California Independent
System Operator Corporation

# Memorandum

**To:** Board of Governors

**From:** Charles A. King, P.E, Vice President, Market Development & Program Management

**Date:** October 9, 2007

Re: **Decision on *Location Constrained Resource Interconnection Policy***

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***This memorandum requires Board action.***

**EXECUTIVE SUMMARY**

Consistent with state and federal public policy initiatives, the CAISO seeks to promote the development of multiple-owner generation sites in which the location of the fuel source is fixed and infeasible or impractical to relocate. Examples of this include wind and solar powered generation facilities. In order to efficiently and effectively interconnect sites suitable for such "location constrained resources" to the transmission grid, transmission facilities of a proper size and capability are required. The scope of the required transmission investment to successfully tap a location-constrained fuel source often greatly exceeds the size and scope of projects brought forth by individual developers and consequently presents a significant barrier to project development and market entry. Furthermore, such location constrained areas are typically developed in small increments over a period of time as opposed to more conventional resources which are fully scoped at the project inception. Incremental transmission upgrades, to support the incremental development of location constrained resources would be extremely costly and would significantly increase the regulatory uncertainty associated with such projects.

This financing proposal supports the full development of location constrained resources located in designated areas by facilitating sufficient funding to properly size the "end-state" transmission facilities, while at the same time avoiding the overburdening of the initial site developers with the entire transmission interconnection costs. The proposed financing method secures the funding of the needed transmission facilities through established rate structures, and then allows for incremental generation developers to "subscribe" to their respective pro-rata share of the transmission costs, consistent with the size and timing of their individual projects. Numerous safeguards are featured in the proposal which work together to insure that such transmission investments have a high probability of becoming fully subscribed over a reasonable period of time, thus avoiding the potential for the stranding of unused transmission assets.

Specifically, under this financing proposal, once a location constrained area has been designated by a regulatory authority, the appropriate Participating Transmission Owner (PTO) would proceed to finance and construct the end-state transmission project to take full advantage of location constrained fuel sources. The associated transmission project would be deemed a "Location Constrained Resource Interconnection Facility" (LCRIF) and the associated PTO would recover the revenue requirements associated with this facility through its FERC-approved Transmission Revenue Requirement (TRR). As individual generation projects connect to the LCRIF, each would become responsible for its pro-rata share of the annual TRR payments. As with a conventional transmission project, the TRR associated with the unsubscribed portion of the LCRIF would continue to be collected, on behalf of the PTO, through the CAISO's access charges, which are comprised of the Transmission Access Charge (TAC), and the Wheeling Access Charge (WAC). This bifurcated funding arrangement would continue until the entire capacity of the LCRIF is subscribed at which time the full revenue requirement for the end-state transmission facility is completely supported by the subscribed generation facilities.

The key eligibility principles for a LCRI project are:

1. The transmission project must not otherwise be eligible for rate treatment that allows costs to be incorporated into the Transmission Access Charge (TAC).

2. The transmission project would permit wholesale transmission access to an area not readily accessible where there is a significant energy resource that is not feasible or practical to transport from that site.

3. The transmission project will to be turned over to the CAISO's operational control.

4. The transmission project is designed to serve multiple power plants.

5. The transmission project is evaluated within a prudent grid planning process involving the CAISO, affected utilities and stakeholders.

6. There will be a rate impact cap imposed to ensure the TAC rates mitigate the short-term cost impact on ratepayers.

7. The transmission project will be able to demonstrate adequate commercial interest among multiple generation developers.

The full proposal can be found in Attachment A.

**MOTION**

***Moved, that the ISO Board of Governors approve the Location Constrained Resource Interconnection Policy as outlined in the memorandum dated October 9, 2007, and related attachments; and***

***That the ISO Board of Governors authorize Management to make all the necessary and appropriate filings with the Federal Energy Regulatory Commission to implement this proposal.***

**BACKGROUND**

In 2006, Management, with the assistance of stakeholders, developed a proposal for a cost allocation methodology to address barriers to the development of transmission for location constrained resources (described above), originally referred to as the "Third Category of New Transmission Facilities". In October 2006, the Board of Governors approved the filing of a Petition for Declaratory Order with the Federal Energy Regulatory Commission (FERC) regarding this proposal.

In April of this year, FERC granted the CAISO's petition and accepted the design concepts proposed therein. Consequently, the CAISO initiated a dialog with its stakeholders to build out the design elements of the financing proposal and develop the necessary tariff language to implement it. In its declaratory order, FERC stated, among other things[1]:

- The "proposed rate treatment is not unduly preferential or discriminatory and includes protections to customers that are just and reasonable";
- It "strikes a reasonable balance that addresses the barriers to development of location-constrained resources and includes appropriate ratepayer protections"; and
- "the CAISO's proposal is consistent with and supports state, federal and regional policies that encourage the types of clean, renewable generation that are often location-constrained."

**ISSUE STATEMENT**

The proposed Location Constrained Resource Interconnection Policy is a tool to facilitate the financing of efficient transmission facilities to fully exploit immovable fuel sources, while not imposing a prohibitive financial burden on the individual generation developers of such energy resources for which substantial commercial interest has been expressed. In the near-term, the ability to facilitate the financing and construction of such transmission facilities is critical to enabling the state of California to achieve its Renewable Portfolio Standard objectives.

