



# REV – the Redefinition of the NY State Energy Equation



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### Reliability, Resilience and Recovery of the Distribution System:

- Blackouts in the Northeast are among the most expensive in the world.
- Severe weather interruptions can result in some of the greatest inconveniences to life as we know it.
- 90% of Long Island Power Authority (LIPA) customers were without power as a result of Sandy.
- The transmission backbone during Sandy remained largely intact, widespread distribution issues.
- Gasoline shortages were also widespread on Long Island during Sandy due to critical gasoline distribution system shutdowns, many of which were directly due to electric distribution system shutdowns.
- Many customers were without power over 1 week after Sandy.



## Creating – a need for fundamental change

Starting with the impacts of Superstorm Sandy, this reflected a convergence of circumstances that was necessary to drive fundamental change in the electric industry.

- Cost pressure caused by the need to replace aging supply and delivery infrastructure.
- Increased customer reliance on reliable and high-quality electricity.
- The need to reduce carbon emissions and the associated costs and threats to infrastructure posed by increasingly severe climate events.
- Security threats to electric systems, both cyber and physical.
- Technology developments in distributed generation and information systems, which challenge incumbent systems and present opportunities for transformation of those systems.
- Electric price volatility caused by increasingly greater dependence on natural gas as a primary generation fuel source.



## Asking new questions that needed to be answered

In December 26, 2013, the commission announced a fundamental reconsideration of our regulatory paradigms and markets. With respect to our regulation of distribution utilities, the Order identified the following key questions:

- What should be the role of the distribution utilities in
  - Enabling system wide efficiency and
  - Market based deployment of distributed energy resources and load management?
- What changes can and should be made in the current regulatory, tariff, and market design and incentive structures in New York to better align utility interests with achieving our energy policy objectives?

Current ratemaking provides few incentives for utilities to innovate or to support third-party innovation, to address the current challenges in ways that promote a more efficient system and benefit consumers.

Programs to encourage efficiency and clean energy are funded through surcharges and programs that are not directly integrated with utility business models.

Although the existing paradigm served adequately for many years, it now falls short of the pace of technology development that defines many parts of our economy.



## The DPS identified two main areas of focus

- ❑ Enable and facilitate new energy business models for utilities, energy service companies, and customers to be compensated for activities that contribute to grid efficiency.
- ❑ Maximize the cost effective utilization of all behind the meter resources that can reduce the need for new infrastructure though expanded
  - demand management
  - energy efficiency
  - clean distributed generation, and
  - Storage



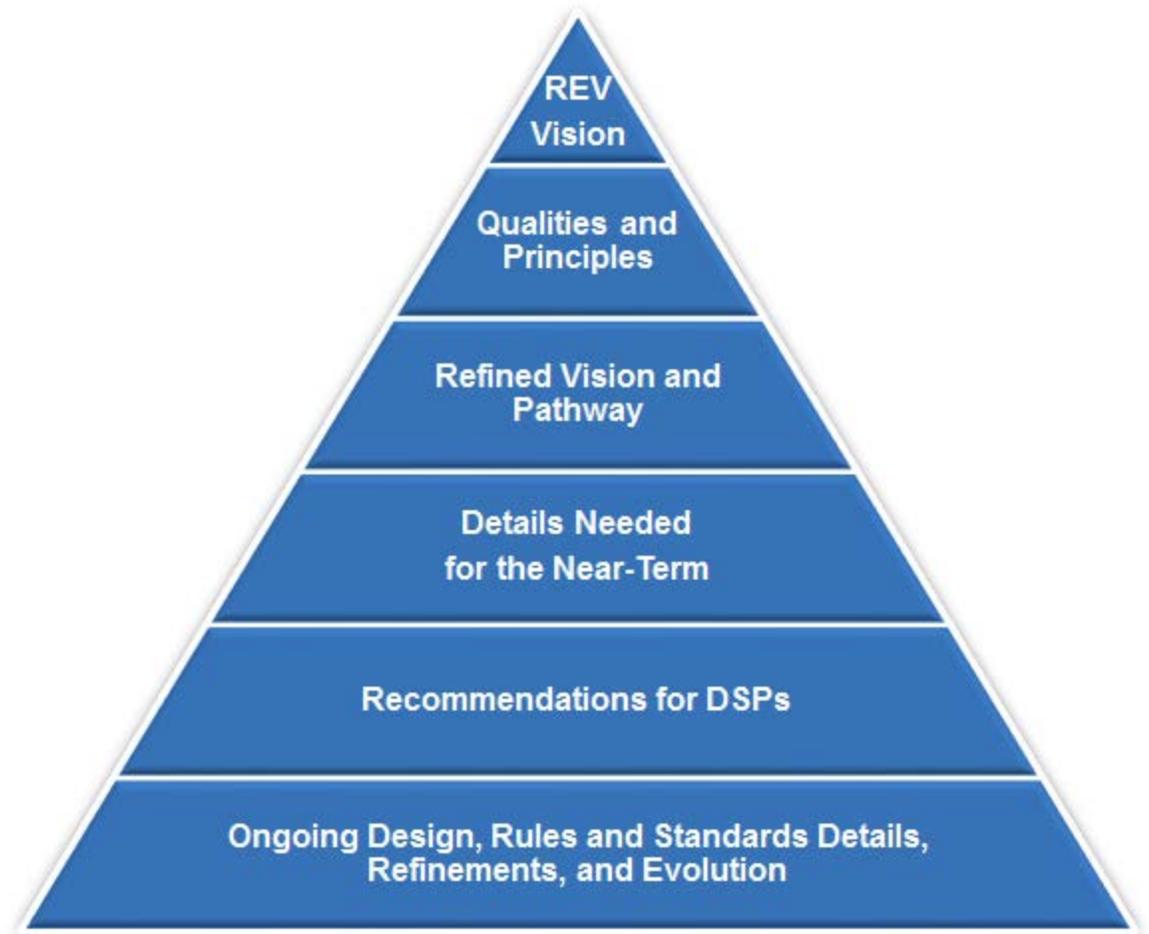
# The NY perspective - it is all about REV?

