



Reliability Capacity Services Tariff (RCST)

Presentation for MSC Meeting
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Jeff McDonald (DMM) / Lorenzo Kristov (MPD)



Problem Statement

- **How to design CAISO "backstop" mechanism for procuring supply capacity** - for local or system needs - beyond what is designated by LSEs to fulfill Resource Adequacy Requirements (RAR)
 - Even with Local RAR there may be gaps between LSE procurement and CAISO operating needs
 - Because Local RAR is not expected for 2006, CAISO backstop must be implemented prior to Summer 2006.
- Absent RA contracts, some needed local resources may not be viable on spot market opportunities alone
 - Existing FERC-ordered Must Offer Obligation may not provide adequate revenue to sustain these resources
- Existing annual RMR is not an optimal mechanism
 - Prefer shorter-term mechanism (e.g., 1-month)
 - CAISO needs additional dispatch flexibility



Questions for Today's Discussion

- Does IEP Proposal offer an effective model for needed CAISO mechanism?
- Should payment be structured only to sustain existing resources, or also to incent new generation investment?
- How to specify the services CAISO is procuring?
- Timing of payment calculation - based only on current month's estimated "Peak Energy Rents," or adjusted for previous month?
- Timing of CAISO procurement in relation to LSE month-ahead RA showing.
- Cost allocation for capacity and for SU/ML costs.
- Does CAISO backstop mechanism inevitably become the benchmark for bilateral RA contracting?



Background

- Spot market not providing adequate revenue opportunities for long-term viability (existing or new units).
 - No day-ahead energy market - today the only spot market opportunities are real-time energy and A/S.
 - Must-Offer waiver denials provide some contribution to fixed cost recovery via Uninstructed Energy payment.
- Uneconomic for many resident units to operate in short-term, and little contribution to fixed costs in medium-term.
- Local RA Requirement not expected for 2006 – may experience unit retirement that would compromise local reserve margins.
- CAISO will need backstop capability in any event, to meet unforeseen needs or gaps in LSE procurement.



IEP Complaint

- IEP filed complaint in August 2005 with RCST proposal to address following goals:
 - Continue to meet growing reliability needs,
 - Compensate generators for providing reliability capacity services under MOO, and
 - Provide proper price signals and incentives to market (new investment).
- IEP's Primary complaints with MOO:
 - Generators not compensated for providing capacity,
 - No incentive for LSEs to forward contract (rely on MOO instead),
 - Energy from MOO waiver denials not included in price-setting mechanism (suppresses MCP and sends erroneous price signal).



IEP Proposal

Outline of Reliability Capacity Services Tariff proposal

- CAISO
 - Calculates zonal reserve margins each Fall. RCST requirement based on this calculation, as well as local requirements and LSE year-ahead RAR showing.
 - Contract term is seasonal.
- Applicability
 - Investor owned generation, or units with RA or RMR contract are not eligible for full contract (partial unit approach applies to RA).
 - NP15 & ZP26: only units identified by CAISO within LRAs.
 - SP15: all units.
- Obligations
 - Must offer unscheduled capacity into CAISO RT energy market.
 - Can not sell energy associated with RCST capacity outside CAISO control area.



IEP Proposal (2)

- Payment Structure
 - Basis for payment is annualized fixed costs based on proxy unit (new frame-type CT).
 - Pro rate annualized fixed cost using the weight of each monthly reserve margin relative to the yearly average monthly reserve margin (by zone).
 - Net off estimated “Peak Energy Rents” (PER) from proxy unit.
 - Adjust for performance (outages).
 - Payments for current month are based on PER calculations for last month.
- Charge Structure
 - Charge to LSEs that do not meet their RA obligation, with any excess charged to LSEs in proportion to their contribution to regional peak demand.
- RCST would remain in effect as CAISO backstop when needed, but be utilized less as needed resources are procured through RAR.



Compensating Existing Units, or Price Signals for New Investment

- Basing payment on going-forward fixed cost or total annualized fixed cost of a new unit.
 - Recovering only going forward fixed costs may delay retirement but will not provide incentives for new investment.
 - Basing all RCST payments on installation of a new unit will be costly if there is no reaction to price signals.
- Question – Can an interim RCST based on annual total fixed cost recovery start a cycle of properly located new investment?



Payment Calculation

- Timing of payment calculation may distort price signals.
 - IEP Proposal - Payment for current month reflects adjustment for estimated proxy Peak Energy Rents from prior month.
 - Resulting adjustment to capacity payment may not reflect market conditions in current month.
 - Alternative – payment based on current month estimated proxy PER and adjusted at end of month.
 - Adjustment more accurate, payment provides cost recovery.
 - Reduces potential influence on RAR negotiations.
 - Does not interfere with long-term investment incentives.



Cost Allocation

- IEP proposed to allocate based on RA procurement deficiency, then contribution to peak load.
- Alternative proposal:
 - Allocate capacity cost to LSEs based on contracting deficiencies within location.
 - Allocate (SU & ML) energy cost based on Amendment 60.
- Timing Issue: RCST determinations would be made prior to LSE month-ahead RAR showing.
 - May over-procure RCST units w/o month-ahead info.
 - How to allocate if LSEs fully procure by month-ahead?



Local Price Signals

- Payments based on zonal reserve margins may not be sufficient to meet objectives for installed capacity in Local Reliability Areas.
 - Differentiated by location to provide incentives for new generation investment?
 - Consider three levels of RCST based on a forward looking assessment of whether the region is “in surplus”, “adequate”, or “deficient”.



Receiving Energy from RCST

- California LSEs are paying for RCS... will they have access to the associated energy?
 - IEP proposes that RCST unit cannot sell associated energy outside California on a firm non-recallable basis...
 - Is this provision enforceable in current market structure?
 - Will California LSEs pay fixed costs for energy to be exported to neighboring states?
 - Problem exists in both Pre-MRTU and MRTU time frames.



Bridge Between MOO and RA

- CAISO will likely continue to procure capacity as a backstop under MRTU.
- RCST design must be compatible with RA
 - Similar capacity product,
 - Timing (CAISO procurement and LSE showing),
 - Not provide an artificially low-priced alternative to RA contracting for LSEs,
 - Not define an artificially high price floor for generators to negotiate RA contracts against.
- RCST design should be mindful of potential future capacity market.