

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

The Nevada Hydro Company, Inc.	)	Docket Nos.	ER06-278-000
	)		ER06-278-001
	)		ER06-278-006

**ANSWER OF  
THE NEVADA HYDRO COMPANY, INC.**

**I. INTRODUCTION AND PROCEDURAL STATUS**

**A. Introduction**

The thrust of the California Independent System Operator Corporation’s (“CAISO”) May 1, 2007 comments is that the Commission should ignore both the statutory mandate of the Energy Policy Act of 2005,<sup>1</sup> that pumped hydro storage is transmission, and the Commission’s own finding that the Lake Elsinore Advanced Pump Storage Project (“LEAPS”) is advanced transmission technology. Rather than treat LEAPS as transmission, including it in the TAC<sup>2</sup> with cost cost-based rates with incentives appropriate for an advanced technology, CAISO would have the Commission wipe this aspect of EPAct 2005 off the books and treat LEAPS as an ordinary generator.<sup>3</sup>

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<sup>1</sup> Energy Policy Act of 2005, Pub. L. No. 109-58, 119 Stat. 594 (2005) (“EPAct 2005”).

<sup>2</sup> Transmission Access Charge.

<sup>3</sup> The Nevada Hydro Company, Inc. (“TNHC”) replies to CAISO’s comments (“CAISO Comments”) pursuant to Rule 213 of the Federal Energy Regulatory Commission’s (“FERC” or “Commission”) Rules of Practice and Procedure, 18 C.F.R. § 385.213, and the Commission’s Notice of Extension of Time dated May 18, 2007. The California Department of Water Resources State Water Project, the California Energy Oversight Board, M-S-R Public Power Agency and the City of Santa Clara, (“M-S-R/Santa Clara”) California, and the Modesto Irrigation District (“MID”) filed comments and answers in support of CAISO. TNHC also

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CAISO's position is deficient in several fundamental respects. As explained further below, and in light of clear law and substantial undisputed evidence:

1. Plain Statutory Meaning. Just as the Commission already determined that LEAPS is advanced transmission technology under EAct 2005 in its November 17, 2006 order ("Nov. 17 Order"),<sup>4</sup> the plain language of EAct 2005 requires that LEAPS be treated as transmission facilities and that incentives be granted to induce its construction and operation. (Section II, below).
2. In Fact, LEAPS Is a Transmission Facility, Not a Generator. LEAPS is an energy storage device, incapable of producing net generation. Treatment of an energy storage facility as transmission is consistent with the Commission's jurisprudential treatment of gas storage as transportation (transmission) under the Natural Gas Act. (Section III, below).
3. Congress's Treatment of Energy Storage as Transmission also Is Consistent with the Commission's Industry Restructuring Principles. Centrally administered Locational Marginal Pricing ("LMP") markets price energy based upon transmission availability and energy capacity and production costs. Restructuring has blurred the "traditional" distinction between energy and transmission. Future development of infrastructure requires diminished adherence to anachronistic distinctions. (Section IV, below).
4. The Facilities Are Economically Justified. LEAPS, including the Talega-Escondido/Valley-Serrano transmission line ("TE/VS"), and TE/VS alone, will lower the delivered cost of power. Inclusion of cost-based rates in the

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responds to any unique aspect of these comments. Since M-S-R/Santa Clara and MID characterized their filings in support of CAISO as answers, TNHC moves, pursuant to Rule 212, 18 C.F.R. § 385.212, for leave to answer these answers. Although the Commission generally does not permit an answer to an answer, the Commission has allowed answers that provide information helpful to the Commission's decision-making process, including information that clarifies issues of fact or assists in the development of a more accurate record. *See PJM Interconnection, L.L.C.*, 117 FERC ¶ 61,218, at P 13 (2006); *Doswell Ltd. P'ship*, 112 FERC ¶ 61,182, at P 15 (2005); *Gulf S. Pipeline Co.*, 110 FERC ¶ 61,391, at P 12 (2005); *N.Y. Power Auth. v. Consol. Edison Co.*, 112 FERC ¶ 61,304, at P 41 (2005); *Mich. Elec. Transmission Co.*, 108 FERC ¶ 61,205, at P 21 (2004); *Cal. Indep. Sys. Operator Corp.*, 101 FERC ¶ 61,241, at P 12 (2002). TNHC submits that good cause exists to permit this answer.

<sup>4</sup> *The Nevada Hydro Co.*, 117 FERC ¶ 61,204 (2006).

TAC would be just, reasonable, and would advance the public interest. (Section V, below).

5. CAISO's Arguments Against Treatment of LEAPS as Transmission Under the TAC Are Meritless. CAISO's opposition rests largely on its mischaracterization of LEAPS as a generator and is otherwise unsupported by factual analysis. (Section VI, below).

Notably, LEAPS and TE/VS come foremost as a package. TE/VS is the connection of LEAPS to the grid, with which it cannot function. TE/VS will also serve as a network upgrade in its own right, secondarily providing transmission services. Therefore, the Commission nevertheless should grant that treatment and requested incentives for TE/VS as a stand-alone transmission line in the event TE/VS is completed before LEAPS, or in the event LEAPS is not constructed. The CAISO does not oppose such treatment.<sup>5</sup> This aspect is addressed below, in Section VII.

#### **B. Procedural Status**

On December 1, 2005,<sup>6</sup> TNHC filed a request for approval of a rate concept, seeking Commission approval of rate principles and responsibilities concerning LEAPS and an associated 500 kV transmission line, TE/VS. TNHC supplemented its initial submission on December 22, 2005. In response to a data request dated February 17, 2006 from the Commission's Division of Tariffs and Market Development – West, TNHC provided further information on March 20, 2006. On April 7, 2006, TNHC supplemented its response to the Commission's February 17, 2006 data request.

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<sup>5</sup> CAISO Comments at 25 (CAISO includes the caveat that TE/VS must be "separately studied and approved by the CAISO.")

<sup>6</sup> The filing letter is dated November 29, 2005. The Commission received TNHC's submission on December 1, 2005.

On November 17, 2006, the Commission issued *The Nevada Hydro Company, Inc.*, 117 FERC ¶ 61,204, in which it determined that:

1. LEAPS meets the requirements of section 1223 of the EAct, and therefore it is an advanced transmission technology;<sup>7</sup>
2. more information “from the CAISO as to how it expects to use this facility for meeting load and managing the grid, and whether and to what extent this facility reduces congestion or enhances reliability” was needed before the Commission could determine “whether incentives are appropriate and whether the costs of the LEAPS facility should be included in the TAC . . . ;”<sup>8</sup>
3. the CAISO should meet with its stakeholders “to determine what role the CAISO should have with regard to this project;”<sup>9</sup> and
4. the CAISO must report to the Commission the outcome of its stakeholder discussions.<sup>10</sup>

In the stakeholder process, the Commission required CAISO to address, “among other things it deems necessary,” the following five issues:

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;” and
5. “whether the CAISO recommends inclusion of the LEAPS costs in its TAC and, if so, why?”<sup>11</sup>

Subsequently, CAISO issued so-called white papers and then held stakeholder meetings.

