

INDEPENDENT ENERGY PRODUCERS

CTPG Phase III Study Report Feedback Questions

August 18, 2010

The Independent Energy Producers Association (IEP) appreciates the opportunity to provide this second set of comments and questions to the California Transmission Planning Group (CTPG) in regards to its Phase 3 Study Report. IEP represents over 20,000 MWs of non-utility, independently owned generation resources in California, which points to our interest in the results and impacts of the CTPG conceptual statewide transmission plan.

Q0

On June 30, 2010 IEP provided CTPG a set of ten feedback questions (attached to this document) regarding CTPG's Phase 3 Study Report. CTPG's receipt of IEP's questions is confirmed by their presence on the CTPG website. To date, CTPG has not yet responded to any of IEP's original questions.

Comment/question:

- *When will the CTPG respond to IEP's questions, dated June 30, 2010?*
 - *Will CTPG's responses to IEP and other commenters' questions become a part of the record going forward, included in the final report, or otherwise memorialized?*
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Q1

In both its written Phase 3 documents and recent presentations to stakeholders, CTPG defines the study process as conceptual and limited in scope to largely technical evaluations (i.e. power flow and system operations). CTPG's focus has been on load and resource volumes, locating resources with immediate commercial potential, and defining a set of network upgrades that might connect sources to sinks in a manner that won't exacerbate and perhaps relive system constraints. By design, CTPG limited its assessment to certain resources. However, CTPG explains in its recommendations (page 126) that it will be conducting further analysis on (1) the "high" and "medium" potential projects, (2) the northern California transmission needs, and (3) the out of state resource scenarios.

Comment/question:

- *How will the results of Phase 3 be prudently used by IOUs, POUs, regulators, BAAs, and others going forward?*
- *Is it realistic in CTPG's estimation to assume that agencies and entities will start expending resources based on this report, and if so, how would CTPG suggest they proceed in order to minimize their losses when/if the upcoming rounds of planning efforts identify different preferred solutions?*

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Q2

CTPG's work is nearing a transition point in which a broader planning/permitting audience will look to this study (and subsequent CTPG efforts) to support decisions that are likely to drive project development and define California's energy market now and for years to come. Wholesale prices, retail rates, and California's energy market will be directly influenced by the generation and transmission decisions influenced by California's long-term transmission plan, a portion of which the CTPG Phase 3 study aims to define. With those long-term consequences in mind, the need to "get it right" is obvious and, admittedly, no simple task. In Phase 3 CTPG initially hoped to produce a "least regrets" set of projects, but has since modified its thinking due to what it describes as a lack of convergence on the outcomes resulting from the power flow studies.

Comments/question:

IEP is eager to ensure that long-term opportunities for economic and environmental benefit to California are preserved. IEP is also concerned that near-term planning decisions may result in forfeiture of future options. Under such conditions, the approach "First, do no harm" may be more appropriate than "least regrets".

- *What can CTPG provide by way of study data to support a prioritization of the list of "high potential" projects such that those interpreting the project prioritization may have some assurance that those projects would "do no harm" to (and perhaps help ensure that) California's opportunities to access resources not included in the current Phase 3 plan*
- *How can CTPG more cautiously define the limitations of the study results so that certain planning entities will understand the risks associated with the final results?*

Q3

At the August 4, 2010 stakeholder meeting IEP requested a more expansive role for the independent generators in an enhanced and more collaborative CTPG planning process starting immediately after Phase 3 ("Phase 4" as discussed by CTPG). CTPG agreed to take IEP's request to the CTPG steering committee.

Comments/question:

- *IEP is interested in CTPG's response to that request and is prepared to offer active support in an enhanced planning process. IEP members represent a source of valuable market and planning information which,*

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heretofore, has not been exploited by CTPG for the benefit of the larger planning process.

Q4

The Phase 3 Report lacks the mapping that was provided in presentation format at the August 4, 2010 meeting.

Comments/question:

IEP requests that all mapping be presented in the final report.

