

VDER Value Stack Working Group
Joint Utilities' Presentation:
Longer Term Compensation for DER and
Expedited Eligibility for Value Stack Resources

March 6, 2018











## **Agenda**

- Provide potential longer term concepts for DER Compensation
  - LSRV, NWS and MCOS interactions
  - DRV integration with DR compensation
  - Environmental compensation
  - Wholesale Market Integration
- Application to Expedited Value Stack
  - Expanded explanation of Joint Utilities' positions from January 10th



# Longer term: LSRV, NWS and Marginal Cost interactions

- Locational System Relief Value provides a price signal to attract Distributed Energy Resources to locations where distribution investments can potentially be deferred, effectively a leading indicator of a future Non Wires Solicitation.
- A successful NWS results in procurement of the correct volume and mix of DER that allows for the actual deferral of the traditional utility investment.
- Marginal cost studies identify the expected cost to serve new load and the potential value of load reductions & injections that defer that investment.
   However, setting the LSRV at the full marginal cost overcompensates DER:
  - LSRV can be paid to DER when utility investments are not deferred
  - NWS only occurs when DER is more cost-effective than traditional investment, whereas the current LSRV transfers the full marginal benefit to DER.



#### **Longer term: Demand Reduction Value**

- Demand Reduction Value (like LSRV) is a blunt and imprecise tool. As such, it could conflict or overlap with demand-response programs and impede adoption of transactional markets
- Need to identify options to coordinate and align DRV with system-based demand response programs.



#### Longer term: Environmental compensation

- Investigate options to enable REC-eligible DER to lock in "E" value through a direct sale of RECs to NYSERDA based on the most recent procurement
  - Last NYSERDA procurement can serve as standard offer for REC-eligible DER
  - Could improve finance-ability of DER and provide more visibility / transparency to REC market.
- Time differentiating carbon value could be used to justify "E" compensation for storage based on charging during times of low carbon emissions and displacing higher emissions with discharge; potential bridge until NYISO can integrate more carbon pricing into LMP.



## Longer term: Wholesale market integration

- NYISO DER Roadmap working to integrate DER into energy and capacity markets.
  - More efficient to clear in market than to show up on a lag as a load modifier
  - Would address potential mismatch with VDER procurement and utility default load obligations
- FERC order requires ISO/RTOs to include direct participation from distributed storage at 100 KW and above
- Should establish and gradually lower threshold where DER participates directly in NYISO markets for energy and ICAP compensation.



#### **Expedited Value Stack: LSRV**

- LSRV for dispatchable resources limited to the shorter of five years or until a NWS is awarded
  - Ten years is longer than most utility planning/investment decisions & LSRV can be extended if potential need still exists after five years
- NWS implementation ends LSRV compensation, DER has option to:
  - Compete in the NWS or
  - Commit to meet NWS performance requirements and receive NWS payment equal to the present value of remaining LSRV commitments
- Normal NWS cost recovery and incentive sharing formula applies.



## **Expedited Value Stack: Wholesale market integration**

- Consistent with JU comments on 1/10, should establish a goal of having DER resources that can directly participate in NYISO markets (e.g. those over 100 kW) do so.
- Reasonable to establish a higher initial threshold with commitment to gradually lower threshold for direct participation in NYISO energy and ICAP markets.



## **Expedited Value Stack: Projects < NYISO threshold**

- Summary of compensation for smaller resources:
  - Energy at DAM LBMP
  - Capacity at Alternative 3 ICAP rate
  - Environmental only if eligible for RECs under CES
  - DRV and LSRV per Value Stack
  - MTC not applicable