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<sup>7</sup> Nov. 17 Order at P 27.  
<sup>8</sup> *Id.* at P 28.  
<sup>9</sup> *Id.* at P 30.  
<sup>10</sup> *Id.*  
<sup>11</sup> *Id.*

On May 1, 2007, CAISO filed its comments in response to the Nov. 17 Order. Rather than respond to the Commission’s questions in objective, factual fashion, CAISO stated strong opposition to including LEAPS in the TAC. CAISO stated that its stakeholders did not oppose TAC recovery for TE/VS “if separately studied and approved by the CAISO.”<sup>12</sup> As discussed at length below, CAISO’s conclusions regarding LEAPS are erroneous, and should not impede the Commission from treating LEAPS as “advanced transmission technology” as EAct 2005 mandates, with cost-based rates, or from granting incentives consistent with Commission policy and precedent.<sup>13</sup>

## **II. THE PLAIN MEANING OF EACT 2005 SECTION 1223 COMPELS TREATMENT OF LEAPS AS TRANSMISSION FACILITIES, INCLUDING INCLUSION IN THE TAC**

### **A. The Commission Should Adhere To The Plain Meaning Of The Statute**

Where the words of a statute admit no ambiguity, the agency must follow the plain meaning of the statute. *K Mart Corp. v. Cartier, Inc.*, 486 U.S. 281, 291 (1988) (“If the statute is clear and unambiguous that is the end of the matter, for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress. . . . The

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<sup>12</sup> CAISO Comments at 25-26. CAISO stated, “[i]t should also be noted that the stakeholders raised no concerns with TAC recovery for the TE/VS transmission portion of the combined Project (if separately studied and approved by the CAISO), and several parties specifically commented that these costs should be recovered through the TAC (including SDG&E).”

<sup>13</sup> *Order Removing Obstacles to Increased Electric Generation and Natural Gas Supply in the Western United States*, 94 FERC ¶ 61,272 (2001); *Further Order on Removing Obstacles to Increased Electric Generation and Natural Gas Supply in the Western United States*, 95 FERC ¶ 61,225 (2001); *Promoting Transmission Investment Through Pricing Reform*, Notice of Proposed Rulemaking, IV FERC Stats. & Regs., Proposed Regs. ¶ 32,593 (2005), Final Rule, Order No. 679, III FERC Stats. & Regs., Regs. Preambles ¶ 31,222 (2006); *W. Area Power Admin.*, 99 FERC ¶ 61,306, *order denying reh’g*, 100 FERC ¶ 61,331 (2002) (Path 15); *Trans Bay Cable LLC*, 112 FERC ¶ 61,095 (2005).

traditional deference courts pay to agency interpretation is not to be applied to alter the clearly expressed intent of Congress.” (citations omitted)).<sup>14</sup>

Congress’s selection of words, especially a word as important as “transmission” in a statute addressing energy regulation, must be given meaning and consequence. Congress has determined that “energy storage devices (including pumped hydro . . . )”<sup>15</sup> are transmission facilities. Congress has determined that the Commission should encourage the development of this and other advanced transmission technologies. Any arguments, including arguments of CAISO, that a pumped hydro storage device should not be treated and encouraged as transmission are contrary to the statute’s plain meaning and should be rejected as meritless.

What is more, EAct 2005 is a remedial statute, intended to help remedy deficiencies in the grid that create risks to economic stability and growth. The statute should be construed liberally to realize its salutary purpose.

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<sup>14</sup> See *London v. Fieldale Farms Corp.*, 410 F.3d 1295, 1304 (11th Cir. 2005) (agency interpretation contrary to plain meaning of statute “deserves no deference”); *Singh-Kaur v. Ashcroft*, 385 F.3d 293, 303 (3rd Cir. 2004) (same); *Tenn. Protection & Advocacy, Inc. v. Wells*, 371 F.3d 342, 351 (6th Cir. 2004) (“we are forbidden to defer to agency guidelines that contradict the plain meaning of the statute.”); *Tex. Coal. of Cities for Util. Issues v. FCC*, 324 F.3d 802, 806-07 (5th Cir. 2003) (“where ‘Congress has directly spoken to the precise question at issue,’ we must ‘give effect to the unambiguously expressed intent of Congress’ and reverse an agency interpretation that does not conform to the plain meaning of the statute.”); *Sullivan v. Strop*, 496 U.S. 478, 482 (1990) (same); *United States v. S.A.*, 129 F.3d 995, 998 (8th Cir. 1997) (“Our starting point in interpreting a statute is always the language of the statute itself. If the plain language of the statute is unambiguous, that language is conclusive absent clear legislative intent to the contrary. Therefore, if the intent of Congress can be clearly discerned from the statute’s language, the judicial inquiry must end.” (citations omitted)); *Hennepin County. Med. Ctr. v. Shalala*, 81 F.3d 743, 748 (8th Cir. 1996) (“The plain meaning of a statute controls, if there is one, regardless of an agency’s interpretation.”).

<sup>15</sup> EAct 2005 § 1223(a).

**B. Under The Plain Meaning Of EAct 2005, LEAPS Is A Transmission Facility**

EAct 2005 § 1223(b) mandates that the Commission “encourage . . . the deployment of advanced transmission technologies.” Advanced transmission technology is defined as follows:

[T]he term “advanced transmission technology” means a technology that increases the capacity, efficiency, or reliability of an existing or new transmission facility, including –

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(11) energy storage devices (including pumped hydro . . . )<sup>16</sup>

The words of this statute admit no ambiguity. The plain meaning disposes of CAISO’s argument that “[l]umping technologies such as distributed generation or controllable load into the ‘transmission’ category for cost recovery purposes not only makes no sense but completely distorts the price signals that the markets have been carefully designed to reflect.”<sup>17</sup> Nothing in the statute supports CAISO’s proffered distinction, for “cost recovery purposes,” between some transmission facilities that CAISO thinks should be in the TAC and other transmission facilities that Congress deems transmission but which CAISO would exclude from the TAC. Worse, CAISO’s argument would defeat an obvious statutory intent. To disallow cost recovery for advanced transmission facilities simply because they are advanced and not, as CAISO puts it, “traditional,”<sup>18</sup> would discourage investment in those technologies. CAISO supports the very status quo Congress seeks to reverse.

