

RSE Failure Surcharge/Revenue Allocation



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RSE Purpose

- To prevent any entity from "leaning" on the market
- Example: suppose 10 farmers have access to the same grazing land. Each farmers' interest is to graze their livestock as much as possible. Without controls, the grazing land would be exhausted.
- By joining a market, each BA has an incentive to underprocure in order to minimize cost. If an entity is short on capacity, it is cheaper to buy an extra MW from the market than to contract for the capacity. "Leaning" is thus attractive. If BAAs are "leaning" on each other, there may be insufficient available capacity defeating the purpose of the RSE.



Basics

- Demand netted against supply under contract
- Demand could be forecast or actual
- Supply could be RA only or all RSE eligible supply
 - ► RA only would be more principled



- Two-tiered approach, same as SCE
- Scenario 1: RSE failure surcharge
- CAISO
 - Demand: 6,800 MWs
 - -RSE eligible supply: 6,000 MWs
 - -RSE failure: 800 MWs
- LSE 1
 - Demand: 600 MWs
 - Supply: 590 MWs
 - -Fail: 10 MWs

- LSE 2
 - Demand: 5,000 MWs
 - Supply: 6,000 MWs
 - -Pass

• LSE 3

- Demand: 1,200 MWs
- Supply: 1,000 MWs
- Fail: 200 MWs



- CAISO failure
 - -800 MWs
 - \$800,000 total cost
- Tier 1
 - -LSE 1: \$10,000
 - -LSE 2: Pass
 - -LSE 3: \$200,000
- Tier 2
 - -\$800,000 \$210,000 = \$590,000
 - -LSE 1: 600/6,800 x \$590,000 = \$52,059
 - -LSE 2: 5,000/6,800 x \$590,000 = \$433,824
 - -LSE 3: 1,200/6,800 x \$590,000 = \$104,118

- LSE 1
 - Demand: 600 MWs
 - Supply: 590 MWs
 - Fail: 10 MWs
- LSE 2
 - Demand: 5,000 MWs
 - Supply: 6,000 MWs
 - Pass
- LSE 3
 - Demand: 1,200 MWs
 - Supply: 1,000 MWs
 - Fail: 200 MWs



- Scenario 2: RSE revenue allocation
 - -1 tier
 - Similar calculation, but reversed
- CAISO
 - Demand: 8,000 MWs
 - -RSE eligible supply: 10,000 MWs
 - Excess supply: 2,000 MWs
- LSE 1
 - Demand: 500 MWs
 - Supply: 490 MWs
 - Fail

• LSE 2

- Demand: 5,000 MWs
- Supply: 6,000 MWs
- Pass: 1,000 MWs

• LSE 3

- Demand: 2,500 MWs
- Supply: 3,510 MWs
- Pass: 1,010 MWs



- RSE revenues
 - -2,010 MWs
 - -\$2,010,000 total revenues
- Calculation
 - -LSE 1: failed
 - -LSE 2: 1,000/2,010 x \$2,000,000 = \$995,025
 - -LSE 3: 1,010/2,010 x \$2,000,000 = \$1,004,975

- LSE 1
 - Demand: 500 MWs
 - Supply: 490 MWs
 - Fail
- LSE 2
 - Demand: 5,000 MWs
 - Supply: 6,000 MWs
 - Pass: 1,000 MWs
- LSE 3
 - Demand: 2,500 MWs
 - Supply: 3,510 MWs
 - Pass: 1,010 MWs



Benefits

- Fidelity to cost causation
- Solves for different planning standards. Using demand (forecast or actual) puts everyone on an equal playing field.
- Using the supply plan correctly rewards those who have procured capacity.
- Two tier allocation of surcharges appropriately recognizes de minimis failures



Problems

- More complicated than SCE's approach
- Planned Outage Substitution Obligation (POSO) rules
 - -CAISO requires substitution for all RA
 - -Supply plans do not reflect all resources under contract
- Maximum Import Capability (MIC)
 - Need MIC allocation to claim RA for imports
 - Some LSEs have firm power contracts & can't get MIC allocation
 - Other LSEs have no firm power contracts & unused MIC allocation
- CPUC RA rules
 - CPUC restricted non-source-specific RA imports in D.20-06-028 OP 2 and D.23-04-010 OP 17(b)





Questions