

California Transmission Planning Group (CTPG)

Response of the CTPG Technical Study Team to the May 20, 2011, Comments of Tom Isham on CTPG's May 19, 2011, Stakeholder Meeting Concerning CTPG's 2011 Work Plan

Comment:

1. What are the guidelines for stressing the selected paths that will be stressed? Is it based on historical? Are the paths that are stressed realistic in that for peak load cases they tend to be the paths that are loaded heavily? Will each scenario have different stressed paths?

CTPG Technical Study Team Response:

For the set of cases in which one or more paths will be “stressed,” the CTPG Technical Study Team has not yet decided how it will decide which paths to “stress.” However, the CTPG Technical Study Team has narrowed the list of candidates to the following paths:

- Path 15 South-to-North
- Path 26 North-to-South
- Path 66 (California-Oregon Intertie (COI)) North-to-South

Stakeholder suggestions as to how to select the paths to be stressed are welcome.

Comment:

2. Since the CTPG has dropped the 70%/30% in-state/out of state constraint, what are the guidelines that CTPG will follow to select the source of the renewables for each scenario?

CTPG Technical Study Team Response:

The 70%/30% in-state/out-of-state constraint used in the CTPG's 2010 work applied only to the fossil-fired generation decrements necessary to reach a load-resource balance upon the addition of the applicable renewable resource development portfolio to the starting point, pre-renewable power flow seed case. This constraint had no bearing on the renewable resource development portfolio that was applied in any particular study scenario.

The decision as to which renewable resource development portfolios will be studied in the CTPG's 2011 work has not yet been made. The CTPG Technical Study Team encourages stakeholders to submit, by June 2, 2011, suggestions as to what renewable resource development portfolios should be studied by the CTPG. It would also be helpful if stakeholders provided a narrative providing the underlying basis of, and support for, their suggestions.

CTPG's current schedule anticipates that the renewable resource development portfolios to be studied by the CTPG Technical Study Team will be finalized following a stakeholder meeting in early July, 2011. Study results will be reviewed with stakeholders in September, 2011 and a final study report is expected in the October, 2011 timeframe.

Comment:

3. With between 60,000 to 80,000 megawatts in the generation queue, how will CTPG select how much to model for each scenario?

CTPG Technical Study Team Response:

The CTPG has not yet reached any decisions on which renewable resource development portfolios will be used in its 2011 work and encourages stakeholders to submit suggestions as to the composition of those portfolios or a methodology for forming such portfolios. Further, the CTPG has made no final determination as to whether it will study renewable resource development portfolios that would exceed the 33-percent Renewable Portfolio Standard (RPS) requirement in Year 2020.

The CTPG Technical Study Team believes it is likely that a significant portion of the renewable resource development portfolios studied by the CTPG in 2011 will be provided to the CTPG by other entities such as the CPUC. For example, it is likely that a substantial portion of these portfolios will be filled with renewable resources from the CPUC's "discounted core" since the CPUC has determined that the renewable resources in the "discounted core" have a relatively high likelihood of being developed. The status of proposed renewable generation in the various Balancing Authority generation interconnection queues, and/or the presence of Power Purchase Agreements (PPAs), may be taken into account in filling out the renewable resource development portfolios to be studied by the CTPG in 2011.

Stakeholders are encouraged to review the CTPG 2010 study plans and study reports posted on the CTPG web site (www.ctpg.us) for information concerning the formation of renewable resource development portfolios used in the CTPG's 2010 work. Similar approaches could be used to develop the renewable resource development portfolios to be studied in 2011.

As noted above, the CTPG Technical Study Team encourages stakeholders to submit suggestions as to what renewable resource development portfolios should be studied by the CTPG. It would also be helpful if stakeholders provided a narrative providing the underlying basis of, and support for, their suggestions.

Comment:

4. Will you be doing a comprehensive dynamic analysis on the pre cases to determine the benchmark for the post cases?

CTPG Technical Study Team Response:

[CTPG will provide a response to this comment at a later date.]

Comment:

5. What is the timing of the Website improvements that CTPG went over?

CTPG Technical Study Team Response:

Three website improvements have been completed:

- 1) The full-time stakeholder feedback link,
- 2) Archiving documents posted before 2011, and
- 3) Updating the CTPG Committees and Leadership.

The other planned improvements require reorganizing and revising the website content. The reorganization of the website will occur during June, 2011 and is scheduled to conclude before July, 2011. Revising the content of the website (i.e., adding a Frequently Asked Question (FAQ) webpage, adding the Project Status List, and revising the Home page) requires the approval of the CTPG Executive Committee. As a result, the proposed content changes will be presented at the July 7, 2011 CTPG Executive Committee meeting and, assuming approval, will be implemented before the end of July, 2011.

Of course stakeholders are encouraged to submit suggestions at any time as to how the CTPG website could be improved.

Comment:

6. What will be the assumptions for adding transmission upgrades from Slide 19?

CTPG Technical Study Team Response:

As stated at the May 19, 2011, stakeholder web-meeting, the CTPG Technical Study Team does not expect that determined disposition of existing Once-Through Cooling (OTC) units will necessitate the addition of new transmission beyond the transmission upgrades already approved by California Balancing Authorities (BAs).

In the unlikely event reliability criteria violations are encountered as a result of this disposition, the engineer performing the applicable CTPG study will identify transmission infrastructure additions that the engineer believes will mitigate the reliability criteria violations. These transmission infrastructure additions will be reviewed by the CTPG Technical Study Team for effectiveness. If effective, they will be included in the pre-renewable starting point power flow cases.

Comment:

7. What were the reasons for the reduced values of the CEC proposed renewable net short range from last year that Gary DeShazo of the California ISO mentioned?