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<sup>16</sup> *Id.* § 1223(a)

<sup>17</sup> CAISO Comments at 16.

<sup>18</sup> *Id.* at 17.

Indeed, the statute forecloses CAISO’s argument that pumped hydro lacks the features of a “traditional transmission project” and therefore should not be treated as transmission.<sup>19</sup> EAct 2005 recognizes that pumped hydro is not “traditional” – it is an *advanced* transmission technology, not a “traditional” technology.

The statutory scheme of section 1223, read together with section 1241, further disposes of CAISO’s position. In section 1223, Congress required the Commission to encourage the enumerated advanced transmission technologies. In section 1241, it granted the Commission authority to establish “incentive-based rate treatments for the purpose of ensuring reliability or reducing the cost of delivered power by reducing congestion.”<sup>20</sup> Under this statutory scheme, the Commission has discretion to determine the incentives to be applied to advanced transmission technology,<sup>21</sup> but it cannot ignore, as CAISO suggests it should, Congress’s designation of pumped hydro storage as “transmission.”<sup>22</sup> Accordingly, the Commission has discretion to determine whether to

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<sup>19</sup> *Id.* at 17.

<sup>20</sup> Nov. 17 Order at n.3.

<sup>21</sup> The Commission exercised this discretion in *Promoting Transmission Investment through Pricing Reform*, Order No. 679.

<sup>22</sup> In *Massachusetts v. EPA*, 549 U.S. \_\_\_\_\_, 127 S. Ct. 1438 (2007), the Supreme Court ruled that an agency cannot ignore a clear statutory imperative to regulate. In *Massachusetts*, the EPA contended that it had no jurisdiction to regulate carbon dioxide emissions under the Clean Air Act and, if it had jurisdiction, it would not exercise it because the regulation would conflict with priorities of the Bush Administration. The Court ruled that the Clean Air Act provided EPA with jurisdiction to regulate air pollutants, and, once EPA determined that carbon dioxide was an air pollutant that endangered the public health or welfare, EPA was required to carry out the mandate. The fact that the Clean Air Act allowed EPA to apply “judgment” to determine whether an air pollutant endangered the public was “not a roving license to ignore the statutory text.” *Id.* at 1462. Section 1223 of EAct 2005 presents even a more compelling case. The Congress enumerated those technologies which are “advanced transmission technologies” and left no room for the Commission to exercise “judgment” to expunge certain  
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encourage advanced transmission technology by granting incentives or other means. On the other hand, the statute permits no discretion to deny basic transmission treatment such as cost recovery under just and reasonable rates.

And so CAISO, not TNHC, takes a “leap of faith.” *See* CAISO Comments at 14 (“it is only TNHC that has made the leap of faith that once the LEAPS pumped storage hydro technology was dubbed an ‘advanced transmission technology’ by the Commission in the November 17 Order, the proposed plant automatically *became* a transmission facility that the CAISO must consider to be eligible for TAC cost recovery even though the services that it provides in the market are services that are generally provided by generating facilities not transmission facilities”). CAISO’s leap of faith is that Congress did not intend the plain words it wrote in the statute.

### **III. IN FACT AND UNDER COMMISSION JURISPRUDENCE, LEAPS IS A TRANSMISSION FACILITY, WHICH SHOULD BE PERMITTED TO RECOVER COST-BASED RATES UNDER THE TAC**

LEAPS, physically, is an energy storage device, capable of producing no net energy. And, as explained below, treatment of storage as transmission comports with the Commission’s “traditional” treatment of natural gas storage as jurisdictional transmission.

#### **A. In Fact, LEAPS Is A Storage Device Capable Of Producing No Net Energy**

Contrary to CAISO’s insistence that LEAPS is traditional generation and its implication that Congress has “dubbed” as transmission something that is not

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technologies from that list (although Congress expressly stated that the Commission could *expand* the list).

transmission, LEAPS is a pumped hydro energy storage device that can generate no net energy.

During off-peak periods (when power is readily available), the device utilizes electric energy to pump water through a penstock into an elevated reservoir (atop an adjacent mountain). During peak periods, the same water is released from the same reservoir down the same penstock to produce electric energy (and capacity and ancillary services). Although the value of the produced peak energy exceeds the cost of the off-peak pumping energy, the device yields no net electricity production whatsoever.

Plainly, CAISO does not grasp (or declines to admit) the physical characteristics and limits of the device. CAISO's entire position rests on its false contention that the "primary purpose of the pumped storage facility is to convert stored water to electricity and to provide Ancillary Services, services that are typically provided by Generating Units."<sup>23</sup> CAISO ignores the critical fact that the device was first required to expend at least as much electricity to pump the water into storage before it could produce a single watt.

Unlike hydroelectric plants at dams and on rivers that convert the energy in flowing water into electricity, pumped hydro sits next to a stagnant body of water that can produce no energy at all. Because the unit must pump that water upwards before generating electricity from the flow downwards, the unit can create no net water flow and no net energy. Consequently, it cannot be said to generate electricity on any net basis. CAISO is aware of the distinction; conceding that LEAPS has attributes of both a

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<sup>23</sup> CAISO Comments at 15, and *see* 14.

“generator and a load,”<sup>24</sup> but then ignores the very distinction it concedes. Generators have no load attributes (except for immaterial start-up power). The load attribute of pumped hydro storage, by contrast, nullifies any net generation capability. Any other conclusion would defy the laws of physics.

Only by ignoring the critical distinction – embodied in EPAct 2005 itself – between generation on one hand and storage on the other, can CAISO make its smoke and mirrors argument that “the services [pumped hydro] provides in the market are services that are generally provided by generating facilities not transmission facilities.”<sup>25</sup> Indeed, if distinctions are cast aside, it could be argued that a transmission wire itself delivers energy just like a generator, and therefore is a generator. But a wire is not a generator, and neither is an energy storage device.

### **B. Under Longstanding Jurisprudence, The Commission Treats Energy Storage As Transmission**

CAISO’s opposition to treating pumped storage in the same manner as “traditional” transmission facilities ignores the Commission’s longstanding treatment of energy storage as part of the transportation network. Natural gas storage facilities are routinely jurisdictional transmission and their costs are properly recovered under cost-based rates.

The Commission regulates interstate natural gas pipeline systems as “natural gas companies” under the Natural Gas Act, 15 U.S.C. §§ 717, *et seq.* These pipeline systems often have underground gas storage facilities which typically consist of former oil and/or natural gas fields with depleted production strata (porous rock) which can be used for gas

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<sup>24</sup> *Id.* at 15.

