

CTPG PHASE 3 STAKEHOLDER MEETING
August 4, 2010

STAKEHOLDER COMMENTS & QUESTIONS

MORNING SESSION

1. Barry Flynn – Flynn RCI

Q – Relative to CTPG assumptions, what “different view of the future” do independent transmission developers have?

A – CTPG’s PH3 analyses utilized renewable resource development assumptions provided by RETI as well as other renewable resource development portfolios described in the Phase 2 study report. Independent transmission developers generally expect a much larger portion of California’s renewable net short will be met from renewable resources developed outside the state of California.

2. Mark Etherton - PDS Consulting

Q – To Jonathan Shearer: not a lot of overloads for autumn cases; did the case include transmission upgrades identified by CTPG in any of CTPG’s other study scenarios?

A – Except for upgrades that are common across all of CTPG’s scenarios, the autumn case did not include transmission upgrades unique to other CTPG study scenarios.

Q – To Jan Strack: were any of the “alternative” projects tested against the autumn assumptions?

A – No.

3. Sharon Firooz – Advanced Energy Solutions

Q – Jan Strack: In evaluating the “alternative” transmission projects, did CTPG remove CTPG-identified transmission upgrades before adding the alternative transmission project?

A – Where we thought the alternative would resolve an overload, we removed the CTPG-identified transmission upgrade that mitigated the overload and then tested the alternative with contingencies to see if the alternative also mitigated the overload.

4. Rich Ferguson – RETI

Q – RETI constructed two renewable developed portfolios, one using a 70/30, in-state/out-of-state assumption, the other using 30/70 in-state/out-of-state assumption. CTPG only had time to evaluate one of these portfolios and RETI decided it should be the 70/30 in-state/out-of-state portfolio. RETI identified the most attractive renewable resource development potential, but the out-of-state amounts were limited by 70/30 in/out of state percentage. There are an infinite number of scenarios, so the decision was to analyze the most likely assumptions.

How did CTPG decide on the transmission upgrades that mitigated the CTPG-identified overloads?

A – No formal process was used. CTPG utilized the experience of the engineers with knowledge of the system in the areas where reliability criteria violations were found.

5. Dinesh Salem-Natarajan – Terra-Gen Power

Q – Study methodology used input from developers on transmission alternatives, but not the generation alternatives. CTPG appears to have left out some of the benefits of the generation alternatives.

A – Plenty of differing views of where the renewable resources will develop. CTPG used renewable resource development portfolios that were provided by RETI and that were developed for the Phase 1 and Phase 2 studies using criteria described in the Phase 1 and Phase 2 study plans and study reports.

6. _____ - Sierra Club

Q – Important elements of the renewable “net short” estimate appear to be missing; e.g., uncommitted energy efficiency impacts.

A – Rich F: “Net short” estimates are always a work in progress. Estimated incremental energy efficiency impacts were not adopted by the CEC prior to the development of the current net short estimate and were therefore assumed to be zero. RETI’s next net short update will include incremental energy efficiency impacts as adopted by the CEC.

7. David Smith – Transwest Express

Q – What are the general assumptions about how the transmission alternatives will be funded?

A – How projects would be funded is outside of the CTPG scope and objectives.

8. Rich _____ - Black & Veatch

Q – Jan Strack: explain the methodology used to model the output of renewable resources in the study scenarios; e.g., were resources assumed to produce power at their nameplate capability or at some other level?

A – CTPG purposefully did not use the “deliverability” study methodology employed by the CAISO in its generator interconnection studies. The CAISO’s deliverability methodology generally runs all resources, both existing resources and new resources of equal or higher queue position, in the study area at “full output” and then tests the system impacts. Because CTPG believes renewable resources will displace existing fossil-fired generation, and because not all renewable resources in generator interconnection queues will get built, CTPG concluded that it would not be appropriate to use the CAISO deliverability study methodology. Further, assuming all new renewable resources will be simultaneously operating at full output during peak load conditions would result in an over-built transmission grid, create transmission project approval hurdles and raise “used and useful” issues.

CTPG understands that given the very limited single-snapshot approach used for the technical studies, it is possible that there may be other system conditions which would result in grid constraints for which different transmission upgrades might make sense to consider from a cost/benefit standpoint.

9. _____ - _____ Environmental

Q – Jan Strack: slide 22 – Can you give some idea of the amount of new generation that would trigger a requirement to upgrade Path 52 between Silver Peak, Nevada and Control substation in California?

A – It wouldn’t take much. The existing path rating for Path 52 is 17 MW in both directions.

10. Gary _____ - IEP

Q – Methodology to determine how many and which scenarios to study?

A – Portfolios were determined, in part, by stakeholder input; specifically RETI input and the CAISO and POU generator interconnection queues. In addition CTPG developed a renewable resource development portfolio in Phase 1 that was based on CTPG-members’ respective procurement portfolios.