## ❑ REV Policy Objectives:

- Customer engagement
- System reliability and resilience
- Market animation, leverage of ratepayer contributions
- System wide efficiency
- Fuel and resource diversity
- Reduction of carbon emissions

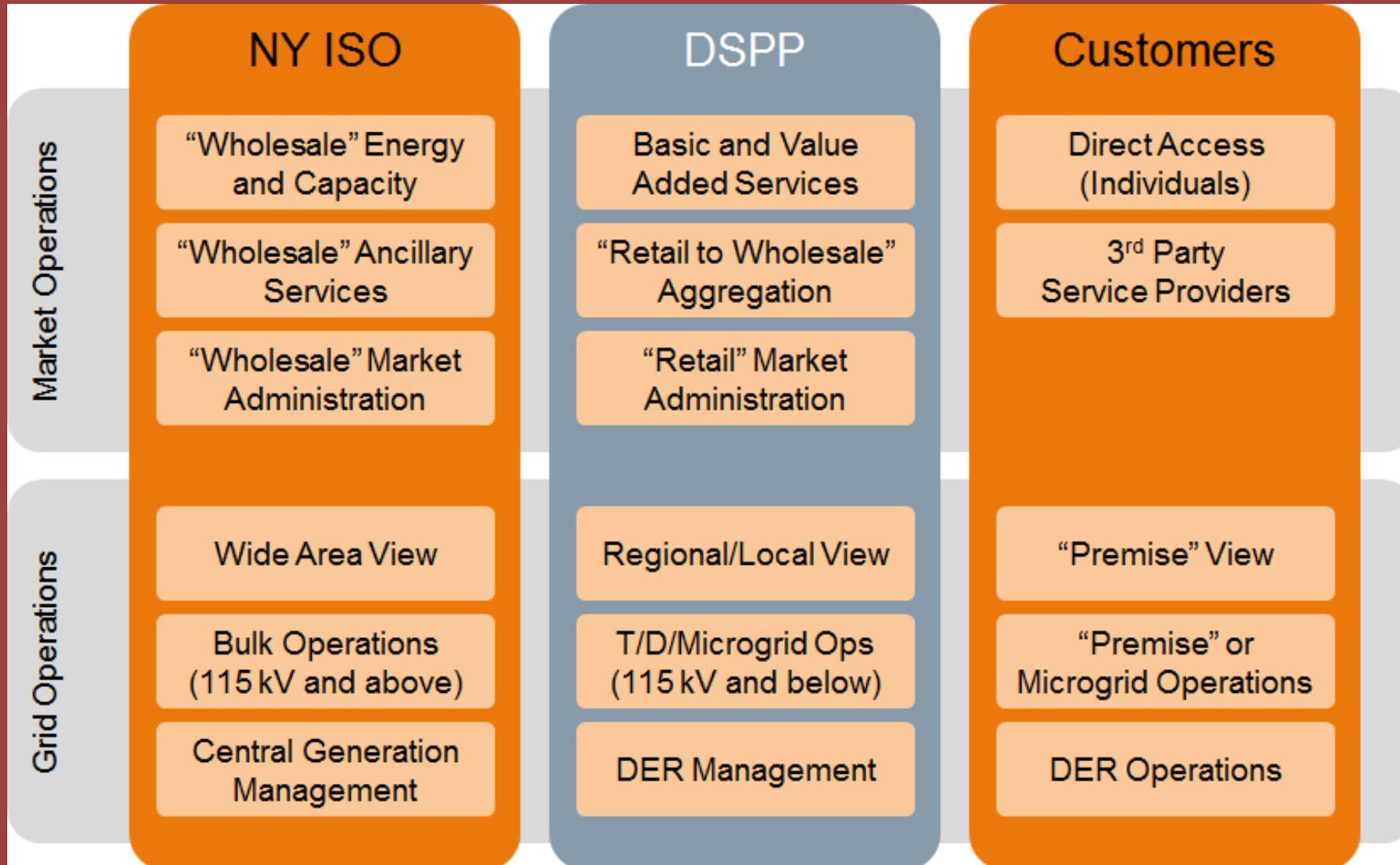
## ❑ The DSP:

- Is an intelligent network platform that provides safe, reliable and efficient electric services by integrating diverse resources to meet customers' and society's evolving needs.
- Fosters broad market activity that monetizes system and social values, by enabling active customer and third party engagement that is aligned with the wholesale market and bulk power system



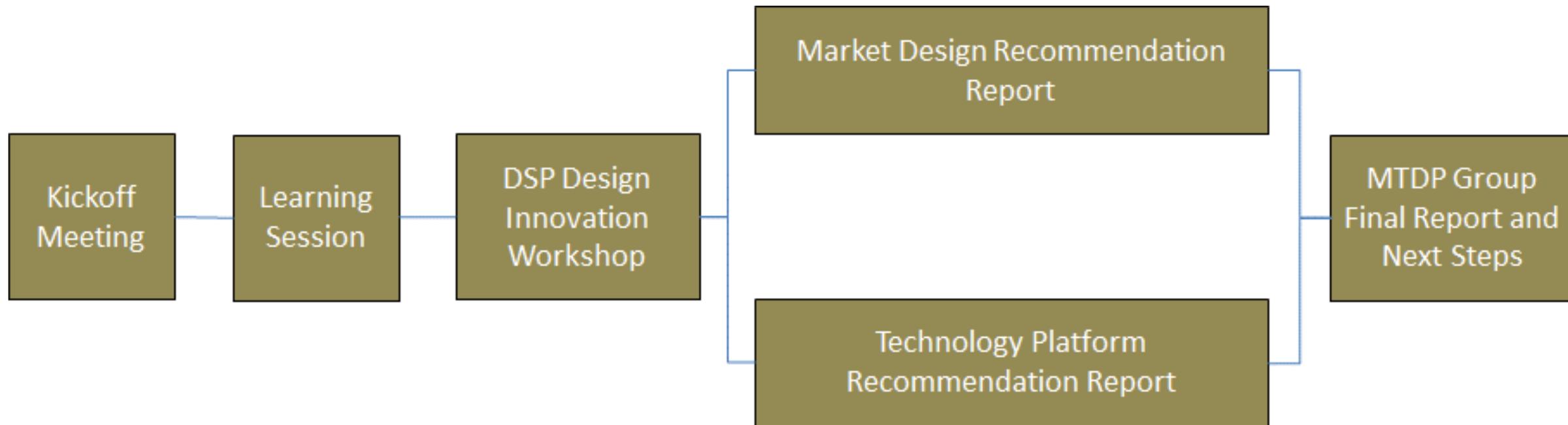


# SCOPE AND ROLES





# Market Design & Technology Platform (MTDP) Group Process: Scope & Schedule





# Market Design Recommendation Report

Objective	Clarify a conceptual staged transition path,, develop high-level near-term and mid-term market use cases, provide guidance for utility DSIPs related to market rules, and specify any other recommendations that require Commission action.
Activities	<ul style="list-style-type: none"><li>● Identify near-term and mid-term market design components and recommendations for what is needed to enable those markets</li><li>● identify key DSP functions and capabilities</li><li>● identify optimal methods to achieve price transparency</li><li>● develop and populate near-term and mid-term use case templates</li><li>● Develop recommendations for what should be addressed in utility DSIPs related to market design</li><li>● Create report</li></ul>
Outputs	<ul style="list-style-type: none"><li>● Report to the Commission summarizing recommended actions needed to enable the near-term market, guidance for utility DSIPs, and use cases</li></ul>



## Market Design Recommendation Report - Key Questions to be Answered

- What defines the DSP market, and how might it evolve from near-term to mid-term to long-term?
- With a focus on the near-term but in the context of the overall transition, what functionality must the DSP market provide to achieve REV's goals?
- How will different actors interact with the DSP market and what are the implications for data availability and transparency?
- What elements of market design must be standardized across DSPs and what rules are needed to adequately govern the market?



# Tech Platform Recommendations Report

Objective	Develop technical requirements identified through the near-term and mid-term use-cases, identify applicable standards for all interfaces with both the DSP and the NYISO, and develop guidance for utility DSIPs related to technical standards.
Activities	<ul style="list-style-type: none"><li>● Identify needed standards and components that must be uniform across DSPs</li><li>● With market design group, develop near-term and mid-term use case templates</li><li>● Populate use case templates</li><li>● Develop recommendations for what should be addressed in utility DSIPs related to market design</li><li>● Create report</li><li>● Seek party input via...</li></ul>
Outputs	<ul style="list-style-type: none"><li>● Report to the Commission summarizing recommended actions needed to enable a standardized technology platform, guidance for utility DSIPs, and use cases</li></ul>