<sup>25</sup> *Id.* at 14.

injection and storage. These gas storage fields tend to be downstream on the pipeline system, closer to market areas, so that they can be used – traditionally, their major function – to meet seasonal load variations on the system. That is, during summer periods (with relatively high production of gas from supply areas *vis a vis* relative low market area demand for such gas) a portion of the gas can be diverted to storage field injection wells for injection and storage. Later, during peak heating demand periods in the winter, the stored gas can then be withdrawn to supplement supplies being transported to markets.<sup>26</sup>

Since the earliest days of the Commission’s (formerly, the Federal Power Commission’s) regulation of interstate gas pipelines, the storage fields and storage operations of these pipelines have been treated as jurisdictional, i.e. as part of the regulated pipeline’s “transportation” facilities and function, and fully regulated under the NGA.<sup>27</sup> Such regulation is well settled. *See Schneidewind v. ANR Pipeline Co.*, 485 U.S. 293, 295 and n.1 (1988), *citing e.g. Columbia Gas Transmission Corp. v. Exclusive Gas Storage Easement*, 776 F.2d 125, 129 (6th Cir. 1985); *Regulation of Natural Gas Pipelines After Partial Wellhead Decontrol*, Order No. 436, 1982-1985 FERC Stats. & Regs., Regs. Preambles ¶ 30,665, at 31,507 (1985). Thus, for decades, the FERC has “certificated” (licensed) interstate pipeline gas storage facilities under NGA Section 7.<sup>28</sup>

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<sup>26</sup> Storage can also be used for other purposes, e.g. to meet emergency needs as a supply source during extreme weather conditions or outages.

<sup>27</sup> *See, e.g., Mich. Gas Storage Co.*, 5 FPC 965, 969 (1946).

<sup>28</sup> In fact, there are today various “stand alone” interstate storage entities – which perform only a storage function for their customers (through pipeline interconnections with pipeline companies) – which are regulated by the FERC. *See Petal Gas Storage, L.L.C.*, 119 FERC ¶ 61,227 (2007); *Saltville Gas Storage Co., L.L.C.*, 110 FERC ¶ 61,324 (2005).

For example, in a typical recent certificate order (permitting an interstate pipeline to expand the boundary of one of its certificated storage fields), the Commission made the following routine declaration:

Since the proposed facilities will be used for the storage of natural gas in interstate commerce subject to the jurisdiction of the Commission, the construction and operation of these facilities is subject to the requirements of subsections (c) and (e) of section 7 of the NGA.

*S. Star Cent. Gas Pipeline, Inc.*, 115 FERC ¶ 61,219, at P 18 (2006). Further, the Commission also regulates, under NGA Sections 4 and 5, 15 U.S.C. §§ 717c and d, the rates the pipeline charges for its interstate transportation services, including its storage services. Thus, the capital investment in the storage field itself (and related compression and other facilities) is included in the pipeline’s rate base – as would any other investment in transportation facilities, e.g. pipeline and compression – in determining its regulated return and rates for these purposes.<sup>29</sup> See, e.g., *Transcon. Gas Pipe Line Corp.*, 112 FERC ¶ 61,170, at PP 113-122 (2005).

Pumped hydro stores electricity just as storage fields store natural gas. Just as gas storage is transmission, electricity storage is transmission as well. Storage is a function of shipment, not energy production. CAISO’s “leap of faith” hyperbole notwithstanding, EPC Act 2005 mandates, and Commission precedent soundly supports, treatment of energy storage as transmission. Indeed, it would be illogical to treat it otherwise. And so, contrary to CAISO’s argument, “clear legal mandates” do support TNHC’s request.<sup>30</sup>

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<sup>29</sup> Indeed, the FERC has permitted “market-based” rates to encourage the construction of new storage facilities. *Rate Regulation of Certain Natural Gas Storage Facilities*, Order No. 678, III FERC Stats. & Regs., Regs. Preambles ¶ 31,220 (2006).

<sup>30</sup> CAISO Comments at 15.

#### IV. THE CONGRESS'S TREATMENT OF ENERGY STORAGE AS TRANSMISSION IS CONSISTENT WITH INDUSTRY RESTRUCTURING PRINCIPLES

The regulation of electricity has undergone revolutionary change over the past thirty years—change that makes clear that reliability solutions do not rely on traditional distinctions between generation and transmission. Originally dominated by vertically-integrated utilities that owned generation, transmission, and distribution, and often had chartered monopolies, the industry landscape now features independent system operators (“ISO”), regional transmission organizations (“RTO”), ISO- and RTO-administered power markets with market-based LMP, bilateral power markets with market-based prices also reflecting transmission constraints, substantial independent generation, and some independent transmission.

These changes began in the 1980s when the Commission first permitted generators to charge market-based rates.<sup>31</sup> In 1996, the Commission issued the seminal Order No. 888,<sup>32</sup> which required all transmission-owning public utilities to file open access, non-discriminatory tariffs and encouraged the formation of ISOs and administered bulk power markets. These changes fostered the robust electric generation markets that exist today. In Order No. 888, the Commission explained, “[a]s entry into wholesale power generation markets increased, the ability of customers to gain access to

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<sup>31</sup> See *AEP Power Mktg., Inc.*, 97 FERC ¶ 61,219, at 61,969 (2001).

<sup>32</sup> *Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities*, Order No. 888, 1991-1996 FERC Stats. & Regs., Regs. Preambles ¶ 31,036 (1996), *order on reh’g*, Order No. 888-A, 1996-2000 FERC Stats. & Regs., Regs. Preambles ¶ 31,048, *order on reh’g*, Order No. 888-B, 81 FERC ¶ 61,248 (1997), *reh’g denied*, Order No. 888-C, 82 FERC ¶ 61,046 (1998), *aff’d in part and remanded in part sub nom. Transmission Access Policy Study Group v. FERC*, 225 F.3d 667 (D.C. Cir. 2000), *aff’d sub nom. New York v. FERC*, 535 U.S. 1 (2002).

the transmission services necessary to reach competing suppliers became increasingly important.”<sup>33</sup> Open access tariffs were to address this problem.<sup>34</sup>

Creating increased competition for generation, however, cannot benefit consumers without robust transmission. Demand for power has increased, but transmission investment has not kept pace. The Commission has noted, “investment in transmission facilities in real dollar terms declined significantly between 1975 and 1998. Although the amount of investment has increased somewhat in the past few years, data for the most recent year available, 2003, shows investment levels still below the 1975 level in real dollars.”<sup>35</sup>

Insufficient transmission investment means excessive transmission congestion,<sup>36</sup> which drives up prices and diminishes reliability. To help manage transmission congestion, the Commission embraced LMP, which measures the price of congestion as “the difference in the cost of energy in the spot market at two different locations in the network.”<sup>37</sup> “[L]ocational marginal pricing and uniform pricing leads to the least cost

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<sup>33</sup> Order No. 888 at 31,643-44.