Q5

Data tables, as used for scoring the projects and resources in Phase 3, should be available to stakeholders, in the same format used by the CTPG, as well as an additional format that would enable a comprehensive review by all stakeholders. References in the CTPG reports about utilizing specific data (e.g. “based on RETI 2A...”) are welcome and appreciated, but don’t allow the reader to easily confirm the source data and how it may or may not have been reformulated by CTPG in its process.

Comments/question:

- *Please make non-proprietary data available on the CTPG website. Each table within the CTPG reports would be helpful to stakeholders to have in Excel (or Word) format rather than Adobe .pdf.*
- *Where practical, please include CTPG’s notes & calculations in these documents.*

Q6

Phase 3 (page 120) explains that the interconnection queue resources for the non-CAISO entities stems from Phase 2 efforts. The Phase 2 report says (page 31) *“From outside the California ISO queue, the generation interconnection queue-based portfolio also included proposed renewable generation projects and associated transmission from the other CTPG Members (Imperial Irrigation District, the Los Angeles Department of Water and Power, the Sacramento Municipal Utility District, the Transmission Agency of Northern California, and the Turlock Irrigation District). These entities identified projects totaling over 3,000 megawatts of installed renewable generation capacity considered by these planning entities to be the most advanced in their respective approval processes.”* These volumes are clearly material and a substantial part of the entire California renewable energy picture.

CTPG expects that the Phase 3 report will inform the development of a transmission plan to cover the entire state, including non-CAISO BAAs and non-CPUC jurisdictional LSEs. However, several times in the Phase 3 report CTPG is required to mention that differences exist in the methodologies employed to quantify resources for the two types of entities. On page 122 of

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the Phase 3 report CTPG says that it is “attempting to gather comparable “discounted core” data for these non-CPUC” LSEs, but that at the time of the report, the data was not available.

Comments/question:

- *Please provide additional information to explain to the reader the steps taken by each non-ISO entity to develop its own generation queue, specifically as those methodologies compare to the CAISO-jurisdictional entity approach.*
- *Given that the amount of load served by non-ISO LSEs is so large – 20% by CTPGs calculations - one would expect that section 11, “Next Steps”, would include some description of how CTPG will (a) reconcile the any differences between the methods of quantification between CAISO and non-CAISO LSEs, and b) some description of process that CTPG’s non-CAISO LSEs will be taking to close the information gap identified on page 122.*
- *What data/information can CTPG members provide to confirm that the processes used by the IOUs and POUs are sufficiently similar such that the planning is reliable and the results are supported by the data?*

Q7

The Phase 3 report goes into some detail to describe the individual assessments and rankings that make up the full study. For example, significant space is provided to discuss environmental scoring. The report also describes the details behind the assessment of “commercial interest”.

The report would be considerably easier to accurately interpret if there were a method employed that illustrates the combined details behind the scoring that lead to the designation of “high” and “medium” potential. The study report would benefit greatly from information that allows the reader to see how each studied line and line segment measures up against all others. The “alternative projects” should also be included as part of this comparison/listing.

Comments/question:

The table on the following page is suggestive, but a table with similar information would allow the reader to understand the delivered benefit from a specific transmission project with regards to its meeting the RPS and in comparison to other options. An approach of this nature may improve CTPGs information transfer to those ‘stakeholders’ not actually working on this content. Follow-on phases would benefit from this record as well. (See table on next page).

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The following table is suggestive and may not address the entire nuance that actually resides behind the CTPG weighting/scoring analysis. This level of detail would aid the reader in comparing the lines identified as “high”, “medium” and “alternative”, one to the other. Please provide this level of detail or greater detail as applicable going forward.

Line Name/ Identifier	To From Sub Names	Interconnected CREZ(s) Name(s)	Assumed MW				Number of Projects				Environmental Score	Interconnection Queue Score	Discounted Core Score	Total “Weighted” Score	“High” & “Medium” & “Alternative” Indicator	Annual MWh Delivered
			Wind	Solar	Geo. Th.	Biomass	Wind	Solar	Geo. Th.	Biomass						

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THE FOLLOWING QUESTIONS WERE SUBMITTED BY IEP ON JUNE 30, 2010.

