

Memorandum

To: ISO Board of Governors
From: Philip D. Pettingill, Manager, Infrastructure Policy and Contracts
Charles King, VP, Market Development and Program Management

Date: April 12, 2007

Re: *Decision on CAISO Response to FERC Order regarding Rate Treatment for the Lake Elsinore Advanced Pumped Storage Project*

This memorandum requires Board action.

EXECUTIVE SUMMARY

The CAISO was ordered by the Federal Energy Regulatory Commission (FERC) to convene a stakeholder process and provide information so that the FERC could determine whether or not the cost recovery treatment requested by The Nevada Hydro Company, Inc. (TNHC) for its two distinct projects: (1) the Talega-Escondido/Valley-Serrano 500kV Interconnect project (TE/VS Interconnect), and (2) the Lake Elsinore Advance Pumped Storage (LEAPS) project is appropriate. FERC requested, among other things, that the CAISO evaluate and explore with stakeholders the operation/management and cost recovery options for the distinct LEAPS project and recommend whether LEAPS costs specifically should be included in the transmission access charge (TAC).

After running an extensive stakeholder process over four months that included two meetings and multiple opportunities for stakeholders to provide comments, management recommends that the following information be communicated to the FERC

1. The LEAPS pumped storage project, already determined to be an advanced transmission technology, is not "transmission" and the costs of LEAPS should not be included in the TAC.
2. TNHC should follow the Large Generator Interconnection Process (LGIP), just like other proposed Generating Units do, to gain entry into the CAISO markets. Because the pumped storage facility would be treated as merchant generation in the CAISO market, there would be no circumstance under which the CAISO would assume operational control of the pumped storage units.
3. Once the pumped storage units are fully operational and interconnected to the CAISO controlled grid, TNHC would bid their services into the CAISO markets, like other generation resources do, where it would be competitively evaluated and dispatched by the CAISO, consistent with the MRTU rate design.
4. The stakeholder positions presented during the stakeholder process expressed concerns regarding cost recovery of LEAPS via the TAC and the operation of LEAPS by the CAISO.

Management recommends that the ISO Board of Governors approve the policy elements underlying the positions described in this memorandum, and authorize Management to file a compliance filing with the FERC regarding operation/management and cost recovery for TNHC's LEAPS project.

BACKGROUND

On December 1, 2005, as amended on December 22, 2005, TNHC submitted a filing pursuant to Section 205 of the Federal Power Act (Section 205) in The Nevada Hydro Company, Inc., 06-278-000 and the following, to request approval of certain rate principles that it states will enable it to attract financing for two distinct projects: (1) the Talega-Escondido/Valley-Serrano 500 kV Interconnect project (TE/VS Interconnect), which consists of an approximately 30-mile, high voltage transmission line that runs through public lands managed by the United States Forest Service and connects San Diego Gas & Electric Company's (SDG&E) transmission system with Southern California Edison Company's (SCE) system, and (2) the Lake Elsinore Advance Pump Storage project (LEAPS), which is intended to be a pumped hydro storage facility with an installed generating capacity of 500 MW and a pumping capacity of 600 MW. TNHC states that, for the purpose of the filing, it has combined the projects (together, TE/VS Interconnect/LEAPS Project or combined Project.)

Congress, in the Energy Policy Act of 2005 directed the Commission to "...encourage, as appropriate, the deployment of advanced transmission technologies." EAct 2005, Section 1223 states in part: "the term advanced transmission technology means a technology that increases the capacity, efficiency, or reliability of an existing or new transmission facility,...". The statute then proceeds to establish a list of nineteen items that include a diverse set of electric equipment and technologies, such as: underground cables, advanced conductor technology, wireless power transmission, ultra-high voltage lines, high-voltage DC technology, energy storage devices (including pumped hydro), controllable load, distributed generation, direct system state sensors, and power electronics and related software. Further, Section 1241 of EAct 2005 granted the Commission explicit authority to establish, by rule, incentive-based rate treatments for the purpose of ensuring reliability or reducing the cost of delivered power by reducing congestion. TNHC relies on these provisions (sections 1223 and 1241) of the EAct 2005, to justify its request that the FERC approve treatment of its proposed LEAPS project as a transmission asset. If the facility is determined to be transmission, then TNHC concludes LEAPS should be included in the CAISO Transmission Access Charge (TAC), along with the TE/VS Interconnect project.

On September 11, 2006, TNHC submitted a supplemental filing in which it identified the following three options for incorporating the pumped storage unit into the CAISO's operations; (1) the CAISO assumes operational control of the unit and bids and schedules the unit into the market (but creates a firewall between the operators of the pumped storage unit and transmission personnel); (2) the CAISO periodically auctions its right to operate the pumped storage unit to market participants, and (3) the CAISO contracts with a third party to operate the unit. On October 2, 2006, the CAISO filed an Answer to TNHC's supplemental filing in which it stated that TNHC's proposal raised several general policy issues that needed to be resolved, including whether it is appropriate to include the costs of a pumped storage unit in the TAC and whether it is appropriate for the CAISO to control and operate the pumped storage unit. On December 18, 2006, TNHC submitted a fourth operational proposal to the FERC where (4) TNHC would bid all energy available to serve load into the CAISO markets at a price of zero to assure that the unit would be dispatched to its full capability. The CAISO would then have operational control of LEAPS just as it does other transmission facilities.