<sup>34</sup> *Id.* at 31,646.

<sup>35</sup> Order No. 679 at P 10.

<sup>36</sup> The Commission defines congestion as “the inability to inject and withdraw additional energy at particular locations in the network due to the fact that the injections and withdrawals would cause power flows over a specific transmission facility to violate the reliability limits for that facility. The market operator manages congestion by scheduling and dispatching generators that can meet load in the presence of congestion.” *Long-Term Firm Transmission Rights in Organized Electricity Markets*, Notice of Proposed Rulemaking, IV FERC Stats. & Regs., Proposed Regs. ¶ 32,598, at P 14, Final Rule, Order No. 681, III FERC Stats. & Regs., Regs. Preambles ¶ 31,226 (2006).

<sup>37</sup> “When such price differences occur, a congestion charge is assessed to transmission users based on their nodal injections and withdrawals.” *Id.*

dispatch and the lowest possible prices while fairly compensating suppliers.”<sup>38</sup> In short, in an LMP environment (and, as a practical matter, in a non-administered bilateral environment), transmission congestion costs and generation costs combine to determine the price.

By encouraging advanced transmission technologies, EAct 2005 § 1223 advances the Commission’s goal of achieving “least cost dispatch and the lowest possible prices while fairly compensating suppliers.”<sup>39</sup> The definition of “advanced transmission technology” makes this apparent: “a technology that increases the capacity, efficiency, or reliability of an existing or new transmission facility.”<sup>40</sup> Increasing capacity, efficiency, and reliability of existing or new transmission facilities fosters least cost dispatch and lowers prices for consumers.

Consistent with need to increase the “capacity, efficiency, or reliability” of transmission, Congress treats not only wires and associated facilities as transmission, but includes additional technologies within the term. Accordingly, the list of advanced transmission technologies Congress enumerated in the statute contains not only “wire” technologies, such as “high-temperature lines,”<sup>41</sup> “underground cables,”<sup>42</sup> and “high-capacity ceramic electric wire,”<sup>43</sup> but also non-wire technologies such as “controllable load,”<sup>44</sup> “energy storage devices (including pumped hydro, compressed air,

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<sup>38</sup> *Southwest Power Pool, Inc.*, 112 FERC ¶ 61,303, at P 23 (2005).

<sup>39</sup> *Id.*

<sup>40</sup> EAct 2005 § 1223(a).

<sup>41</sup> *Id.* at § 1223(a)(1).

<sup>42</sup> *Id.* at § 1223(a)(2).

<sup>43</sup> *Id.* at § 1223(a)(4).

<sup>44</sup> *Id.* at § 1223(a)(12).

superconducting magnetic energy storage, flywheels, and batteries),”<sup>45</sup> “distributed generation,”<sup>46</sup> and “mobile transformers and mobile substations.”<sup>47</sup>

Given the revolutionary changes occurring in the electricity industry and the recognized need of transmission investment, Congress’s treatment of these technologies as transmission implements a sensible policy vision. As the Commission has recognized, building new transmission wires presents enormous challenges in today’s environment:

Siting major new transmission lines is extraordinarily difficult, given the environmental and land use concerns associated with obtaining and permitting new rights-of-way.

These challenges and risks are underscored by the fact that, in many instances, new transmission will not be financed and constructed in the traditional manner. New transmission is needed to connect new generation sources and to reduce congestion. . . . Our policies also must encourage all other needed transmission investments, whether they are regional or local, designed to improve reliability or to lower the delivered cost of power.<sup>48</sup>

Given these daunting challenges to building “traditional” transmission wires, it is hardly surprising that Congress decided to move beyond CAISO’s notions of “traditional” transmission. All of the enumerated technologies in Section 1223 promise to reduce congestion, either by building new wires, better wires, or by *reducing the need for wires*. Thus, including distributed generation, controllable load, and pumped hydro energy storage fulfills Congress’s purpose of promoting technologies that increase “the capacity, efficiency, or liability of an existing or new transmission facility.”<sup>49</sup> In the

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<sup>45</sup> *Id.* at § 1223(a)(11).

<sup>46</sup> *Id.* at § 1223(a)(13).

<sup>47</sup> *Id.* at § 1223(a)(18).

<sup>48</sup> Order No. 679 at PP 24-25.

<sup>49</sup> EPCAct 2005 § 1223(a).

Commission’s words, these technologies further the purpose of “improve[ing] reliability or . . . lower[ing] the delivered cost of power.”<sup>50</sup>

**V. LEAPS WITH TE/VIS, AND TE/VIS ALONE, WILL LOWER THE DELIVERED COST OF POWER AND INCLUSION OF COST-BASED RATES IN THE TAC WOULD BE JUST, REASONABLE, AND CONSISTENT WITH THE PUBLIC INTEREST**

As described in earlier submissions,<sup>51</sup> and summarized here for convenience, TNHC has proposed that LEAPS operate under the TAC. The full capability of the unit would be available to CAISO. This means that CAISO could avail itself of the unit’s entire ancillary services capabilities to fulfill the requirements of the CAISO grid. The unit’s energy storage capabilities also would be available to CAISO, that is, its capacity to store off-peak energy and release it as peak energy. In order to avoid CAISO needing to participate in markets to derive that benefit, however, TNHC has proposed the following methodology. TNHC would cause the unit to pump off-peak, and would bid the stored energy into the market at zero (as does nuclear and some other baseload generation). The unit would be dispatched at the market clearing price, yielding revenue.

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<sup>50</sup> Order No. 679 at P 25. In this light, comments such as those of MID, M-S-R and Santa Clara, which state that “[p]umped hydro generation’s label under EAct as an ‘Advanced Transmission Technology’ does not necessitate treatment as transmission for the purposes of the CAISO’s Tariff,” Answer of the Modesto Irrigation District in Support of the California Independent System Operator Corporation, Docket Nos. ER06-278-000, *et al.*, at P 15 (May 16, 2007), defy the statute. Nothing in EAct 2005 grants an ISO/RTO the right to pick which of the Section 1223 technologies are “transmission” within their territories. All of the listed technologies fulfill Congress’s purpose.

<sup>51</sup> *Lake Elsinore Advance Pump Storage project, Talega-Escondido/Valley-Serrano 500-kV Interconnect project*, Docket No. ER06-278-000 (filed Dec. 1, 2005); *Compliance Filing of the Nevada Hydro Company, Inc.*, Docket No. ER06-278-005 (filed Dec. 18, 2006).

CAISO would receive that revenue, less the electricity pumping cost, as a credit against the unit's cost-based rate.

