

**Minutes of RIR Stakeholder's Conference Call, August 5, 2008 at 11:00 am**

Stakeholder Conference called to order by Chifong Thomas at 11:05 am. Chifong turned meeting over to Ron to summarize [[RIR Stakeholders Meeting-8-5-08\\_new.ppt](#)] PowerPoint Slides.

- Contingency analysis will only be done for 230 kV and 500 kV lines and transformers, however lower voltage lines will be monitored and tracked.
- Generators above 100 MW will be included for N-1 analysis
- Three southern California penetration levels for three different seasons
  - 2020 Spring – 20%, 26%, 33%
  - 2020 Summer – 20%, 26%, 33%
  - 2020 Fall – 20%, 26%, 33%
- Bases cases were set up to include California existing renewables projects and CPUC-approved contracted renewables, and based on information developed in prior CEC studies, the most recent of which being the Strategic Value Analysis (SVA) and the Intermittency Analysis Project (IAP) cases. Residential Solar PV (~3,000 MW installed capacity for California) generation was modeled to reflect the CEC forecast; and conventional gas units were modeled based on information from the CEC Electricity analysis Office.
- To provide the bench mark cases from which to build various renewable scenarios for Northern California, the starting base cases will model 20%, 26% and 33% RPS in Southern California, and existing PG&E- and Muni-contracted renewables in Northern California .
- Ron discussed the graph with reliability indices (AMWCO) values that compare the relative reliability of the 2020 case with different generation units online. Generation location is very important in reduction of transmission congestion.
- The Preliminary test runs included four locations for 2020 Injection Scenario – Objective is to determine the common overloads from each of the scenarios at their respective injection points.
  - RM – Round Mountain 500 kV Bus
  - TM – Table Mountain 500 kV Bus
  - TE – Tesla 500 kV Bus
  - MD – Midway 500 Bus
- The 500 kV buses were selected for the test runs because of their locations and because the effects of generation connected in the underlying systems would eventually be reflected as impacts on higher voltage systems as the added generation displaces existing generation to supply the customer loads.
- 500 MW to 2,000 MW at 500 MW increments were modeled for each of the injection locations
  - Interface flows were held constant
  - Northern California gas units were reduced equal to the injected generation
  - N-1 Contingency analysis were completed for each scenario's injection penetration level for 230 kV and 500 kV lines and generators above 100 MW
  - RAS was not modeled
- Ron discussed two tables with overloads that were common between each scenario levels for 230 kV and 500 kV lines.
- Any additional generation at Captain Jack, Table and Round Mountain buses requires new COI transmission lines given the existing heavy loading of the COI

- Adjusting the intertie flows may temporary reduce overloads on the COI and make Table Mountain and Round Mountain more accessible. However, it would imply trade-off between economy import and renewables.
- Ron discusses potential sample scenarios for discussion purposes
- Ron went over the maps with renewable potentials for wind, geothermal and solar resources to use as a framework to develop renewables scenarios and the location for injection of the power.
- Scenario spreadsheet examples are shown.

### Comments:

Robert Jenkins: What is the game plan about the two reports, PG&E RIR and RETI, that will come out about the same time, and cover the transmission aspect of the project with similar information, yet both projects have no affiliation?

Chifong: This should not be much of an issue. The RIR Project ranks conceptual transmission projects based on a number of resources scenarios. The RETI ranks CREZs and develops conceptual transmission projects to connect the highest ranking CREZs. When RETI rolls out the information on CREZs, the RIR project integrate them as potential scenarios, to the extent they are not already included.

Peter Bray: Please include on the RIR website, the description how the RIR project will look at the results coming out of the RETI process.

Logan Winston: Are we going to be able to access the different scenario spreadsheets?

Chifong: Once the first cut scenarios are developed the information will be posted for comments from the stakeholders. Adjustments can be made as needed.

Matthias Fripp: How are you handling the timing of the wind and solar resources, how is the capacity factor decided with peak dates for the seasonal cases?

The CEC has developed generation profiles for each types of renewables technology. The coincidental generation from each type of renewables will be modeled in the base cases.

12:20 pm – Conference concludes.

***Next stakeholders call will be, October 7, 2008; exact date to be determined.***

### Action Items:

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### Members in Attendance:

- |                    |                           |
|--------------------|---------------------------|
| • Chifong Thomas   | PG&E                      |
| • Kang Ling Ching  | PG&E                      |
| • Ron Davis        | BEW                       |
| • Billy Quach      | BEW                       |
| • Melissa Mitchell | Aspen Environmental Group |
| • Dave Hawkins     | CAISO                     |
| • Dave Olsen       | CEERT                     |

- Logan Winston Horizon Wind
- Dora Yen LLNL
- Peter Bray PG&E - Transmission
- Robert Jenkins PG&E - Merchant
- Tom Miller PG&E
- Michael Porter PG&E – Transmission
- Chifong Thomas PG&E – Transmission
- Hank Macintosh SDG&E
- Lujuanna Medina SDG&E
- Ben Montoya SDG&E
- Fong Mua SMUD
- Joe Tarantino SMUD
- Monte Meredith TANC
- Larry Gilbertson TID
- Matthias Fripp Union of Concerned Scientists
- Larry Tobias WAPA
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