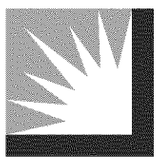
Joint SCE/PG&E Proposed Modification of Indifference Amount Calculation

DA OIR Phase III Workshop
December 2010



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Adopted Indifference Calculation

- Pursuant to D.06-07-030 (as modified), the utility develops an "indifference amount" annually in the ERRA forecast proceeding:
  - For each vintage year, the utility calculates the cost of the total portfolio of all generation resources assigned to that year.
  - The generation portfolio for each vintage year includes all resources and contracts entered into to serve bundled load for that year.
  - Energy Division produces a market price benchmark (MPB) for the forecast year, which includes:
    - Value of energy (average price of a 12-month forward strip)
    - Value of RA/generation capacity (per MWh adder)
    - Line losses (per MWh adjustment)
  - Each portfolio is valued at the MPB to produce a market cost ($/MWh) for the total portfolio.
  - The market cost of the portfolio is subtracted from the total portfolio cost for each year to determine any above-market costs, identified as the "indifference amount," which can be positive or negative.
  - Statutory CTC revenue is subtracted from the indifference amount to produce the Power Charge Indifference Adjustment (PCIA) amount.
  - CTC and PCIA revenue requirements are allocated to individual rate groups using the top 100-hours method to determine rates.

Proposed Modifications to the Indifference Calculation

- Market Price Benchmark
  - Update the generation capacity adder included in the MPB
  - Adjust MPB to reflect value of renewable resources in portfolio
- Total Portfolio Cost
  - Exclude forecasted CAISO costs associated with load (variable) and the IOU's short-position at ISO on a non-vintaged basis.
  - Includes cost of contracted/owned resources.
- **SCE's/PG&E's proposed modifications to the indifference calculation are predicated on:**
  - Simple changes to existing methodology based on publicly available data.
  - Continuation of DA switching rules requiring 6 month notice to depart or return to bundled portfolio service (BPS).
  - Minimum 18-month stay on BPS.
  - ESP Security Requirements for involuntary returns calculated using the method recommended in CCA Bond/Re-Entry Fee Settlement.
  - Update of the Transitional Bundled Service (TBS) rate consistent with MPB changes for generation capacity and RPS value.

Proposed Method for Including and Updating Capacity Value in MPB

- Existing Generation Capacity Adder
  - Current value of $7/MWh for SCE ($62.5/kW-yr) and $4/MWH for PG&E adopted in D.06-07-030 (based on annualized cost of combined cycle combustion turbine) is added to MPB
- Proposed method - Include a capacity adder based on the price set in the CAISO's Interim Capacity Procurement Mechanism (ICPM) (to be superseded by Capacity Procurement Mechanism (CPM)) in effect when the annual MBP is calculated.
- ICPM (or CPM) is the CAISO's capacity backstop mechanism:
  - Public source of data on capacity value
  - Reflects actual CAISO capacity payments to generators
  - Expected to be regularly updated
  - Currently $41/kW-yr, CAISO proposed CPM of $55/kW-yr pending
- Remove the existing energy adder for capacity and adjust the market cost calculation of the total portfolio by multiplying procured, net qualifying capacity (MW), by vintage, by the CPM. NQC accounts for the intermittent characteristics of certain generation resources.

Proposed Method for Reflecting Value of Renewable Resources in MPB

- Establish a MPB adder to incorporate the value of renewable energy in the portfolio using public data
  - U.S. Dept. of Energy's survey of reported contract premiums for renewable energy in the Western U.S.
  - Replace with transparent REC market value, if/when available
- Weight MPB, before loss adjustment, based on proportion of total energy portfolio supplied by RPS eligible renewable energy
  - Exclude pre-2003 resources (legacy QF's priced at avoided cost)