LEAPS cannot be constructed without a connection to the grid: TE/VS. TE/VS would connect LEAPS to the pre-existing grid, but also would serve as a network upgrade in its own right. As established by the attached testimony of Mingxia Zhang, Ph.D. (Exhibit No. TNHC-21)<sup>52</sup> and based upon her computer modeling utilizing CAISO data, the cost savings from energy storage alone in a single year (2015 was modeled), would be as follows:

LEAPS constructed with TE/VS      \$151 million in 2015

TE/VS constructed without LEAPS   \$23 million in 2015

Given these savings, and the variety of other ancillary services and resource adequacy-related benefits they will provide, LEAPS and TE/VS will more than pay for themselves. The attached testimony of Philippe Auclair (Exhibit No. TNHC-19)<sup>53</sup> presents a detailed cost-benefit evaluation of the projects, based in part on Dr. Zhang's market simulations (for energy cost and ancillary services (regulation and operating reserves) benefits) and in part on analyses prepared by CAISO. Mr. Auclair demonstrates that the LEAPS and TE/VS projects in tandem will provide annual benefits to CAISO ratepayers aggregating approximately \$352 million in 2015, or nearly \$190 million per year in excess of the projects' combined levelized annual cost of \$145.33 million. TE/VS alone, Mr. Auclair finds, should produce benefits in 2015 of approximately \$148 million

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<sup>52</sup> Because Dr. Zhang was out of the country during the week preceding the filing date of this Answer, she was unable to sign her testimony. TNHC will provide an original signature page as soon as Dr. Zhang returns to the United States.

<sup>53</sup> The attached Ex. No. TNHC-19 contains a facsimile of Mr. Auclair's signature, TNHC will provide an original signature page as soon as possible.

per year, or nearly three times the transmission line's levelized annual cost of \$51.33 million.

Should the Commission prefer, and in order to continue its efforts to make peace with CAISO, TNHC is open to consideration of creative financial and regulatory solutions, e.g., allocating a portion of the device's capability to CAISO under cost based rates and allocating the balance to the markets. TNHC's goal is to achieve a framework that would allow construction and operation of the project.

The savings presented in the attached testimony conclusively refute the unsupported assertions of the Modesto Irrigation District, the M-S-R Public Power Agency and the City of Santa Clara, and the California Electricity Oversight Board, that the costs of LEAPS outweigh its benefits. The economic analysis proves the benefits to be realized by the ratepayers – or the benefits to be denied if LEAPS and TE/VS are not constructed.

**VI. CAISO'S POLICY ARGUMENTS AGAINST TREATMENT OF LEAPS AS TRANSMISSION UNDER THE TAC ARE MERITLESS**

CAISO's alleged "strong policy reasons" for not including LEAPS costs in the TAC and for CAISO refusing operational control are meritless.

Given the economic benefits LEAPS and TE/VS would provide, it would be prudent for one of the regional investor owned utilities ("IOU") to enter into a power purchase agreement with TNHC. Indeed that may occur, but to date it has not. TNHC's experience, consistent with industry history nationally, is that investor-owned utilities prefer to avoid purchasing from independents unless required – either by law or demand. Given the industry environment in which TNHC operates, the grant of cost-based rates

with appropriate incentives is the only realistic way to help assure construction of LEAPS. Without cost recovery, as a practical matter, construction would depend upon the willingness of an IOU to enter into a long-term power purchase agreement. (Financing for merchant plants is not obtainable in the current environment.) The public interest in the potential savings should not be hostage to competitors' willingness to enter into such purchase contract.

Further responses to CAISO's arguments are now set out under categorized headings.

**1. No discrimination.** Contrary to CAISO's assertions, it is immaterial that other pumped storage hydro facilities are interconnected to CAISO, or that in other ISO/RTO markets pumped storage hydro facilities "operate like generating units selling Energy and Ancillary Services in the markets operated by the ISO or RTO."<sup>54</sup> Reduced to its essence, CAISO argues that the Commission should ignore EAct 2005 because it was not earlier in effect. CAISO cites no authority for the surprising proposition that implementation of a change in the law is inherent discrimination. In EAct 2005, Congress determined to encourage advanced transmission technology, just as, in other laws, it granted tax incentives to encourage certain renewable resource generation. That the EAct 2005 statutory incentives are inapplicable to other transmission, or that the tax incentives are inapplicable to other generation, is inherent in Congress's encouragement of facilities deemed to be in the public interest. If that is discrimination, it is lawful and

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<sup>54</sup> CAISO Comments at 19.

proper discrimination, and cannot be said to violate Section 205.<sup>55</sup> Consequently, contrary to CAISO’s arguments, the treatment Congress has mandated does not violate the Commission’s directive to avoid preferential treatment in *California Independent System Operator Corp.*, 98 FERC ¶ 61,335, at 62,426-427 (2002), *order on reh’g*, 101 FERC ¶ 61,241, at 24 (2002).<sup>56</sup>

**2. LEAPS will not displace generation or otherwise “disrupt” markets.**

Because LEAPS is a storage device, producing no net energy, CAISO’s argument that LEAPS would displace generation,<sup>57</sup> is factually meritless. Just as construction of wires and towers can resolve congestion, thereby changing the merit order of generation dispatch, so too LEAPS storage will resolve congestion by shifting load from peak to off-peak. CAISO would not maintain that construction of wires and towers is market “disruption.” Its effort to taint LEAPS with this moniker is hollow.

**3. Reports of competitor stakeholder opposition are expected; stakeholders should provide information, but not be given a veto of Congressionally mandated policy.**

CAISO’s argument on behalf of stakeholders that TAC cost recovery would “disrupt the development of competitive markets” was disposed of by the passage of EAct 2005.<sup>58</sup> Further, as discussed above, LEAPS is storage, and under longstanding Commission precedent, storage is part of the transportation system. Storage allows

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<sup>55</sup> Moreover, owners of other similar facilities, such as the California Department of Water Resources State Water Project, are at liberty to seek comparable treatment. The Commission then could determine whether pre-existing facilities are within the scope of EAct 2005 or are transmission regardless of the scope of that Act.

<sup>56</sup> CAISO Comments at 34.

<sup>57</sup> *Id.* at 19.

<sup>58</sup> *Id.* at 21.

delivery at the most efficient times from standpoints of cost and reliability. Efficiencies might change markets – and should be encouraged – but they do not “disrupt” markets.