The FERC, in an Order issued November 17, 2006, held that the pumped hydro storage facility portion of the combined LEAPS project qualified as "advanced transmission technology" under Section 1223 of EAct 2005 that should be "encouraged, where appropriate" (Order, ¶127). However, the FERC did not decide whether inclusion of the costs of the combined LEAPS project in the CAISO's Transmission Access Charge was appropriate or whether the rate incentives requested by TNHC were justified. Furthermore, the FERC did not make any determination as to what role the CAISO

should have with regard to this project. The FERC acknowledged that it needed further information from the CAISO and stakeholders to determine the appropriate treatment of the LEAPS project. Accordingly, the FERC directed the CAISO to address with its stakeholders, among other things, the following:

1. operation/management options and recommendations;
2. cost recovery options given the CAISO's determination of the extent to which the combined Project reduces congestion costs or enhances reliability;
3. whether the CAISO can effectively operate this combined Project in the context of being an independent system operator;
4. whether it is appropriate to include a cost-based, fixed revenue requirement in its TAC where the benefits associated with that revenue requirement will be determined by the daily operation of the market;
5. whether the CAISO recommends inclusion of the LEAPS costs in its TAC and, if so, why?

As directed by FERC, the CAISO engaged its stakeholders to explore the issues identified by FERC so that the CAISO's recommendations could be presented for consideration by the FERC in a compliance filing to be submitted on May 1, 2007. The CAISO's recommendations below reflect the significant input that the CAISO received during the stakeholder process.

PROPOSED COMPLIANCE FILING HIGHLIGHTS

General Policy and Cost Recovery Options

The conclusion that the LEAPS pumped storage unit is an advanced transmission technology does not require that the costs of the unit be recovered through the TAC. The CAISO has concluded that TAC recovery for the costs of the LEAPS pumped hydro storage facility would be inappropriate for the following reasons:

- EAct did not distinguish between existing and new resources. The CAISO is wary of discriminating against existing pumped storage hydro projects in the CAISO control area -- which bid into the market and which are not treated as transmission facilities -- in favor of new pumped storage hydro facilities.
- Recovering the costs of the pumped storage units through the TAC inappropriately shifts the development risk from the project sponsors to the California ratepayers.
- The CAISO competitively procures services from generation resources to operate the integrated electric system reliably while managing congestion. The CAISO does not support any procurement of generation services outside of a competitive process. The benefits of a generation resource should be determined from the competitive market and not from the ratepayers.
- The pumped storage facility, as described by the project sponsors, is not providing services that are so unique that other market participants cannot provide them and/or require cost recovery from a non-competitive procurement process.
- When the CAISO finds that it has a need for a particular type of service, the CAISO can establish a market to find a provider for that service.
- A broad cross-section of the stakeholders participating in the process indicated that market-based cost recovery is the most appropriate rate treatment for the pumped hydro facility.
- Inclusion of the costs related to advanced transmission technologies such as distributed generation and pumped storage in TAC could significantly increase TAC rates and inappropriately increase costs to transmission ratepayers.

Operation/Management Options

- The three options identified by TNHC in the September 11, 2006 supplemental filing and the fourth option of the December 18, 2006 filing for operating the pumped storage units are based on inclusion of the units in TAC.

The results of the CAISO stakeholder process indicated that the costs associated with pumped storage units should not be included in TAC; therefore, the options promoted by TNHC are unworkable.

- Stakeholders did not support any operation scenario which involves the CAISO bidding or scheduling the pumped storage units into the CAISO markets. Such approach was viewed by stakeholders as undermining the independence of the CAISO and being inconsistent with the role of an independent system operator.
- Auctioning off the rights to bid the pumped storage units into CAISO markets was identified by some stakeholders as the only option proposed by TNHC that was even potentially workable. However, stakeholders still opposed including the costs of the LEAPS units in TAC, based on the general policy principles stated above.
- Stakeholders supported management/operation of the pumped storage facility as a merchant plant.
- The only supportable option available to the CAISO and consistent with stakeholder preference, is the merchant operation of the pumped storage units following the conclusion of the LGIP process. In formulating this position, the CAISO considered all options in the context of stakeholder comments, CAISO independence, and market impact.

Stakeholder Input

Detailed stakeholder comments are summarized in Attachment A to this memorandum.

CONCLUSION OF MANAGEMENT AND RECOMMENDATION

Management concludes that the following summary points should be communicated to the FERC in the CAISO compliance filing regarding the operation/management and cost recovery options for the LEAPS facility.

- The CAISO values its independence and will conduct its business in such a way to as to create confidence among market participants that the CAISO is independent during any market transactions.
- The primary function of the pumped storage units is to produce electrical energy, not to move energy in bulk. The services the pumped storage units provide are services that are generally provided by generation facilities not transmission facilities.
- The LEAPS project is not so unique such that it deserves preferential treatment and available market processes will support its participation in CAISO markets.
- TNHC should not receive cost based recovery through the TAC for the pumped storage units.
- TNHC should follow the LGIP process to gain entry into the CAISO markets whereby the pumped storage units would bid into the market and be competitively evaluated and dispatched by the CAISO. The LEAPS pumped storage units would participate in the market similar to other dispatched resources to satisfy the CAISO's requirements, consistent with the MRTU rate design.

Management recommends that the ISO Board of Governors approve the policies summarized in this memorandum and offers the following motion:

MOVED,

That the ISO Board of Governors approve the policy principles related to the rate treatment, interconnection and operation for the Lake Elsinore Advanced Pumped Storage project described in this memorandum dated April 12, 2007, and related attachments; and

That the ISO Board of Governors authorizes management to make all appropriate and necessary filings with the FERC in support of such policy proposals.