

IID’s Comments on the CAISO Proposed Remote Resource Interconnection Policy

Submitted by	Company	Date Submitted
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This template has been created for submission of stakeholder comments on the following topics covered in the June 1 Market Notice regarding Remote Resource Interconnection Policy. Upon completion of this template please submit (in MS Word) to chinman@caiso.com. Submissions are requested by close of business on Friday June 15, 2007.

Please submit your comments to the following questions for each topic in the spaces indicated.

1. What is the minimum percentage of capacity of eligible projects that must be subscribed pursuant to executed Large Generator Interconnection Agreements before construction can commence?

The proposed 25 to 30% is too low and may result in longer than acceptable subsidization by CAISO ratepayer. To minimize this risk, a higher initial percentage, 40 to 50 % of capacity from eligible projects should be subscribed pursuant to executed Large Generator Interconnection Agreement prior to commencing construction. Additionally, a technical and financial analysis should be performed before authorization to build each trunkline in order to protect customers from unjust and unreasonable rates. These technical and financial studies should evaluate the cost-effectiveness of each proposed trunkline and should evaluate all reasonable alternatives for transmission of renewable energy.

For example, within the IID balancing authority there are significant geothermal energy reserves in the Salton Sea area. IID has existing transmission capacity surplus available for the export of Salton Sea geothermal reserves. Additionally, IID has existing Right of Ways and infrastructure which can quickly and cost effectively be utilized to further increase transmission capacity. If a trunk line were proposed in this area to access these geothermal reserves, the alternative of utilizing the IID system should be considered since it could provide a lower cost alternative.

Furthermore, implementing a higher percentage (40 to 50%) requirement for eligible projects will result in lower subsidies by CAISO ratepayers. Eligible projects must be renewable resources (wind, solar, and geothermal) that are located in a transmission constrained area.

2. What are the appropriate criteria for demonstrating “additional interest” (i.e., interest more than the requisite minimum percentage of LGIAs) for an eligible project?

A somewhat rigorous demonstration of “additional interest” is essential to avoid long term subsidization of a “Trunk Line” by CAISO ratepayers. At a minimum criterion should include:

- a) Verified renewable capacity (i.e. geothermal steam field potential) and accessibility to renewable potential. I.e. Is there sufficient stored energy to support additional generation for a sustained period of 30 years? 30 years is typically the depreciation horizon for new facilities.*
- b) Confirmation of ability to finance proposed project.*
- c) Ownership of or Rights to land within specific remote resource area*
- d) Ownership of or Rights to renewable resource (i.e. mineral rights for geothermal extraction).*
- e) Demonstrated demand for additional renewable resources.*

3. What is the minimum percentage of “additional interest” that should be shown for an eligible project before construction can commence?

A demonstration of “additional interest” should have to be shown for capacity in excess of that identified as eligible project capacity prior to beginning construction. For example, if the percentage for eligible capacity is set at 40%, then the percentage for additional interest should be 60%. A significant percentage and rigorous demonstration of “additional interest” will minimize the risk of long term subsidies by the CAISO ratepayer.

4. Do wheel-through customers receive benefits from a Remote Resource Interconnection Facility? Should the costs of a Remote Resource Interconnection Facility be included in wheel-through rates? Why or why not?

Wheel-through customers, such as IID, do not benefit from a Remote Resource Interconnection Facility. As the Commission stated in its April 19th Order it is unclear, whether wheel-through customers receive any specific or identifiable benefits as other LSEs that take energy, including imports, from the CAISO balancing authority. According to the Commission, these benefits will likely include fuel supply diversity, reduced price volatility and an enhanced ability for LSEs to cost-effectively meet their RPS requirements. As such, the associated costs of a Remote Resource Interconnect Facility should not be included in wheel-through rates. The Commission, however, encouraged the CAISO to clarify what if any costs would be allocated to wheel-through customers and their corresponding benefits. This stakeholder process provides the prime opportunity for the CAISO to now provide this clarification.

The following example should help clarify IID’s objection to including Remote Resource Interconnection costs in wheel-through rates. Consider the situation where a trunk line is

constructed to interconnect wind generation which has been 100% contracted for by a CAISO load serving entity. Under the current proposal the cost for this trunk line will increase the wheeling rate while providing no corresponding benefit to any wheeling customers. This is not just or reasonable and the wheeling customers should not have this rate increase imposed upon them.

5. What are the key elements of and considerations for a transmission planning process for the Remote Resource Interconnection Policy?

One key element of the planning process must be the global evaluation of all possible alternatives for transmission of renewable generation out of the remote resource area.

For example, let us consider the renewable generation in the Southern Salton Sea area. IID is in the process of upgrading its transmission system and developing several new transmission lines in this region that will enable thousands of megawatts of renewable energy to be transmitted from the Imperial Valley to other parts of the State, including the CAISO. Export capacity analysis and cost/benefit studies should be performed with a global perspective to ensure that proposed facilities are not duplicative of already existing transmission facilities and that no stranded transmission investment results.

The planning process for remote resource interconnections should be no less rigorous than the existing WECC/NERC planning and review processes¹ described below.

Planning Process Outline

The policies, guidelines, planning process, scenario examples, and study methodology are intended to provide guidance to WECC members on the process of planning and placing in service a project as well as to outline member responsibilities with regard to this process.