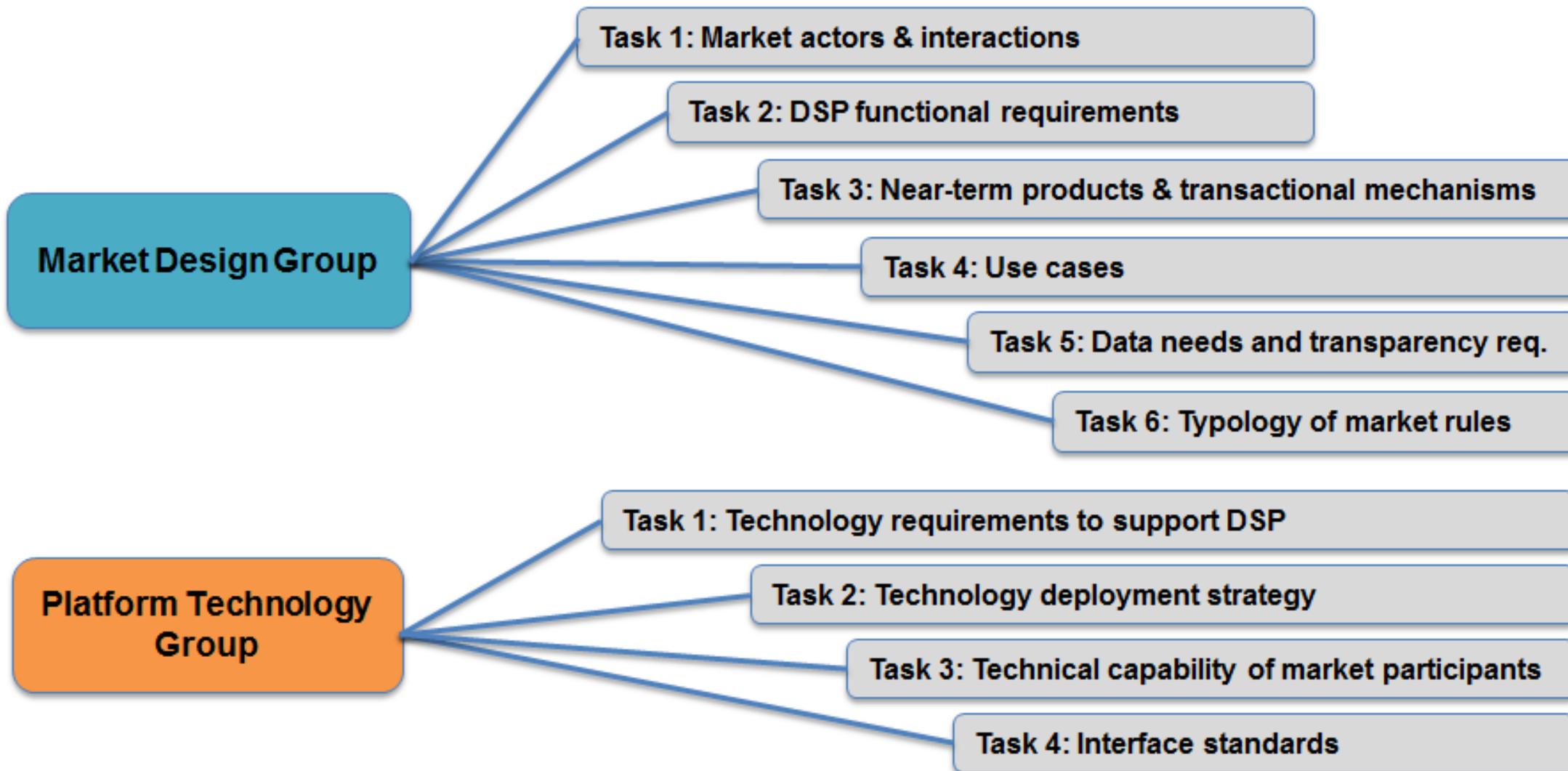


## Tech Platform Recommendation Report – Key Questions to be Answered

- What are DSP technology requirements for DER systems in the near-term market?
- What are the technical requirements identified for major participants in the new market: DER provider and/or aggregator; DSP, NYISO (if appropriate)?
- What are the communication protocols needed for the participants to interact within the market?

**Process Design:** To address these topics, the MDTP group process will be structured as follows:

- Meetings will be multi-hour; most will be in-person and some may be virtual