Q1

The CTPG Phase 3 Study Report (“Report”) states on page five that an “important further qualification of the CTPG process...is that CTPG is not a transmission or generation project decision-making body.” The Report goes on to say that such decisions will be made by the CTPG members that are planning entities for their Balancing Authority Areas and therefore the 2010 statewide is meant to be “truly conceptual, not prescriptive...”

Questions:

The comment appears to ignore the fact that CTPG is itself made up of those precise entities that will make project decisions, therefore, how will CTPG insure that preferences driven out in private during proprietary CTPG study work aren't “rubber stamp” approved by the BAAs (read: CTPG members) when project selection time arrives? What will CTPG do to insure that the outcome of CTPG's efforts is indeed considered by CAISO, TOs, LSEs, CPUC and others as “conceptual”?

Q2

On page 5 of the Report CTPG states that at the end of Phase 3 that it expects that the identified bulk transmission needs will be “further analyzed and refined, including wires and non-wires alternatives for addressing those needs, by different planning entities, evaluated through their respective stakeholder process.”

Questions:

Please elaborate on this statement by identifying the “planning entities” envisioned as well as the “stakeholder process” they will follow, if known. In addition, please state what exactly CTPG considers as “non-wire” alternatives in this context and how plans created by these other entities via their stakeholder processes will fold back into the CTPG process, if it will.

Q3

On pages six and seven the Report states that CTPG provided wires recommendations only, and “did not conduct a deliverability analysis to determine the necessary improvements and operating methodology for delivery of renewables to fulfill Resource Adequacy eligibility and to provide integration capability for variable generation...”

Questions:

When and how does CTPG expect to integrate this level of planning (RA & VG integration) into its own process and moreover the larger CAISO RTPP process?

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Q4

On the same point as above, the Report anticipates that this type of study, meaning RA and VG integration, will be completed by the entity responsible for each project utilizing “its own analysis assumptions.” The Report concludes that CTPG may perform this analysis in future studies.

Questions:

What process does CTPG envision that will insure some standardization in the assumptions utilized in these processes?

Q5

CTPG modified various RETI 2A findings in the Phase 1 Study that serve as the basis for Phase 2 and now Phase 3 findings. In Phase 1 CTPG provided Table #6 (excerpted below) to identify differences between the generation resource scenario in RETI 2A and CTPG.

Table 6: CTPG Renewable Generation Comparison to RETI

Location (Region/CREZ)	CTPG		RETI*	
	Installed Capacity (MW)	Identified Annual Renewable Energy Production (GWh)	Maximum Potential Installed Capacity adjusted for success rate (MW)	Identified Potential Annual Renewable Energy Production adjusted for success rate (GWh)
British Columbia	0	0	340	1849
Washington	963	2594	0	0
Montana	413	1111	N/A	N/A
Idaho	130	350	N/A	N/A
Oregon	1637	4408	392	3062
Round Mountain-A	0	0	101	710
Round Mountain-B	78	319	49	196
Lassen North	873	2262	387	999

The Report states that Phase 1 differed from RETI in that CTPG studied a portfolio based on “the commercial interest” expressed by CTPG LSE procurement plans. Phase 2, as reported, further refined the portfolio based on interconnection requests and other factors that CTPG believed would better determine projects that were more likely to be developed.

Questions:

The process described in the Report indicates and jointly developed CTPG methodology was employed to create the modified portfolios using some means

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or metric to evaluating actual generation projects and weighting them by specific criteria. Please provide the evaluation work papers/analysis tools that were utilized to modify each phase of planning from RETI 2A through each step of refinement up through Phase 3 and the current Report.

Table 4.3, 4.4 and 4.6 of the Report identifies projected generation resources from each CREZ between RETI 2A through CTPG Phase 3, and includes detail regarding assumed resource by generation type. For those significant changes in expected CREZ resource quantities (i.e. 100 MW or more for all combined generation types in a CREZ) and significant changes in generation-specific resource assumptions within any CREZ, please provide commentary about the assumptions that support those changes.