1. *A procedure for reviewing project conformity with WECC's role for coordinating regional planning;*
2. *Guidelines to demonstrate that regional, sub-regional, and non-CAISO Energy Resource host balancing area needs and efficiencies are considered;*
3. *A consistent and predictable process for planning (who does what, when, etc.) that is well understood and is accepted as standard practice in WECC;*
4. *Consistent methods for determining and demonstrating project ratings in accordance with NERC/WECC Planning Standards;*
5. *An Accepted Rating that has been reviewed by the WECC membership;*

¹ WECC - Overview of Policies and Procedures for Regional Planning Project Review, Project Rating Review, and Progress Reports, Revised April 2005

6. *Allows for negotiations to resolve capacity allocation issues between parties; and;*
7. *A consistent and effective means for resolving disputes over capacity allocation issues should negotiations fail.*

The WECC Regional Planning Project Review

The Regional Planning Review Process encompasses the initial development phase of a project in which regional interest is expressed. The Process addresses how transmission project sponsors should work and interact with other parties when developing a project that has or may have a significant regional benefit or impact. Through this process, WECC members cooperate to identify transmission expansion projects that may be beneficial to the region. By following this process, project sponsors may also address certain issues related to regulatory approval of their projects. The Regional Planning Review Process should begin as soon as possible and involve all interested project participants. Although it will vary, this phase of the process should start when interested project participants are devising their individual and collective transmission needs. This phase is completed when PCC has made a final determination regarding the project's conformity with the WECC Regional Planning Guidelines.

6. What principles should be applied and factors considered to ensure that a proposed Remote Resource Interconnection Facility will result in a cost effective and efficient interconnection of resources to the grid?

As discussed above, a critical principle is to ensure a global perspective in evaluating cost and efficiency. Existing infrastructure and in-progress upgrades external to the CAISO system must be considered as alternatives to any new “trunk line” proposals and appropriately evaluated.

Choosing the “least cost” solution must be a primary principal in this evaluation. To ensure the least cost solution, factors such as existing transmission external to the CAISO must be evaluated and should be done in coordination with the external entity.

For example, the renewable portfolio standard has created much interest in developing geothermal potential within the IID balancing authority. However, most of the focus has been on building new transmission from southern California towards the boundary with IID. While this may be appropriate for long term reliability needs within the CAISO, it may not be the most efficient approach to meet near term renewable goals. In fact, with modest upgrades within the IID system the transmission capacity needed for renewable exports to CAISO can be achieved. Presently IID has nearly 1000 MW of surplus capacity, which can be utilized for the export of renewable energy with modest upgrades of the IID transmission system.

While the above example may not apply to all situations it highlights the potential value in collaborating with neighboring balancing authorities. In fact, a reasonable principal to follow should be the collaboration with the balancing authority where the renewable resources reside and the utilization of that balancing authority's transmission assets to the fullest extent possible to transmit renewable energy to the market.

7. How should Energy Resource Areas be selected?

In the selection process for Energy Resource Areas the following should be considered:

- a) The area should be constrained from a transmission perspective with a requirement to equal or exceed a specified number of curtailment hours similar to the WECC requirement for establishment of a qualified path per WECC Unscheduled Flow (USF) procedure.*
- b) There should be no existing plans to build transmission.*
- c) If the Energy Resource Area is located outside of the CAISO balancing authority, located within a different balancing authority, or in an area accessible by either the CAISO or other balancing authority, then both the CAISO and the other balancing authority should work in coordination evaluating transmission alternatives.*
- d) If the Energy Resource is located outside of the CAISO balancing authority area, approval of WECC and the balancing authority area in which the Energy Resource resides shall be necessary to proceed.*
- e) Will existing Energy Resources for which a transmission path already exists be treated in a case where a CAISO trunk line is constructed to meet a new Energy Resource in that same area?*
- f) If the CAISO trunk line extends into a non-CAISO balancing authority area and strands transmission assets there, how shall the adversely impacted rate-payers be made whole by CAISO?*

8. Should the CAISO consider tariff changes to its existing authority to "cluster" interconnection studies to enhance its ability to efficiently evaluate locationally-constrained resource areas

Clustering of interconnections studies should be limited to locations within the CAISO balancing authority area.

9. Other

Additional items that must be addressed in Tariff language:

- a) *How will non-renewable generation be treated if they request to connect to a trunkline?*
- b) *How will “phantom projects” be identified? The concern here is that projects may be in the interconnection queue for the sole purpose of increasing “additional interest” and have no actual intent of developing. If this was to occur the CAISO ratepayer could be in the position of paying long term subsidies.*
- c) *Cost shifting and adverse financial impacts. The existing proposal for financing of trunk lines may create unintended consequences that negatively impact the rates of other load serving entities and balancing authorities.*

The following example should help clarify IID’s concern. Suppose that the CAISO determines that it could serve 500MW of new geothermal resources by building a \$50 million trunk line into the Salton Sea area, and that it received a showing of interest from 165 MW of potential resources. Also assuming an annual revenue requirement of 14 percent of the total cost, the new resource would pay \$2.31 million per year for its share of the trunk line. CAISO ratepayers would pay the remaining \$4.69 million per year until additional generation connects to the line. Although IID could have interconnected the 165 MW without building new transmission lines and would have saved CAISO ratepayers the \$4.69 million and additional cost to generators. The policy must ensure efficient transmission additions, minimize duplication of facilities and minimize unnecessary additional cost to ratepayers. IID does not want to be in a position where additional rate will be assigned to their exports from CAISO, while at the same time their transmission is stranded.

- d) *An aggregate cap of 15% of the sum total of the net high-voltage transmission plant of all PTO’s is too high and will exacerbate the subsidies required from CAISO ratepayers. While 15% may be an appropriate aggregate cap once the trunk line process has matured, a more conservative cap should be established to minimize exposure to unintended consequences. An aggregate cap of 5 to 10% would reduce risk of unacceptable, long term, subsidies by CAISO ratepayers. As the process matures and the impacts of building trunk lines are better understood, the aggregate cap percentage can be re-evaluated.*