In this order, the Commission accepts in part and denies in part The Nevada Hydro Company, Inc.’s (Nevada Hydro) requested rate incentives for the proposed TE/VS Interconnect. Specifically, the Commission grants Nevada Hydro an incentive equity return set within the upper end of the zone of reasonableness to be determined through a subsequent proceeding under section 205 of the Federal Power Act (FPA) and a hypothetical 50 percent equity/50 percent debt capital structure during the construction period. However, the Commission denies Nevada Hydro’s request for full recovery of Construction Work in Progress (CWIP), abandonment costs and a three-year rate moratorium for this transmission project, as discussed herein. With respect to the Lake Elsinore Advanced Pump Storage project (LEAPS, LEAPS project, or LEAPS facility), the Commission finds that this pumped hydro storage facility may not be operated and/or managed by the California Independent System Operator Corporation (CAISO) or functionalized as transmission for rate recovery purposes for the reasons discussed below.

1 The Talega-Escondido/Valley-Serrano Interconnect project (TE/VS Interconnect) is a 30-mile, 500 kV transmission line that will connect San Diego Gas & Electric Company’s (SDG&E) transmission system with Southern California Edison’s (SCE) system.
Based in part on the information submitted by CAISO in compliance with our November 17, 2006 Order, the Commission has determined that the LEAPS project is ineligible for incentive rate treatment pursuant to Order No. 679.

I. Background

2. On December 1, 2005, as amended on December 22, 2005, Nevada Hydro submitted a filing, pursuant to section 205 of the FPA, to request approval of certain rate incentives that it states will enable it to attract financing for the LEAPS project and the TE/VS Interconnect (Combined Project). On November 17, 2006, the Commission issued an order which deferred ruling on the merits of the rate incentives requested by Nevada Hydro, pending submission of additional information directed by the Commission to complete its analysis. In particular, CAISO was directed to convene a

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5 Order No. 679 requires applicants seeking transmission rate incentives to submit, in the first instance, either a petition for declaratory order or a filing under section 205 of the FPA outlining its request. Nevada Hydro’s request, which preceded Order No. 679 by approximately seven months, is more akin to a request for declaratory order, notwithstanding the characterization provided by Nevada Hydro. The Commission’s rules and regulations do not allow the submission of “partial” filings under section 205 of the FPA. See, e.g., Nevada Hydro’s December 1, 2005 filing at 5 (Initial Application) (stating that it “does not seek to put into effect specific rates or charges to be collected from customers”). Thus, Nevada Hydro’s application has been reviewed by the Commission as a petition for declaratory order. Nevada Hydro’s request for waiver of sections 35.3 and 35.12 of the Commission’s rules and regulations is moot, since petitions for declaratory orders have no cost of service filing requirements. However, because the requirement of a petition for declaratory order was announced in Order No. 679, after Nevada Hydro had made its filing, the Commission grants waiver of the filing fee under 18 C.F.R. § 385.207 (2007).

6 The procedural history from the date of Nevada Hydro’s initial filing to the issuance of the November 17 Order is set forth in the November 17 Order.
stakeholder process to explore primarily the operational/management aspect of Nevada Hydro’s proposal for the LEAPS facility. On December 18, 2006 and May 1, 2007, Nevada Hydro and CAISO submitted compliance filings with the November 17 Order, respectively.

A. Description of the Projects

3. Nevada Hydro proposes to build the TE/VS Interconnect project, which consists of an approximately 30-mile, 500 kV transmission line that will run through federally-owned public lands managed by the United States Forest Service (Forest Service) and connect San Diego Gas & Electric Company’s (SDG&E) transmission system with Southern California Edison’s (SCE) system, and the LEAPS project, 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. These projects will be located in Riverside County, California at Lake Elsinore, California and this lake will serve as the lower reservoir for the LEAPS facility. The upper reservoir will be constructed above the crest of the Elsinore Mountains.

4. Nevada Hydro states that it combined the Combined Project for the purpose of this filing, in accordance with the provisions of sections 1223 and 1241 of the Energy Policy Act of 2005 (EPAct 2005), under which the Commission was directed to encourage, when appropriate, the deployment of energy storage devices as “advanced transmission technology.” Nevada Hydro, a single purpose entity created to develop and construct the Combined Project, requests the following rate incentives for its Combined Project: (1) an initial post-tax rate of return on equity (ROE) of 14.5 percent for the LEAPS project and 13.5 percent for the TE/VS Interconnect project; (2) a hypothetical 50/50 capital structure for at least the first three years of service; (3) a three-year rate moratorium; (4) full recovery of prudently incurred construction work in progress.

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9 In its Initial Application, Nevada Hydro requested a 14.5 percent ROE on the TE/VS Interconnect project. Initial Application at 5. It later amended its proposal by stating that if the Commission preferred not to approve the requested 14.5 percent ROE for the Combined Project, it would accept a 13.5 percent ROE for the TE/VS Interconnect project. Response of Nevada Hydro Company at 16 (January 27, 2006) (Nevada Hydro Answer).
and (5) abandonment costs should these projects be approved and, then, cancelled or abandoned for reasons beyond Nevada Hydro’s control. Further, Nevada Hydro does not seek any special depreciation of the Combined Project’s capital costs as a rate incentive but requests a final determination on the period of depreciation so that financing can be structured accordingly.