**POSITIONS OF THE PARTIES**

A matrix that summarizes stakeholder view on the options that were considered and the various features of this proposal is included in Attachment B. General comments related to the design of the Location Constrained Resource Interconnection include:

<u>Minimum Percentage of capacity of eligible projects that must be subscribed pursuant to a Large Generator Interconnection Agreement before construction can commence</u> – In the CAISO Petition for Declaratory Order, a two pronged test was established for purposes of determining whether a project had sufficient commercial interest before beginning construction. The first test required that the LCRIF had 25% - 35% of the capacity of the line subscribed through executed Large Generator Interconnection Agreements. FERC accepted this range with the knowledge that the exact percentage would be required for the tariff filing. Stakeholder input on this issue varied widely on this from as little as 10% (proposed by Clipper Windpower) to as high as 50% (proposed by the Bay Area Municipal Transmission Group and CMUA.) Generally, comments were within the range that was accepted by FERC. With this knowledge, the minimum percentage capacity of eligible projects that must be subscribed pursuant to a Large (or Small) Generator Interconnection Agreement ("LGIA/SGIA") was set at 25%. This percentage level is high enough for a substantial showing yet it does not constitute a barrier. Also, when combined with the second test (which follows), at least 60% of the line capacity has demonstrated some level of commercial interest.

<u>Minimum percentage of demonstration of additional interest in an LCRIF project</u> – The second test pertains to the amount of additional commercial interest in a LCRIF beyond the minimum 25% showing of executed LGIAs and /or SGIAs. In the Petition for Declaratory Order approved by FERC, the CAISO suggested a range of 25% - 35% for a showing of additional interest. As with the first test, there was an array of stakeholder responses. CalWEA stated that there should be <u>no</u> further test of commitment beyond the LGIA/SGIA requirement, while Imperial Irrigation District commented that the demonstration of additional interest along with the executed agreements test should equal 100% of the capacity of the proposed line. Most stakeholders' comments were within the range suggested in the Petition.

[1] http://www.caiso.com/1bee/1bee7d3b3b4d0.doc

Based on the range approved by FERC and the comments by stakeholders, the demonstration of additional interest in an LCRIF project was set at 35% of the total capacity of the proposed line. As mentioned above, the sum of these two tests will demonstrate that over half of the capacity of the proposed line has some degree of demonstrated commercial interest.

Appropriate criteria for demonstrating additional interest – In addition to setting the appropriate level of additional interest that is required, the specific criteria for demonstrating that there are sufficient qualifying projects to warrant investment in the transmission infrastructure was a question that was left unanswered in the Petition for Declaratory Order. There were several rounds of proposals and stakeholder comments to narrow down the field of possible criteria. Initially, the most prominent suggestions for attributes of projects that would warrant the construction of new LCR transmission proposed by stakeholders were:

- A project that is in process of completing the LGIP (responses varied as to the exact stage)
- A monetary deposit
- A signed declaration of intent
- A completed Power Purchase Agreement
- A project that is in the CAISO interconnection queue
- Controlling land or mineral rights
- Participate in an Open Season

At the conclusion of the stakeholder process, the following three criteria were deemed appropriate to demonstrate adequate additional interest in a project over and above the requirement that 25% of the proposed line's total capacity be subscribed through executed LGIA/SGIAs:

- Additional executed LGIA/SGIAs
- Signed Power Purchase Agreements (5 year minimum term)
- A deposit equal to the applicable minimum deposits required for an applicant for connection to the ISO Controlled Grid in connection with all required studies.

Allocation of costs to wheel-through customers through TAC – In its Order, FERC required that the CAISO clarify what if any costs would be allocated to wheel-through customers and their corresponding benefits. Most stakeholders who commented agreed that these customers receive benefits from LCRIFs and should be allocated costs no differently than other customers. Imperial Irrigation District dissented, arguing that wheel-through customers do not benefit from LCRIFs and should not be allocated the TAC associated with these projects.

Management determined that wheel-through customers benefit in many ways from these types of projects, just as other customers do and should be allocated their share of the costs in the TAC accordingly. In particular, wheel-through customers will benefit from LCRIFs in the following ways: (1) they provide additional resource interconnections to help relieve congestion; (2) they provide additional opportunities to meet the state's RPS goals; (3) the CAISO operates an integrated transmission system (which will include LCRIFs under the CAISO's operational control) used to serve all customers, including wheel-through customers; and (4) LCRIFs will improve system flexibility and reliability, thereby benefiting all customers. In addition, the Transmission Revenue Requirements (TRRs) of PTOs are currently calculated in the same way for purposes of establishing the Transmission Access and Wheeling Access charges; the CAISO does not believe that TRRs should be calculated differently with respect to the costs of LCRIFs.

Selection of Energy Resource Areas – FERC ordered that the CAISO provide additional detail on the process for identifying Energy Resource Areas. In its Petition, the CAISO suggested that a state entity identify and assess these areas. Most stakeholders supported the idea that the California Energy Commission, the California Public Utilities Commission or the Renewable Energy Transmission Initiative (comprised of the CPUC, CEC, CAISO and representatives of publicly–owned utilities) be the appropriate party to select these areas. CalWEA suggested that the

CAISO use the interconnection queue to identify Energy Resource Areas and Imperial Irrigation District proposed that if the Energy Resource was outside of the CAISO balancing authority area, WECC approval should be considered.

Eligibility for the proposed rate treatment will depend upon a LCRIF's location in an Energy Resource Areas ("ERA") jointly certified by the California Public Utilities Commission (CPUC) and the California Energy Commission (CEC).

Another issue raised by stakeholders concerned the limited amount of time available to the CPUC and the CEC to develop the criteria for designating ERAs prior to the implementation of the LCRI process. The CAISO proposes that prior to the completion of the initial ERA designation process, if the CAISO determines that a LCRIF proposed by the CAISO, a PTO, or a non-Participating TO sponsor meets all of the criteria **except** the requirement to be located in a designated ERA the CAISO will bring the project before the California ISO Board of Governors for approval.

**MANAGEMENT RECOMMENDATION**

Management recommends that the Board approve this proposal and authorize Management to file the associated tariff changes with FERC.