- For in-person meetings, the venue will rotate between Albany and New York City
- Each meeting will be supported by a pre-read that includes a strawman for that topic and key questions to guide the group discussion
- Following the discussion, the core team will work with participants to refine and revise the strawman
- Sub-groups will be identified to work on each of major topic area to help develop the strawman and/or other relevant research and analysis that will feed into each meeting, and then synthesize input and refine recommendations





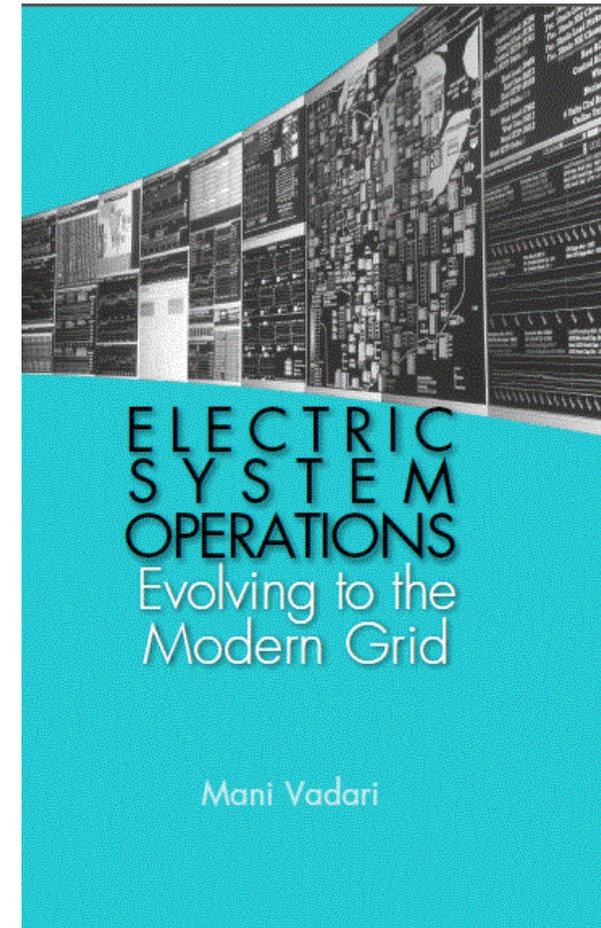
Thank you!!!!  
Any Questions??



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