CAISO’s further contention that “it will undermine the development of competitive markets, including the implementation of LMP, which is intended to signal the need for locational generation expansion,”<sup>59</sup> is absurd. CAISO implies that inefficiencies must be preserved to allow LMPs to give stronger signals. This elevates form over substance. Worse, it elevates profits arising from inefficiencies over just and reasonable rates. LMP is not intended to preserve inefficiencies but to reflect them, and thereby give signals that induce efficiency and diminution of the same pricing differentials. TNHC seeks to do just that: respond to signaled differences between off and on-peak values by constructing a device that would tend to narrow that difference (upon which others profit). By contrast, CAISO would preserve the differential in support of robustly different LMPs that give continued price signals. In any event, and contrary to CAISO, LMP was never intended to support only “locational generation expansion” as CAISO implies, and Congress obviously concludes that any number of technologies, including storage, should be employed to enhance grid reliability.

CAISO’s same arguments devolve in to rote support for the status quo and its resulting benefits for the current group of market participants. The Commission should find it immaterial that stakeholders oppose cost-based rate treatment.<sup>60</sup> The stakeholder process should be informational, not a vote by competitors to set policy or bar advanced technology from entering the cost-based rate transmission market. Congress already

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<sup>59</sup> *Id.* at 22.

<sup>60</sup> *Id.* at 22-25.

determined the policy in EAct 2005, and the Commission should determine policy consistent with that law and the public interest under the Federal Power Act. Stakeholders can be expected to vote their economic interests, which each and every day will be against new market entrants. It goes without saying that stakeholders will oppose LEAPS and TE/VS, and the Commission should devalue that opposition.

**4. CAISO's arguments that operational control of LEAPS will compromise independence and distort markets are illogical.** On their face, CAISO's arguments that assuming operational control of a storage device will compromise its independence and distort markets are hyperbole and rest on CAISO's faulty view that a storage facility is the same, or should be treated the same, as a generator.

The underlying question is whether CAISO's support for an entrenched status quo will be permitted to deprive the public of the efficiencies of energy storage and other advanced transmission technologies. CAISO staunchly urges denial of the benefit, which TNHC seeks to create. Operation of a storage device under the TAC, where CAISO simply avails itself of the ancillary services, where CAISO gets a revenue credit for the economic benefit of the stored energy, and where CAISO does not become a market participant (under TNHC's preferred proposal discussed above), will have no greater impact on "independence" or markets than additions of wires or towers. The clarity of this conclusion drives CAISO erroneously to compare LEAPS to other generators, without regard to the fact that it is a storage device. TNHC does not seek TAC treatment for a generator. LEAPS is storage and therefore transmission. To the extent this transmission addition could impact any relevant markets, it is no different than any new transmission wire, tower, substation, transformer, switch, or other facility.

CAISO's argument that TAC treatment would cause market distortion<sup>61</sup> is particularly noxious. Storage is inherently efficient to integrate wind generation and assure peak power at relatively lower cost. These are market impacts, but not distortions (distortions being understood to be price or supply impacts resulting from withholding of supply, rigged bids, and the like). It is too easy for CAISO to throw these terms around as though any change to supply or efficiency should be disfavored as "disruption." Congress apparently disagrees, and given the history of the markets in California, so too should the Commission.

TNHC has carefully crafted its proposal to avoid any risk of distortion. CAISO would take its ancillary services, presumably consistently and to the extent required and feasible, from LEAPS. LEAPS would consistently bid in stored energy at zero. This scenario has far more stability than typical markets where generator owners can decide whether to bid in or not, and can withhold supply when it suits them under some pretense or another.

CAISO's arguments that distortion will occur are accordingly fallacious. For example, CAISO advances its stakeholders' assertion that bidding in energy at zero will create a "lack of separation between the CAISO bidding and transmission functions as well as a lack of motivation to optimize the revenue stream produced by the facility."<sup>62</sup> But CAISO will not do the bidding, TNHC will. Optimization will occur by virtue of the CAISO dispatch model, which will take the energy as needed, and not based on some subjective standard. Given CAISO's computerized dispatch by which LEAPS energy

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<sup>61</sup> *Id.* at 27.

<sup>62</sup> *Id.* at 32.

would be taken as needed, there is no basis for stakeholder assertions that CAISO would be involved in operational decisions.<sup>63</sup>

Manifestly, and as CAISO concedes, operation of LEAPS “could dramatically affect on(-) and off(-) peak pricing,”<sup>64</sup> but that is the positive consequence of energy storage. LEAPS would tend to reduce peak prices by releasing stored energy during peak periods (this impact is already taken into Dr. Zhang’s testimony). This function is similar to the function performed by gas storage, discussed above. Storage and release can add market stability and system reliability, but that these are positive market forces, not a distortion to be avoided.<sup>65</sup>

CAISO’s further assertion that it would be “placed in a position of favoring the product of a particular market participant (i.e., Ancillary Services), in preference to others, by resorting to the service offered by a certain generator in lieu of optimal dispatch,” CAISO Comments at 33-34, continues the confusion between market impact and market distortion. Again, even wire construction impacts generation and energy markets. As advanced transmission technology, LEAPS provides ancillary services together with its energy storage function. LEAPS would not be a market participant, and so would not be favored. Generators could compete in the market to provide the balance

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<sup>63</sup> *Id.*

<sup>64</sup> *Id.* at 34.

<sup>65</sup> Similarly deficient is the California Electricity Oversight Board’s speculative argument that the difference between peak and off-peak energy prices will dissipate and thus erode the economics of LEAPS. *See* Comments of the California Electricity Oversight Board, Docket Nos. ER06-278-000, *et al.* at 4-5 (May 1, 2007). The Board offers no evidence to support any change in energy usage patterns sufficient to erase the difference in price between peak and off-peak energy in the foreseeable future. The Board’s speculation is mere wishful thinking.

of ancillary services requirements and LEAPS would have no impact on that competition. Again, and in any event, the Congress did not intend through EPAct 2005 to preserve the status quo, it intended to encourage new technologies that would produce precisely the kind of change the CAISO and its stakeholders oppose.

**5. CAISO is not a vertically integrated utility.** Ironically, if not cynically, CAISO finally contends that its operational control of LEAPS is a step back from competitive markets and towards vertically integrated electric utilities.<sup>66</sup> This is folly. CAISO already controls a transmission system, to which LEAPS would be added as a facility. CAISO's argument could have a semblance of logic if CAISO were a vertically integrated utility, but it is an ISO.

