Eastern Interconnection Planning Collaborative

SSC Webinar/Conference Call
September 9, 2011, 2:00-4:00 PM Eastern
Summary

SSC Members in Attendance (by sector)

End Users: Ryan Kind, Sonny Popowsky, Brenda Harris
Generation Owners: Steve Gaw, Michael Goggin, Mark Volpe
NGOs: Andy Oliver, Beth Soholt
Public Power/TDUs: Paul Malone, Tim Noeldner, Maryam Sharif
States: Jim Volz, David Boyd, Lib Fleming, Greg Watkins, Garry Brown, Bob Pauley, Marya White
Transmission Owners: Mark Wehlage, Paul Napoli, Stuart Nachmias
Ex Officio: David Meyer
Chairs: Roy Thilly
EIPC: David Whiteley, John Buechler

1. MRN-NEEM Results for Futures 6, 7 & 8 (Ralph Luciani, CRA)

- See CRA's presentation under Meeting materials for details.
- Discussion & Questions:
  - In the comparison across all Futures:
  - Coal generation without carbon prices is about 30% of total; but declines dramatically (1-4%) under carbon Futures (2,3 and 8)
  - Nuclear is between 23-35% across all Futures and hydro also doesn't change much
  - Off shore wind only expands under Future 6.
  - On-shore wind is highest in F2 & F8 (~30%).
  - Other renewables includes primarily solar, biomass, landfill gas, geothermal

2. High-level Transmission Cost Analysis of Futures 3, 5, 6, & 8 (David Whiteley, EIPC)

- See spreadsheets with detailed costs on EIPConline.com under Task 5 Results
- Building block approach applied to hardened inter-regional transfer limits used, as in other Futures.
- EIPC also provided a summary comparing the costs across all Futures
- No questions

3. Scenario Task Force Report (Wil Burns, NGO Caucus)

- See STF presentation under Meeting Materials
- Primary variables analyzed for comparison purposes are transmission expansion, level of policy and planning (national, regional, local), type of environmental policy (RPS, Carbon price, CES, etc.), and costs
- MWG provided estimates for costs not included in NEEM outputs – variable and thermal integration costs, EE,DG and DR costs, nuclear uprate costs. These costs are integrated

into the comparison analysis, but the STF did not reach agreement on how they should be weighed.

- The TOs raised a concern that the 11.2% carrying cost rate used to determine the NPV of high-level transmission costs may not be reflective of actual costs, and noted that this needs further review under Phase 2.
- In discussing the best measure for transmission expansion – peak capacity or total energy flows – Dave Whiteley explained that both measures will be important to transmission planners who will look at not only the peak load case but also flows that are significant during off-peak, which may be the case with significant wind generation.
- No options are off the table but the STF narrowed the Bookends/Clusters to:

    - **National**: F2S8, F8B/F8S1 (F8 may require NEEM run with hardened limits)
    - **Regional**: F3S7, F6S10
    - **Other:** F1S3, F4B, F7all (EISPC representatives declined to narrow down the F7 runs)

3. **TO/TD proposal:**
    - **National** - F2s8 (CO2 price future; sensitivity flattens CO2 price after 2030); large build out (40,000 MW transfer capability increase between NEEM regions); meets the National RPS goal of 30% renewables.
    - **Regional** - F6s10 (RPS base case with "hardened pipes" based on OL25 sensitivity); smaller transmission build (3,000 MW); regions are more likely to have an RPS than a C02 price.
    - **BAU** – F1s3 (which includes the updated EPA regulations); has transmission expansion within - but not between - NEEM regions; the TOs believe the EE/DR assumptions of F4 may not be feasible

Other options to consider:

- GOs asked that Future 5 be kept under consideration for the National Scenario
- Public Power/TDU questioned whether the F2,S8 pushed the transmission expansion limits adequately (40,000 MW compared to 64,000 MW under F5) and suggested that one of the NEEM runs could be used to harden the OL25 soft constraint run under F2 to achieve a larger build out.
- Public Power/TDU sector prefers F3 for regional Scenario but could go either way. Also prefer BAU to F4, but since BAU, Futures 4 & 7 do not require inter-regional transmission expansion, they essentially represent similar transmission scenarios.
- For comparability, End Users suggested that the STF consider using the CES Sensitivities for the National and Regional Scenarios.
- End Users also suggested that the STF give further consideration to using F2 (national) and F3 (regional) for comparability.
- NGOs are discussing the benefits of using F4 instead of the BAU for the third Scenario to capture the lower cost carbon reductions that can be achieved with high EE/DR levels. Alternatively, the STF may want to use the BAU and adjust one of the other Scenarios to

incorporate higher EE/DR levels. For instance, the national Scenario could be based on F8 which has 7% more EE/DR rather than F2.

- NGOs also proposed that F3 could be used for the Regional Scenario but could be adjusted to incorporate more off-shore wind.
- Dave Whiteley explained in response to a question that Futures with baseline infrastructure may still have different transmission build-outs if the generation mix and location is significantly different. Therefore BAU, Futures 4 and 7 will provide unique information and transmission costs will be based on the building block approach for these Futures to avoid a conflict with developers' cost estimates. Additions to transmission within regions needed to support inter-regional transfers will also be evaluated.

4. Next Steps

- STF will meet Sept. 12th to develop final recommendations on Scenarios, additional NEEM Runs to define the Scenarios and the narrative to describe each Scenario.
- The next SSC meeting to consider the recommendations will be Sept. 26-27 in Philadelphia.
- Stu Nachmius and Steve Gaw asked if additional information on the PA's criteria and process for selecting DC lines could be shared at the next meeting. Dave Whiteley agreed to consult with PAs to determine if the pre-work schedule could be advanced to accommodate the request.