Integrated Planning DER Interconnection

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Key next steps

Additional technical conferences

- Potential study results review (Phase 1)
- Grid of the Future Plan review (1st iteration)
  - Leverage the results of the Flexibility Study
  - Focus on the development of a more expansive DSIP process aligned with the proceeding's goals
  - Present the key elements, results of our DSIP assessments, and other insights that will feed into the Grid of the Future Plan

Other outreach

- 1:1 DSIP scorecard meetings with the utilities to review prelim results before final report
- Ongoing expert interviews
- Stakeholder survey to prioritize barriers and solutions

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