Example

- 2009 vintage for 2011 PCIA
  - Assume an average price of a 12-month forward strip of $50/MWh
  - Assume current ICPM value for Capacity $41/kW-yr
  - Assume renewable premium value of $20/MWh (from DOE)
  - Assume the RPS percentage of 18% in total portfolio for 2009 vintage
  - Assume total generation portfolio 60 million MWh for 12 months
  - Assume capacity portfolio (NQC) for 12 months of 150,000 MW-months
  - Calculation of Adjusted MBP ($/MWh):
    ($50*82%)+(($50+$20)*18%)=$53.60
  - Calculation of market value of energy portfolio ($/MWh):
    $53.60*60 = $3,216 M
  - Calculation of market value of capacity portfolio:
    (($41*1000)/12)*150,000= $512.5 M
  - Adjust energy for losses consistent with existing method assume 4%
- Revised market value equals $3,216*104% + $512.5 = $3,857.14
- Current market value equals ($50*60*104%)+($7*60) = $3,540.00

Proposed Indifference Amount Calculation

- Exclude forecasted costs associated with load-related ISO charge types from non-vintaged portfolio. Need to identify charge-types to be excluded.
- Exclude forecasted costs associated energy purchases at ISO to fill anticipated short position.
- Non-vintaged costs appear proportionately in all vintaged portfolios.
- Calculate revised market value, for each vintage portfolio, by adding the revised market energy (with renewable value) to market capacity.
- Subtract revised market value from total portfolio cost, by vintage to produce indifference amounts.
- Indifference amount is allocated to rate groups for purposes of rate design based on top-100 hours method. Groups who contribute proportionately more to the system peak receive a higher allocation.
- Indifference rates, by rate group, are calculated based on total energy for each group (bundled, DA, CCA).

Load Shape Weighting of the MPB Already Accounted for in Allocation of Above Market Costs

- Existing method
  - MPB reflects unweighted average (flat profile) of annual forward prices
  - Generation portfolio cost reflects system profile (relatively flat)
- Under the existing method, the indifference amount reflects the differential on a system basis between the total portfolio costs and the market value of the portfolio.
  - This approach correctly develops an indifference amount for ALL customers.
- The allocation of above-market costs to rate groups (based on each group's contribution to the system peak) accounts for the load profiles of the different types of customers.
  - The existing method correctly produces lower indifference amounts for rate groups with proportionately lower consumption of peak resources, consistent with rate design of generation charges for bundled customers.
- If load profile weighting of the MPB is incorporated the appropriate load shape would be the generation profile, consistent with the profile underlying the total portfolio cost.

Modify TBS Price Consistent with MBP Modifications

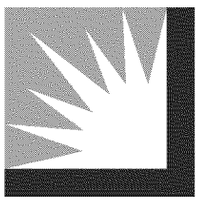
- Existing TBS
  - Reflects day-ahead market prices for energy
  - Includes load-related CAISO charge types
  - Weighted to reflect applicable customer class profile
- Proposed modification:
  - Adjust TBS to be consistent with MPB modifications to reflect additional costs incurred by IOU in procuring energy and capacity for TBS customers (based on current year vintage calculations):
    - CAISO charges consistent with adjustments made to total portfolio
    - Market energy scaled consistent with renewable value adder

    Energy Scalar = (energy at market / energy at revised MPB)
    - Market energy scaled consistent with RA/capacity adder

    Capacity Scalar = (energy at market / market energy plus capacity)

Other CRS Issues for Consideration

- SCE supports the need for resolution of the CTC / PCIA issue raised by PG&E.
- Designation of PCIA-URG and PCIA-DWR needs to be reconsidered given impending elimination of DWR generation from total portfolios and the incorrect classification of "New Gen" above-market costs as DWR.
  - Distinction can be eliminated with no impact in ratemaking or cost responsibility.
- Address potential issue with "continuous DA" customers and new world generation created in D.08-09-012.
- Potential Method for Reflecting Value of "Provider of Last Resort" (POLR) Service provided by IOU's.
  - No proposal at this time.
  - Need for a POLR proposal is a function of outcome on switching rules, TBS, ESP financial security requirement and minimum BPS stay.



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