11. Jeff Schrader – Great Basin Energy Development

Q – RETI assumed approximately 400 MW of northern NV generation potential. Developer has proposed it as 1000 MW.

A – Mike Deis: Analysis team is undertaking a study of the Great Basin transmission alternative assuming injections at the O'Banion, rather than Table Mountain, substation.

Q – Currently proposed on the 230 kV system, but CTPG might find that it concludes to connect into 500 kV system.

A – As CTPG's study plans and study reports have repeatedly indicated, CTPG has not—with the exception of the transmission “alternatives” submitted by certain independent transmission developers—undertaken any consideration of wires- and non-wires alternatives to the transmission upgrades identified by CTPG. Whether an evaluation of other wires- and non-wires alternatives is something that CTPG will undertake in the future is something that will be discussed in connection with deciding what CTPG's “next steps” should be.

12. Sharon Firooz – Advanced Energy Solutions

Q – Any timing considerations of which transmission upgrades will be developed first?

A – CTPG believes that many of the transmission upgrades identified as “High Potential” in the second draft Phase 3 study report (Appendix C) can be developed relatively quickly. However, CTPG's studies are focused on year 2020 requirements and do not specifically address interim development schedules. Interim timing of transmission upgrades is something that will be discussed in connection with deciding what CTPG's “next steps” should be.

AFTERNOON SESSION

13. Madeline _____ - First Solar

Q – There are some unfinished pieces to the CTPG work. The non-POU's are not included in the shift factor analysis. In addition, the Northern California studies remain as well as the CAISO integration study. Will this work be included in Phase 3 or later?

A – The recommendation is to not include this work in Phase 3. CTPG will be following a staged approach and will continue to review these issues in Phase 4.

The high potential lines should be considered a down payment as to what will be required to meet the 33% RPS goals. CTPG needs to continue to study the medium potential lines as well as other alternatives. In addition, a solution for Northern California needs to be evaluated.

14. Mark Etherton - PDS Consulting

Q – In Appendix C no alternatives received environmental scores or were identified as “High Potential” or “Medium Potential” lines. What does it take to get included?

A – Most of the medium/high lines were needed to connect the California CREZ’s. The third party alternatives are considered the same as other medium potential lines. No projects have any position with respect to the other lines. We will check the report to make sure the alternative projects are characterized correctly.

15. Darius _____ California Wind Energy Association

Q – Maps were not included in the Phase 3 report.

The approach used by CTPG may not produce good results. The list of high potential lines consists primarily of generation ties and old utility projects. The list does not incorporate needed bulk system upgrades that cut across different utilities. CTPG may need to abandon AC powerflow and utilize a DC powerflow so that more alternatives can be evaluated.

A – CTPG’s work is not complete. CTPG is pursuing a staged approach and has more work ahead in developing a plan that meets an RPS of 33%. The initial high potential lines are generation ties that have a high degree of certainty while the medium potential lines will require more analysis. However, CTPG is confident that it can complete a full-blown analysis and come December 2010 CTPG will have a full set of transmission that will incorporate additional work completed by the Balancing Authorities as well as the independents.

16. Perry Cole – 21st Century Transmission

Q – It would be helpful to get the independent transmission providers into the CTPG process. We can provide resources and would like a seat at the table. We can help determine the best fit for the least cost. For the next phase more work needs to be done with dynamic studies. What happens with the system on an hour-by-hour basis at different times of day? What happens with power plants in the east? You need more than just a snap shot. You need to evaluate more heavy out-of-state conditions and need more integration with WECC.

A – I have no record of a response to Perry Cole’s statements and neither does Casey who also took notes.

17. Barry Flynn -- Flynn RCI

Q – The recent work used to identify high potential and medium potential lines was not described in the Phase 3 report. This work needs to be described and stakeholders need an opportunity to review this information.

Given the uncertainties in planning new transmission lines a more simplified approach should be used. Use an approach that can give you a first cut on several scenarios. Look at E3’s spreadsheet as well as the CAISO once-through-cooling method and WECC’s proposed work.

18. David Smith – Transwest Express

Q – What percent of RPS is achieved by the high potential transmission lines? Who will fund the high/medium potential generation ties? Will CTPG inform the generator owners of their decision? I agree with previous comments that a less sophisticated approach should be used to analyze a wider range of scenarios.

A – CTPG is working on the percent of RPS achieved by the high potential lines and this number will be incorporated into the report. We are confident the number will be below 33%. CTPG does not address who builds or funds projects. In addition it will be up to the developers as to how generation ties get built. CTPG is a technical group and not a decision making body.

19. Pushgood? -- Flynn RCI

Q – Can you provide the data used for the shift factor analysis?

A – Powerflow analysis was used to test candidate transmission solutions. We can make the powerflow data available. The shift factors were based on CAISO’s deliverability analysis and were used to screen the projects identified in the powerflow analysis.

20. Rich Ferguson – RETI

Q – More information is needed on how the shift factor analysis was used. I am surprised that we didn’t end up with high shift factors on Path 15 and Path 26. How does the high ranking CREZ’s come in because it’s different from RETI?

