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<td>Raquel Kravitz</td>
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SCE Slides for CEC deck
SCE Demand Response Resources: Integrated & not Integrated – “Crumbs” Issue

“Orphaned MW”

• As of June 23, 2017 SCE has 61 demand response resources integrated in the CAISO market
  • Resources represent 913* MW
• As of June 23, 2017 approximately 107 resources remain not integrated into the CAISO market
  • 20 of these resources will expire this year with SCE’s remaining AMP contract
  • 38 of these resources are capable of being integrated
    • Resources amount to 40* MW (avg 1,020 kW)
  • The remaining 49 resources do not meet CAISO minimum size requirements
    • Resources amount to 3.4* MW (avg 69 kW)
• In addition to the 107 resources cited above, there are resources currently participating in SCE’s BIP Aggregation option which are not integrated into the CAISO market

• SCE is working diligently to integrate the last qualifying resources into the market by the January 2018 deadline; problems to solve center around manpower and finding IT solutions to automate manual processes
• The CAISO rule which dictates “1 resource = 1 LSE” drives the sheer number of resources
• Future CCA formation will increase the number of LSE’s in CAISO market
• SCE will continue the dialogue with CAISO on rules governing DR resources
Demand Response Dispatched on June 20, 2016 and Baselines
- On June 20, 2016, temperatures peaked at 101 degrees in Los Angeles (114 in Riverside) while SCE’s demand was nearing all-time peak levels of over 23,000 MW
- All of SCE’s DR programs were dispatched that day with the exception of BIP and API
- SCE’s DR programs contributed ~500 MW of load reduction in response to system conditions
- According to current CAISO settlement calculations and methodology, SCE’s load reduction shows SCE customers making a payment to the CAISO

Above graphic and associated data as recorded by SCE substation SCADA systems
Demand Response Dispatched on June 20, 2016 and Baselines... continued

- Below is a snapshot of a single SCE residential RDRR resource
  - The bottom line is the current 10-in-10 baseline used by CAISO for settlement
  - The top line is recorded demand/consumption of the resource per aggregated SCE retail meter data
  - According to the baseline methodology, demand response performance missed expected levels of reduction in all hours of dispatch

A baseline better suited to the resource type should look more like this

![Graph showing measured performance and actual load reduction](image-url)
CCA’s and the future of Demand Response in California

Cost Causation Competitive Neutrality Principle adopted in D.14-12-024 Ordering Paragraph (OP) 8b:

“Once a direct access or community choice provider implements its own demand response program, the competing utility shall, no later than one year following the implementation of that program: i) end cost recovery from that provider’s customers for any similar program and ii) cease providing the similar program to that provider’s customers.”

• In aggregate, potential load departure from the Joint IOU’s bundled service procurement could be up to approximately 80% of total retail load
• To date, there has been no agreement among participants to the proceeding as to the definition of “similar”
• The IOU’s filed a joint proposal on February 17th and outlined an approach for implementing the above which outlined 4 guiding principles:
  • Support mechanisms to provide DR services to meet grid needs in a way that is even-handed and fair to CCA’s, ESPs, aggregators, the utilities, and to bundled and unbundled customers
  • Establish a sustainable framework that provides sufficient flexibility to accommodate the changing nature of DR, and the roles of various participants
  • Focus on simplicity in implementation, with an emphasis on reducing customer confusion and minimizing implementation costs
  • Recognize CCA/ESP responsibilities to deliver on their DR obligations based on the shift of customers to the CCA/ESP and make corresponding reductions in IOU targets to deliver DR

QUESTION: Given the potential shift of customers away from bundled service, how should demand response be procured in future so that procurement mandates are fair and achievable? How should the resulting costs be distributed to ensure fairness for all customers regardless of Load Serving Entity (LSE)?
Issues to consider for future Demand Response Planning and Potential Goal Setting

Taking all of the information into consideration for purposes of a 5-year DR plan, some of the most pressing factors to consider include:

- How does the CAISO’s “1 resource = 1 LSE” rule affect the future demand response resource stack?
- If services provided by third-parties through performance-based contracts becomes the preferred business model for DR in the next 5-year period, are those contracts via IOU tariffs open to both bundled and unbundled customers (e.g. Capacity Bidding Program)? Are they DRAM contracts or Power Purchase Agreements procured via RFO’s?
- If the preference is for DRAM or Power Purchase Agreements via RFO’s, then taking into account California IOU projections of 80% loss of load to CCA’s and the Cost Causation Competitive Neutrality Principle:
  - Who is buying?
  - Who is selling?
  - Who is responsible for the costs?