Addressing RPS Compliance Costs in the PCIA/Indifference Calculation

Workshop # 1 on Departing Load PCIA Methodologies

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Problem:

- The current Market Price Benchmark does not reflect the value of renewable resources even though the cost of these resources is included in the Indifference Rate calculation underlying the PCIA.
- As a result, above market costs are inappropriately shifted to departing load customers.

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Potential Options

- 1. Remove all RPS renewables (costs and MWhs) from the indifference calculation
- 2. Adjust the Market Price Benchmark to reflect RPS values
- Segregate RPS resources from conventional and create a separate benchmark/indifference calculations for each
- 4. Allocate a share of the renewable attributes to CCAs/ESPs.
- 5. Other ideas?

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1. Remove RPS from the Indifference Calculation

<u>Rationale</u>:

- Consistent with flexible RPS compliance
- RPS assets are never "stranded" as long as the departed load doesn't cause the IOU to be excessively long on RPS power
- Departing loads are responsible for costs of their own RPS compliance
- Simplicity: don't have to construct a price proxy for renewable power

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2: Adjust the Market Price Benchmark

- Have the market price benchmark equal a weighted average of the brown market power forwards and a green price benchmark
- Weight the two factors based on that year's RPS requirement
- E.g., assuming a 20% RPS requirement, the Market Price Benchmark would equal: (Forward Price x 80% + Green Benchmark x 20% + other adders) x (1+ line losses)

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2: Adjust the Market Price Benchmark

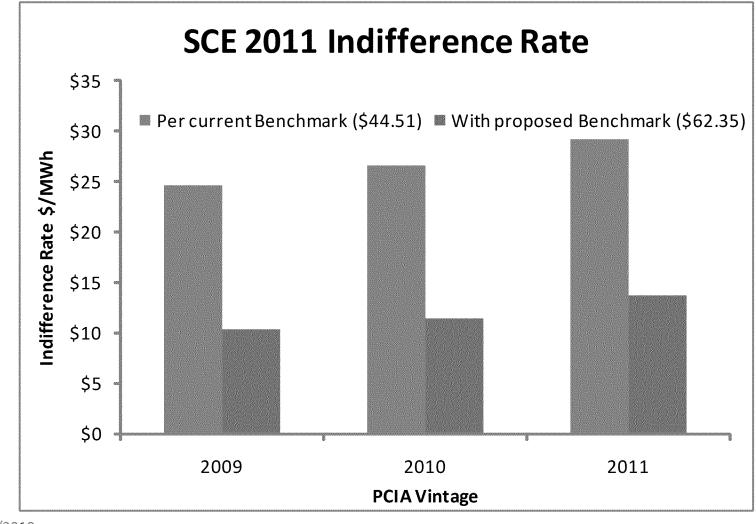
Example: Based on SCE November ERRA:

- Average 2011 Forwards: \$35.27/MWh
- RA Adder: \$7/MWh
- Line Losses: 5.3%
- Current Benchmark: (\$35.27 + \$7) x 1.053 = \$44.51
- Green Benchmark: \$120/MWh*, 20% RPS requirement
- New Benchmark:
- $[(0.8 \times \$35.37) + (0.2 \times \$120) + \$7] \times 1.053 = \$62.35/MWh$

* \$120/MWh is for illustration purposes only

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Impact of Weighted Average Benchmark on Indifference Rate



How Should a Green Benchmark Be Set?

- RPS Market Price Referent (MPR)
 But the MPR is long-term index
- REC values
 - REC market does not yet exist, so does not address immediate need for relief
- Some other "Green" Market Price
 No published indices
- A Proposal: Infer market price from current year's IOU RPS-compliant purchases

Green Benchmark Proposal

The benchmark in year *n* would be the weighted average cost of all new renewable PPAs and utility-owned RPS compliant resources entering the revenue requirement in year *n*.

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Green Benchmark Proposal

<u>Rationale:</u>

- We need a current price for the full spectrum of renewables
- The California IOUs are the primary buyers of renewables in the state (and likely the WECC)
- What the major buyers are paying for renewables is *de facto* what the market price is, as they are conducting most of the transactions

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Green Benchmark Proposal

- Issues:
 - There would be some volatility, as the mix of new resources would change from year to year. How much? How big a problem would it be?
 - Would the Green Benchmark be IOU specific or a weighted average of all three?
 - How would it be reported, so as to protect IOU confidentiality AND provide for independent verification?

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3. Separate RPS and conventional indifference calculations

- Create two parallel calculations based on two sets of resources and costs: those used for RPS compliance and those not.
- Use the Green Benchmark to calculate the indifference rate associated with RPScompliant resources
- Use a brown/market benchmark to calculate the indifference rate associated with non-RPS resources

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3. Separate RPS and conventional indifference calculations

- Each calculation would be based on the actual volumes in the RPS and non-RPS bucket
- Would allow more transparency in the Indifference rates
- Would add a level of complexity –two indifference calculations rather than one.

4. Allocate renewable attributes to CCAs/ESPs

- If no green benchmark is added, transfer some RPS attributes (RECs and/or any RPS compliance elements) to the providers of the departed load (CCAs and ESPs)
- How?

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<u>Recap</u>

- Remove RPS renewables from the calculation
 - Avoids all need to set a benchmark for renewables
- Adjust the Market Price Benchmark for RPS
 - A challenge to come up with a Green Benchmark
- Separate Indifference calculations for brown and green power
 - Adds transparency but also complexity
- Allocate some portion of the renewable attributes to CCAs/ESPs
 - How?