A -- The CTPG powerflow cases were used to calculate shift factors for each CREZ. We will add more description on the shift factor analysis in the report.

21. Tim Cushion – RK Solar

Q – Why is the Kramer – Yono 1 a medium potential line while the Midway – Morro Bay line is a high potential line? The environmental scores for Tehachapi are higher and the potential is twelve times greater.

A – The Carizo CREZ is further along in commercial development and it has a high correlation with the CPUC's discounted core. In addition, it has less environmental impacts because it is a reconductor project as opposed to the Kramer – Yono line which would require a new 500 kV corridor.

22. Gene O'Neal – California Energy Commission

Q – In the shift factor analysis what was the cut off for medium potential lines? Please put more detail in the report.

A – The shift factors for high potential lines exceeded twenty percent. The cutoff for medium potential lines was not precise but some medium potential lines had shift factors exceeding five percent.

23. Barry Fynn – Flynn RCI

Q – I recommend CTPG continue on with Phase 4 while allowing stakeholders more time to review the Phase 3 work.

A – Would one week be enough? We want to work with you and will take this issue to the Executive Committee.

24. Mark Etherton -- PDS Consulting

Q – We need more time to analyze the Autumn cases.

A – CTPG will not be closing up its shop. More time will be available.

25. Gary Marraige – IEP

Q – The stakeholder comments are not posted on the CTPG we site for Phase 3. We want all questions answered and these responses should be in the draft report. How much of the RPS needs will be met with the current list of projects? CTPG needs to incorporate a wider view with independent transmission input.

A – You raise a good point regarding the stakeholder comments. We'll take that into consideration. We will cover the plan for incorporating a wider view in our next steps presentation.

26. Barry Fynn – Flynn RCI

Q – There is uncertainty regarding the CAISO tariff with respect to renewables. Should we be looking at the existing tariff or the proposed tariff?

A – You should use the existing tariff.

27. Madeline _____ -- First Solar

Q – Will CAISO put the high potential lines into the CAISO plan?

A – Both the high and medium potential lines will be incorporated. As more analysis is completed some of the medium potential lines could transition to high potential. Also, we need to address what to do for Northern California.

28. Madeline _____ -- First Solar

Q – Will these lines go into the 2011/2012 process or the 2010/2011 process.

A – They will go into the 2010/2011 process.

29. Madeline _____ -- First Solar

Q – How will the CTPG high and medium potential lines correlate with the LGIP.

A – Until the projects are approved they will not go into the planning studies.

30. Madeline _____ -- First Solar

Q – What if the projects overlap with the Phase 2 transmission cluster studies?

A – The LGIA will need to include the projects that overlap.

31. Rich Ferguson – RETI

Q – Are the high and medium potential lines considered as projects or as potential solutions to reliability problems?

A – They will be considered as potential solutions to reliability problems.

32. Rich Ferguson – RETI

Q – When would the projects go to the CAISO Board for approval?

A – There is no clear answer as there is uncertainty as to what tariff CAISO will be in place during 2011.

33. Mark Etherton -- PDS Consulting

Q – The CAISO 2008/2009 projects were not included. What's the thinking on these projects?

A – These projects will be addressed in Quarter one 2011.

34. Paul Sherman – Citizen's Energy

Q – When will the CTPG state-wide plan be completed?

A – There will be a draft plan in place by the end of the year.

35. Paul Sherman – Citizen's Energy

Q – Will CAISO have a 2011 plan?

A – Yes.

36. Paul Sherman – Citizen's Energy

Q – Will CAISO be going to the Board in the first quarter of 2011 with this plan?

A – The CAISO process is a fifteen to sixteen month process so Board action will take place during the second year.

37. Paul Sherman – Citizen's Energy

Q – Will the state-wide plan be completed once or will it get reviewed annually?

A – The plan will be continually modified and evaluated.

38. Madeline _____ -- First Solar

Q – Will CAISO's Wind & Solar integration study feed the CTPG plan or visa versa?

A – The Wind & Solar integration study is more concerned with operations and addresses issues such as what thermal is required to cover intermittency.

39. Paul Sherman – Citizen's Energy

Q -- Will the CTPG schedule for 2011 include a revision to the 2010 plan?

A – That is unknown but we will continue to revise the plan. However, we have other studies to complete such as once-through-cooling and a carbon plan.

40. Gary Marriage – IEP

Q – How can we be more involved now and in the future?

A – We will take this issue to the Executive Committee.

41. Barry Flynn – Flynn RCI

Q – Will the stakeholder process be the same in Phase 4? What will the stakeholder process be in 2010 and 2011?

A – We will have better information at our next stakeholder meeting.

42. David Smith – Transwest Express

Q – I suggest CTPG develop a process looking at the time frame for long lead items and then develop a phased plan.

A – We will need to look at phasing. We aren't sure when we will get to this step but probably next year.