CTPG Technical Study Team Response:

The preliminary range of Year 2020 renewable net short numbers shown on slide 26 of the presentation made by the CTPG Technical Study Team at the May 19, 2011, stakeholder web-meeting, was developed by the CEC staff. Stakeholders should contact Angela Tanghetti of the CEC staff (916-654-4854) for details as to how the CEC staff's preliminary net short range was developed. The Year 2020 renewable net short estimate used by the CTPG in its Phase 2, 3 and 4 work during 2010, was 52,764 gigawatt-hours. This estimate was developed by the Renewable Energy Transmission Initiative (RETI) and is described in the January 18, 2010, document titled "*RETI Net Short Update, Evaluating the Need for Expanded Electric Transmission Capacity For Renewable Energy.*" An annotated copy of this document is posted on the CTPG website and can be accessed via the following link:

http://www.ctpg.us/public/images/stories/downloads/reti_net_short_update.pdf

Comment:

8. With the potential for renewables coming across West-of-River being so important that the CTPG devoted the 2010 Phase 4 to that scenario, why wasn't the Southwest Corridor deemed as important as the other two corridors and get its own scenario for 2011? Wasn't there enough interest in the West-of-River scenario in 2010 to warrant restudying that scenario in 2011? Why isn't the CTPG (CAISO) interested in renewables coming from the Southwest?

CTPG Technical Study Team Response:

The CTPG has not yet reached any decisions on which renewable resource development portfolios will be used in its 2011 work. A renewable resource portfolio that includes a significant amount of new renewable generation west of the Colorado River (WOR) is certainly a portfolio that the CTPG Technical Study Team would be willing to consider for study in its 2011 work. Stakeholders that believe such a portfolio should be evaluated in the CTPG's 2011 work should submit to CTPG by June 2, 2011, the particulars of such a portfolio (*e.g.*, the renewable technologies, quantities, and approximate locations of those renewables). In addition, it would be helpful if stakeholders provided a narrative explaining why they believe it is important for the CTPG to study the indicated renewable portfolio in the CTPG's 2011 study work.

The CTPG is interested in renewables coming from the Southwest and notes that several renewable resource portfolios that included relatively large amounts of renewable resources in the desert Southwest were studied by CTPG in its 2010 work. The CTPG encourages stakeholders to review the relevant study plans and study reports posted on the CTPG web site (www.ctpg.us).

Comment:

9. Since the CTPG is only including new transmission lines in California that have BA approval, how is the CTPG deciding which lines to include outside of California that are shown interconnecting on the fringes of California like the lines into the Eldorado Valley?

CTPG Technical Study Team Response:

The CTPG will include in the pre-renewable starting point power flow cases any new transmission in the WECC that the CTPG knows has BA approval. This includes, for example, CAISO BA-approved transmission upgrades that are partially outside the state of California (the 230 kV Ivanpah-Eldorado #1 line is partially in southern Nevada).

Comment:

10. What specific information do you require to get a scenario added? Could the CTPG send an example of one that was submitted previously?

CTPG Technical Study Team Response:

As discussed by the CTPG Technical Study Team at the May 19, 2011, stakeholder meeting concerning the CTPG's 2011 work plan, the CTPG will consider for study in 2011 scenarios submitted by stakeholders that have varying levels of specificity. Recognize that to the extent the scenario lacks specificity in terms of renewable resource technologies, quantities and approximate geographic location, the CTPG Technical Study Team will be forced to make assumptions in order to model the scenario in a power flow program. The more assumptions the CTPG Technical Study Team is forced to make, the greater the possibility that the scenario will not represent what the stakeholder intended.

An example of the kind of detail that is most helpful is provided in the cell range A1:I84 on the worksheet labeled "Summary_model_connections" in the Excel spreadsheet named "CTPG_WOR_scenario_v8.xls" that is available on the CTPG website at www.ctpg.us/public/images/stories/downloads/ctpg_wor_scenario_v8.xls.

Comment:

11. As far as alternative transmission mitigation is concerned, what were the conclusions from the 2010 study? Was the information obtained from those studies worthwhile or not? Or was it just a lot of busy work and nothing valuable was learned?

CTPG Technical Study Team Response:

The evaluation of transmission infrastructure alternatives submitted by stakeholders for evaluation in the CTPG's Phase 3 analysis during year 2010 was useful and informative. The results, of course, are specific to the underlying assumptions used in the performance of the studies. For example, had a different renewable resource portfolio been used or had a different month, day of week, or time of day been studied, significantly different results may have been found.

Stakeholders are encouraged to review the Phase 3 Study Plan and Phase 3 Study Report available on the CTPG website to understand which transmission infrastructure alternatives were studied, the assumptions underlying those studies, the study results, and the conclusions the CTPG reached based on those studies.

Comment:

12. Slide 42 mentions a Southwest renewable generation portfolio to be studied. Why isn't this being studied with the Southwest High-Potential Corridor?

CTPG Technical Study Team Response:

The CTPG has not yet determined what would be “studied” in connection with the high potential “Southwest Corridor” identified in the 2010 Phase 4 study report. The “Southwest” renewable generation portfolio studied by the CTPG in Phase 2 of its 2010 work could be a candidate renewable resource development portfolio that could be studied in connection with the high potential “Southwest Corridor.” As noted above, the CTPG is encouraging stakeholders to submit to the CTPG by June 2, 2011, the renewable resource development portfolios that stakeholders believe the CTPG should study in its 2011 work. In addition, it would be helpful if stakeholders provided a narrative explaining why they believe it is important for the CTPG to study the indicated renewable portfolio in the CTPG’s 2011 study work.