**6. CAISO refrained from conducting economic analysis, but TNHC's analysis shows LEAPS and TE/VS to be economical additions to the grid at cost-based rates.** Dr. Zhang and Mr. Auclair show LEAPS and TE/VS, and TE/VS standing alone, will provide total net benefits (i.e., net of the projects' levelized annual costs) to CAISO customers of \$207 million and \$96 million, respectively, in 2015. CAISO's own analysis shows that the savings in ancillary services, integration of wind generation resources and mitigation of over-generation costs for 2015 would be approximately \$64.5 million (rounded, stated in 2006 dollars). Economic Benefits Assessment of the LEAPS Project, California ISO (Sept. 19, 2006) (Exhibit No. TNHC-20 at 32). CAISO has not submitted any comparable assessment here, having determined not to conduct an

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<sup>66</sup> CAISO Comments at 34.

economic analysis due to its stakeholders' preference that LEAPS be excluded from the TAC.<sup>67</sup>

Nor does CAISO offer any support for its striking conclusion that its studies show nothing “unique or compelling” about LEAPS and TE/VS that cannot be provided by the market. This argument sweeps too broadly to be credible.<sup>68</sup> TNHC’s economic analysis shows that LEAPS energy storage and TE/VS would bring substantial savings to the market. That, together with LEAPS’ unique storage capability, is sufficiently “unique and compelling” to justify inclusion in the TAC and incentive rates. CAISO’s statements regarding its evaluation of LEAPS as a generator<sup>69</sup> are conclusory and unsupported by record evidence.

CAISO concedes that its purported economic conclusions rest not on economics but on its notions of “significant policy reasons” to deny TAC treatment.<sup>70</sup> CAISO’s policy is contrary to Congressional policy and against the public interest.

**7. Tax status – the final red herring.** CAISO has never explained, and cannot explain, how or why inclusion of another transmission facility into its operational control and under the TAC would jeopardize its tax status, which it identifies as an exemption from federal income taxation under § 501(c)(3) of the Internal Revenue Code. As best as can be discerned, the argument is a red herring– that compliance with EPAct 2005 would cause CAISO to become a market participant, such that it could not continue to represent to the Internal Revenue Service that it operates for the public benefit. The

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<sup>67</sup> *Id.* at 36.

<sup>68</sup> *Id.* at 34-36.

<sup>69</sup> *Id.* at 37-39.

<sup>70</sup> *Id.* at 40.

CAISO provides neither evidence nor legal support for this proposition, which is in any event at odds with the relevant operational structure. As discussed above at length, CAISO will provide LEAPS service to the grid in the same manner it provides service on any other transmission facility. As to energy, TNHC, not CAISO, would bid into the markets at zero, and dispatch would occur under CAISO's dispatch program (as it would at other nodes). CAISO would receive the revenue as a credit against the rate. CAISO cannot seriously maintain – and in fact does not seriously maintain – that this scenario would jeopardize its tax status.

What is more, CAISO's tax status does not trump EAct 2005 or the Federal Power Act. Not all ISO/RTOs are tax exempt. Tax exemption is not a required characteristic for an ISO or RTO under any law or Commission precedent. It is merely a convenience, obviating the need to manage year-end accounting to avoid a taxable cash surplus. Retention of an exemption, *vel non*, is immaterial to the far more important issues at hand.

**VII. AS A MATTER SEPARATE FROM LEAPS, RATE INCENTIVES SHOULD BE GRANTED WITH RESPECT TO TE/VS AS A STAND-ALONE TRANSMISSION FACILITY**

The Commission should grant all incentives previously requested to TE/VS as a stand alone transmission upgrade. To any extent this request may have been unclear, TNHC now clarifies. Providing such incentives for TE/VS at this time will ensure that the benefits of TE/VS are realized as soon as possible, regardless of the sequence of construction, or in the event that LEAPS is not constructed.

As further support for its request, and in conformity with Order No. 679, TNHC refers to the findings of Mr. Auclair, based on Dr. Zhang's market simulations, that

TE/VS as a stand-alone would yield energy savings of \$22 million in 2015 (*see* Exhibit No. TNHC-19 at 2) and total net benefits of more than \$96 million per year. *Id.* at 21. This request is not controverted.<sup>71</sup>

#### **VIII. TNHC RESPONSES TO COMMISSION CONCERNS ENUMERATED IN NOV. 17 ORDER**

In light of the foregoing, TNHC responds to the enumerated matters identified in the Nov. 17 Order, as to which CAISO comment was sought, (quoted and emboldened in the enumerated paragraphs below (Nov. 17 Order at PP 21, 30) as follows:

**1. “operation/management options and recommendations.”** TNHC proposes that of the various options it has proposed, CAISO should utilize LEAPS ancillary services as it would any other ancillary services, and receive as a rate credit all net revenues resulting from LEAPS zero bids (which TNHC would administer) into the market. Under this approach, CAISO ratepayers obtain the full economic benefit of the unit, but CAISO’s functions and role are unchanged from today. CAISO’s parade of horrors terminates under this approach.

**2 “cost recovery options given the CAISO’s determination of the extent to which the combined Project reduces congestion costs or enhances reliability.”** No reason appears why LEAPS (and, for that matter, TE/VS) should not be treated as any other transmission facility. For reasons stated fully above, there is no basis for denial of this treatment in discrimination against LEAPS.

**3. “whether the CAISO can effectively operate this combined Project in the context of being an independent system operator.”** Under the procedure explained

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<sup>71</sup> *See* CAISO Comments at 25.

immediately above in #1 and in additional discussion above, CAISO would not be submitting energy bids because unit stored energy would be bid into the market at zero. Therefore, CAISO would exercise operational control over the unit with the same level of passivity or involvement present in its operation of other transmission facilities, except that CAISO would specify the ancillary services it required and TNHC would comply. As to release of stored energy, CAISO would have no involvement except to receive funds.

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.”** While LEAPS benefits and values depend upon operation of markets, so too do the benefits of wires and towers. TNHC’s economic analysis shows the energy and ancillary services values. The Commission should focus on these values, as it would with any facility to determine whether cost recovery is just and reasonable.

5. **“whether the CAISO recommends inclusion of the LEAPS costs in its TAC and, if so, why?”** The CAISO has shown that its opposition rests on anachronistic notions that EAct 2005 rejects, or on its refusal to acknowledge that the unit generates no net energy. The Commission should reverse the question and consider what good reasons CAISO possibly could have for its opposition. Throughout CAISO’s opposition, the public interest in stability, lower peak prices, and reliability, finds no voice.

## CONCLUSION

For the foregoing reasons and the reasons stated in TNHC's earlier submissions in this proceeding, the Commission should find and declare that LEAPS is not only an advanced transmission technology, as it previously found in the Nov. 17 Order, but that as transmission it should be taken into the CAISO's operational control, with cost recovery under the TAC, and with the requested rate incentives; and that TE/VS should be accorded the same treatment and incentives both in conjunction with LEAPS or as a stand-alone facility.

Respectfully submitted,

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Dated: June 22, 2007

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## CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Court in this proceeding.

Dated at Washington, D.C., this 22nd day of June, 2007.

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