

DOCKETED

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CPUC Demand Response Accomplishments

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2017 CEC IEPR Workshop on Demand Response

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SOME BASIC DR FACTS....

- **Demand Response MWs over 5 years:**

	2014	2015	2016	2017	2018
Utilities Portfolio*	2,299 MWs	2,212 MWs	2,054 MWs	1,952 MWs	2,020 MWs
3 rd Party (DRAM)	No DRAM	No DRAM	40.5 MWs	124.6 MWs	184 MWs
TOTAL	2,299 MWs	2,212 MWs	2094.5 MWs	2,076.6 MWs	2,204 MWs

- **Roughly half of DR MW capacity is for reliability situations**
- **IOU portfolio includes time-differentiated rates such as time-of-use and critical peak pricing**
- **Time-of-Use Rates: residential default TOU by 2019**
 - **TOU pilots in play to test customer responsiveness**

* Ex ante forecasts used for RA purposes



CPUC DR ACCOMPLISHMENTS

- **Authorized the Demand Response Potential Study**
- **Adopted bifurcation policy and set 2018 deadline for integration into CAISO markets.**
- **Authorized the Demand Response Auction Mechanism pilot – a capacity procurement mechanism for 3rd party supply DR**
- **Adopted new goal and principles for demand response**
- **Improving IOU delivery of customer data to 3rd party DR providers, while protecting customer privacy**



BIFURCATION POLICY & IMPLEMENTATION

- **Bifurcation: DR resources split into two categories:**
 - **Supply resources (bid into CAISO wholesale markets and dispatched by the CAISO). Includes emergency DR programs and price-responsive programs**
 - **Load-modifying resources (not integrated into CAISO): primarily time-differentiated rates such as time-of-use and critical peak pricing tariffs**
- **2018 Deadline: IOUs must integrate all Supply DR resources into CAISO markets by Jan. 1, 2018. No Resource Adequacy value for resources that miss the deadline.**
- **SCE began integration of its Supply DR resources in the summer of 2015. Currently has over 1,000 MWs integrated (>80% of its DR portfolio).**



DEMAND RESPONSE AUCTION MECHANISM (DRAM)

- **A capacity procurement mechanism pilot operated by the IOUs to attract 3rd party DR providers.**
- **3rd party DRP contract winners provide supply DR resources (bid directly into CAISO markets and dispatched by CAISO).**
- **2016 pilot (delivery year): 40.5 MWs under contract**
- **2017 pilot (delivery year: 124.6 MWs under contract**
- **2018-19 pilot (delivery years): 184 – 205 MWs under contract (pending approval)**
- **Evaluation of the pilots (auction results and performance of DRPs in CAISO markets) by June 2018.**



CPUC DEMAND RESPONSE GOAL

Commission-regulated demand response programs shall assist the State in meeting its environmental objectives, cost-effectively meet the needs of the grid, and enable customers to meet their energy needs at a reduced cost.

CPUC Decision 16-09-056



CPUC PRINCIPLES FOR DEMAND RESPONSE

- **Be flexible and reliable to support renewable integration and emission reductions;**
- **Shall evolve to complement the continuous changing needs of the grid;**
- **Customer choice of DR service provider and Utilities shall support their choice by eliminating barriers to data access;**
- **Shall be implemented in coordination with rate design;**
- **Demand response processes shall be transparent;**
- **Shall be market-driven leading to a competitive, technology-neutral, open-market in California with a preference for services provided by third-parties through performance-based contracts at competitively determined prices, and dispatched pursuant to wholesale or distribution market instructions, superseded only for emergency grid conditions.**



ACCESSING CUSTOMER DATA

- **Customer usage data is key to 3rd party DR provider enrollment of customers and participation in CAISO wholesale markets**
- **State law and CPUC policy require the Utility to obtain customer authorization to release customer usage data to a 3rd party.**
- **Current process to authorize the release of data is time-consuming and difficult to complete**
- **“Click-through” is an automated, streamlined process by which the customer can authenticate his/her identity and authorize the release of his/her data with a couple of “clicks” on a 3rd party website.**
- **CPUC Draft Resolution E-4868 approves funding for the IOUs to build the necessary IT infrastructure to support the ‘click-through’ system to support 3rd party DR providers.**



LOOKING AHEAD

- **Future of DRAM: If the pilots are a success, what changes, if any, are necessary for its expansion from pilot to program?**
- **New models of DR to help with renewable integration: How do we design DR that can incent customers to shift their electricity consumption to certain times of the day? What are the barriers to developing new models of DR?**
- **Default TOU rates for residential customers: how can we best leverage DR programs/technology to best equip customers for TOU?**
- **Targeting DR to local capacity areas and disadvantaged communities: what approaches should be taken to address this issue?**