Development of Conservation Targets for the 7th Power Plan

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Outline

- Seventh Plan Process
  - Overall IRP process
  - Role of RPM in identifying conservation targets
- Proposed Targets for the Seventh Plan
- Ramp Rates
- Cost of Conservation in the Seventh Plan
Seventh Plan Process

1. Estimate Cost & Amount of Savings
2. Estimate Max Rate of Acquisition
3. Energy Savings by Season & Time
4. Peak Capacity Impacts of EE

Interpreting Results
Developing Inputs

8. Conservation Targets & Action Plan
7. Conservation Build-Out over 800 futures
5. Regional Portfolio Model
Proposed 7P Targets

“Bummer of a birthmark, Hal.”
Proposed* 7P Targets

*These values were presented to the Council on 8/12/2015 to initiate the target setting discussion. Conservation targets are set by the Council and these numbers could change prior to the release of the final Seventh Plan in February 2016.
## Biennial and Cumulative Targets

<table>
<thead>
<tr>
<th>Targets (aMW)</th>
<th>FY16-17</th>
<th>FY18-19</th>
<th>FY20-21</th>
<th>FY22-23</th>
<th>FY24-25</th>
<th>FY26-27</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biennial</td>
<td>370</td>
<td>470</td>
<td>590</td>
<td>660</td>
<td>700</td>
<td>700</td>
</tr>
<tr>
<td>Cumulative</td>
<td>370</td>
<td>840</td>
<td><strong>1400</strong></td>
<td>2100</td>
<td>2800</td>
<td>3500</td>
</tr>
</tbody>
</table>

- **6-Year target:** 1400 aMW by 2021
- **3100 aMW by 2026**
Setting the Start and Pace

- Ramps from 174 aMW in 2016 to 306 aMW in 2021
  - Built from the bottom-up, measure by measure
  - New baselines
  - Results are from RPM
  - Limited by ramp rate assumptions & RPM findings
    - Accelerated ramp rates in RPM didn’t produce significantly different results
Comparison of 6P Targets/Actual with 7P RPM Results

Note: “6P Actual” excludes momentum savings. But the targets include momentum savings.
Cost of Conservation

- The cost of cost-effective conservation is
  - $6.2 Million/aMW (first-year, total cost)
  - $4.1 Million/aMW (first-year, utility cost-assuming 65% share)

- Assumptions:
  - Uses $100/kWh as a proxy of what is cost-effective
  - Weighted average costs
  - Excludes T&D benefits and negative levelized cost
7P Costs Compared to 6P

- The cost is higher for the 7P than it was for the 6P:
  - 6P was ~$3M/aMW for the utility share, now it's ~$4M (all 2012$).
  - This means that although the target is “resetting” to the 2010 levels, it is likely going to be more expensive to acquire than it was in the 6P period.
Reactions/Discussion

- Is 370 aMW appropriate for 2016+17?
- Is the ramp rate reasonable?
- Reminders:
  - 2016 momentum savings will be ~zero
  - Baseline has been reset
  - New measures comprise a significant portion of potential; will take time to develop
  - Cost per aMW first year may be higher
Next Steps

- We will provide your feedback to the Council
- Council to decide draft plan targets at October meeting
- Final targets to be set after comment period, in the final plan (early 2016)