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Transmission and Distribution DER Activities: DER Participation in the Wholesale Market

Delphine Hou
Manager, State Regulatory Affairs, California ISO

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Several models exist for DERs to participate in CAISO markets

- **Proxy Demand Resource (PDR)**
 - Supplier can aggregate multiple end-use customers to create a virtual DR resource that responds to economic signals
 - May involve other DER types behind customer meter, but cannot result in net energy injection to the grid
- **Reliability Demand Response Resource (RDRR)**
 - Same as PDR but based on reliability trigger
- **Non-Generator Resource (NGR)**
 - Designed for a resource that can vary between consuming & producing energy
- **DER Provider (DERP)**
 - New CAISO structure for an entity to aggregate all types of DER into a virtual resource for CAISO market participation

CAISO initiatives to lower barriers and enhance ability of DERs to participate in wholesale markets

- **Energy Storage and DER initiative phase 1 (ESDER1)**
 - Enhancements to the non-generator resource (NGR) model
 - Developed demand response performance methodologies to recognize behind the meter generation (meter generator output MGO)
 - Approved method to statistically derive Energy usage data
 - Clarifications to rules for non-RA multiple-use applications
- **Energy Storage and DER initiative phase 2 (ESDER2)**
 - Introduce new demand response performance evaluation methods that will better reflect the performance of various DR types in the ISO market
 - Clarify station power treatment for distributed energy resources (joint effort with CPUC)
 - Incorporate additional gas indices into the Net Benefits Test calculation to reflect EIM participants.
 - Continue existing and identify new topics for ESDER phase 3 (such as multiple-use applications, a joint effort with CPUC)