Where specific projects are impacted by planning assumptions perhaps specific to a CREZ, technology type, or other factor, please identify each.

Q6

On Page 7, the report states that, in Phase 1 the CTPG studied “a renewable generation portfolio that was based on the commercial interest expressed by the CTPG member’s [sic] Load Serving Entity Procurement Plans.”

Questions:

Please: (1) indicate the documents referred to as “the CTPG member’s Load Serving Entity Procurement Plans;” and (2) if the supply sources and procurement amounts are not the same as stated in those documents, please describe the changes that were made and the reasons for those changes.

Q7

Tables 4.3 and 4.4 both show the RETI Best CREZ portfolio, but the CREZ/area identifications appear to be labeled 187 MW of installed renewable capacity and 1,259 GWh of renewable energy capacity for “Nevada” (Table 4.3), with 1,120 GWh of this generation apparently consisting of geothermal generation in the “Nevada-Owens” area.

Questions:

- (1) Please explain the differences between the CREZs/areas in the two tables, e.g., between the “Nevada” area in Table 4.3, the “Nevada-Mountain Pass” and “Nevada-Owens” areas in Table 4.4, and the Nevada North CREZ.*
- (2) Please explain any differences between the transmission paths assumed in the RETI analyses and the transmission paths in the CTPG Report, e.g., for Nevada North generation.*

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Q8

In Section 8 (“Transmission Needs Alternative Analysis”), the Report states that, “in order for the comparison studies [of transmission alternatives submitted by stakeholders] to be consistent, the CTPG will use the scenarios developed in Phase 2 as basis for the power flow studies” to assess those alternatives.

Questions:

Why is it necessary to use the Phase 2 scenarios instead of the Phase 3 scenarios for the analyses to be “consistent”? Why couldn’t they be made “consistent” by assuming the Phase 3 scenarios instead, or by examining them under both the Phase 2 and Phase 3 scenarios? This is particularly important for project suggestions, like #3 (“Path 52 Connections for Nevada Resources”) that would be particularly well-suited for the Phase 3 scenarios (e.g., those with higher (we would argue more realistic) amounts of Nevada North geothermal generation).

Q9

In Section 8 (“Transmission Needs Alternative Analysis”), the Report states at p.75 that that the Phase 3 analyses assumed that only half of the Nevada North geothermal and wind resources in the NV Energy interconnection queue would actually be developed, and that this generation would be interconnected through the Lassen North CREZ. It appears that the report simply calculated a number for the additional assumed Nevada North wind and geothermal generation and then “characterized” it as “Nevada North” generation – i.e., it did not actually add any Nevada North generation but simply called what was Lassen North generation “Nevada North” generation.

Questions:

- (1) Please describe the reasons why the Nevada North generation in the NV Energy queue was cut in half for this analysis.*
- (2) How does this assumption compare with the treatment of generation in the CTPG members’ interconnection queues? Were those also cut by 50% and, if not, why not?*
- (3) What is the basis for assuming that this generation would interconnect through the Lassen CREZ, instead of through the existing Path 52 transmission path? What was the reason for making this assumption in the RETI Best CREZ scenarios, even though the RETI analyses assumed a Path 52 import point? Please provide specific citations of documents or quotes from your sources.*

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Q10

Section 9 (“Least Regrets Analysis”) is entirely blank, and Section 10 (“Findings, Conclusions, and Recommendations”) appears to be a simple compilation of the findings of the different scenario analyses.

Questions:

- (1) Please describe: (1) how the CTPG plans to conduct such “least regrets analysis” from all the different cases and scenario results in the Phase 1-3 study reports; (2) when the CTPG plans to release that analysis; and (3) the opportunities that stakeholders will have to comment on this portion of the report.*
- (2) How will the “least regrets” results that will be in Section 9 relate to the “findings, conclusions, and recommendations” in Section 10?*