SOUTHERN CALIFORNIA EDISON

Energy for What's Ahead℠

SCE Alternative Residual Model Framework and Full vs. Residual Model Comparison

Nov 1, 2019

CPUC RA Working Group Meeting

SCE EXTERNAL

Questions as related to the Settlement proposal

- The integrity of the RA program must be retained under any CPE proposal. Extension of CPE to system & flex raises many important questions, which must be addressed before such proposal is considered.
    a. What is the role of an LSE in ensuring reliability under RA? What is the role of CPE?
    b. How will CPE RA procurement be coordinated with IRP procurement?
    c. If the CPE is not IOUs, are legislative actions required? What is the process, timeline and necessary interim measures to address RA while legislative action is taken? Will such a process/structure undermine the Commission's oversight of the RA program?
    d. How is RPS procurement and reliability procurement coordinated under such a model?

- Additional issues with the settlement proposal include (but not limited to):
    a. Cost allocation implications of not accounting for local resources' effectiveness
    b. Issues of "locking in" system & flex three-year forward, while the program likely needs to change (e.g. the CAISO proposed 15-min flex RA, the shift in net load peak)
    c. Complexity of inter-year reconfiguration and related issues (e.g. capping LSE showing to 100%; "force" sell of excess RA when load declines)

➢ These issues have led SCE to develop **an alternative residual model framework**, should the Commission decide to adopt a residual model.

➢ SCE continues to support a full procurement model and for local RA only.

SCE Alternative Residual Model Framework

- Local RA only
- To eliminate inter-year reconfiguration, target is set at 100/100/100
  - Load forecast is unlikely to result in significant changes in local RA need
  - CPE to procure according to the latest difference between shown and identified local need
- CPE procures residual need after LSEs' shown RA
  - Shown resources will be on 3-year forward supply plan
    - LSEs may trade shown RA with other LSEs to change their hedged position
  - Shown local resources can be used to meet the LSE's system and flex requirements
- CPE allocates the cost based on ex post load share after subtracting shown RA adjusted for effectiveness factor
  - LSEs receive credit based on effectiveness
    - Limit the credit to the LSE's load share (i.e. an LSE overshowing is not paid for by the CPE or other entity)
  - Charge customers directly
- IOUs are the CPE for their respective TAC area

Central Procurement Model Comparison (Local RA Only)

Description	Full Model	Settlement Proposal	SCE Alternative Residual
Who is responsible for local RAR?	CPE	LSEs/CPE	LSEs/CPE
What will the CPE procure?	All capacity to meet the local RAR	Deficiency above what is shown to meet the local RAR	Deficiency above what is shown to meet the local RAR
Can LSEs offer local resources to the CPE?	Yes	Yes	Yes
How the final set of local resources is determined?	CPE RFO	Sequential LSEs procurement and CPE RFO	Sequential LSEs procurement and CPE RFO
Are resources' effectiveness considered?	Yes	No	Yes
How will costs be allocated?	Charge directly to customers or LSEs based on ex post load share	Charge to LSEs based on residual, ex post load share	Charge to customers based on residual, ex post load share

Complexity Related to Reconfiguration (Local RA Only)

Description	Full Model	Settlement Proposal	SCE Alternative Residual
Who set local RAR?	CPUC	CPUC	CPUC
Who procures capacity to meet RAR?	CPE	First LSEs Then CPE	First LSEs Then CPE
Is inter-year reconfiguration required?	No. CPE buys all.	Required. LSEs may procure depending on other LSEs' shown activities or any change in their load share.	No reconfiguration among LSEs is required. The target is set at 100/100/100.
Is there a need to track inter-year load migration for cost allocation?	No. Costs are directly charged to customers or LSEs based on ex post load share.	There is a need to track inter-year load changes that set the limit for LSEs' shown RA, despite that cost allocation is based on ex post.	No. Cost allocation based on ex post load share. Credit is capped to ex post load share.
Is there a limitation on LSEs' shown RA?	N/A	Cap shown RA to 100% LSE-specific forecasts and "force" sell if above.	No. Any hedge risk is handled by LSEs*.

*: LSEs will still benefit from system and flex attributes even if shown RA exceed ex post load share