5. Nevada Hydro intends to turn the Combined Project over to the operational control of CAISO and, thus, expects compensation through CAISO’s Open Access Transmission Tariff (Tariff) protocols and other governing agreements. Specifically, Nevada Hydro states that it expects both the LEAPS and the TE/VS Interconnect projects to be considered transmission assets, the full costs of which should be included in CAISO’s Transmission Access Charge (TAC) and collected from all users of the CAISO’s transmission grid. Nevada Hydro had originally estimated the cost of the Combined Project to be approximately $750 million, and Nevada Hydro will be the sole owner of both projects.

6. According to Nevada Hydro, the LEAPS facility will be environmentally friendly and will “help the [CAISO] manage grid operations, shift off-peak energy closer to the

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10 See Nevada Hydro Compliance Filing at 11 (December 18, 2006) (Nevada Hydro Compliance Filing).

11 Id.

12 As we discuss later, Nevada Hydro may raise this issue again when it submits its full section 205 filing to the Commission for review.

13 CAISO’s TAC consists of a High Voltage (HV) Access Charge; a Low Voltage Access Charge; four Transmission Access Charge (TAC) areas defined by the three former control areas of the Original Participating Transmission Owners (TO) (i.e., PG&E, SDG&E and SoCal Edison), and LADWP’s control area should LADWP choose to become a Participating TO; and a ten-year transition period. Over the ten-year transition period, the HV Access Charge of each TAC Area will progressively combine to form a single CAISO grid-wide HV Access Charge through blending the HV Transmission Revenue Requirements of each TAC area by an additional ten percent each year.

14 Nevada Hydro now estimates the cost of the combined Project to be over $1 billion.

15 In a separate proceeding, the LEAPS project hydropower license application was filed with the Commission in August 2004 (Project No. 11858).
demand center during peak periods, and enhance the reliability of the Southern California transmission grid while helping the State of California achieve its renewable resource use goals.”

Additionally, Nevada Hydro states it is seeking a special use permit to cross public lands from the Forest Service for the TE/VS Interconnect project.

7. During the course of this proceeding, CAISO conducted a stakeholder process to evaluate the feasibility of Nevada Hydro’s proposal for a CAISO-managed and/or operated LEAPS facility. Stakeholders also considered the appropriateness of including the LEAPS plant costs in the TAC and socializing its cost over all users of CAISO grid. Based on input from this stakeholder process, CAISO concluded that TAC-recovery for the LEAPS facility should not be allowed and that CAISO should not be required to assume operational control of this generation facility, as discussed in greater detail herein.

8. In its Initial Application, Nevada Hydro asked the Commission to consider the Combined Project as a single project for purposes of determining the applicability of Order No. 679. Following the CAISO’s recommendation to the Commission on the appropriate treatment of the LEAPS facility, Nevada Hydro filed a subsequent request that the Commission evaluate the TE/VS Interconnect as a stand-alone, independent project for the same transmission rate incentives previously requested for the Combined Project. Therefore, in this order, the Commission will discuss its evaluation of each project individually. First, after summarizing the procedural history in this proceeding, the order will address Nevada Hydro’s request for transmission rate incentives for the TE/VS Interconnect and, then, the LEAPS project, beginning with the threshold issue of whether to treat the LEAPS facility as a transmission asset for rate basing purposes. In

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16 Initial Application at 6. Further, Nevada Hydro states that the facility’s pump-turbine units will operate under an average net head of approximately 1600 feet, making the LEAPS facility one of the most efficient pumped storage facilities in the world, with the highest lift in the continental United States. Moreover, Nevada Hydro asserts that peak energy will be available over a 16-hour period and will be dispatchable in approximately 15 seconds, serving a variety of ancillary service needs for the CAISO market.

17 Comments of the CAISO in response to the November 17, 2006, Order on Rate Request (May 1, 2007) (CAISO Compliance Filing).

18 See Nevada Hydro Answer to CAISO Compliance Filing at 29.
each discussion, we will address the pleadings made to both Nevada Hydro’s December 18, 2007 Compliance Filing and CAISO’s May 1, 2007 Compliance Filing. As discussed below, we will examine the TE/VS Interconnect and the LEAPS project separately for purposes of our analysis under Order No. 679.

B. Overview of Issues in Nevada Hydro’s Initial Filing

9. As described in the November 17 Order, several parties filed comments and/or protests in response to Nevada Hydro’s original filing. Specifically, CAISO expressed its concern regarding how the LEAPS facility, which it classifies as a generation resource, would function in CAISO’s market-based environment. Other arguments by protestors included: (1) Nevada Hydro’s filing is premature and Commission action should be deferred until the proposal was considered in the CAISO’s regional planning process; (2) the proposal would have the Commission treat the TE/VS Interconnect as a reliability and/or economic network transmission upgrade, while it appears to be a gen-tie not eligible for network treatment; (3) Nevada Hydro’s proposed 14.5 percent ROE is too high for the risk Nevada Hydro would incur, as there is a high degree of certainty of return to investors if the project is approved and built.

10. In its answer, Nevada Hydro stated that its requested cost-based treatment for the LEAPS facility was reasonable, as Congress had already labeled pumped hydro as an advanced transmission technology under EPAct 2005. Nevada Hydro also argued that the Combined Project will increase import capability in the region, reduce RMR contract costs, and provide value in the ancillary services market, as well as provide significant environmental benefits. In a supplemental filing, Nevada Hydro suggested three approaches CAISO could take to exert functional control of the LEAPS facility without becoming a de facto market participant: (1) CAISO would assume operational control and bid and schedule the LEAPS facility into the market but create a firewall between the actual operators of the LEAPS facility and transmission personnel to ensure that the LEAPS operators would have no access to non-public information; (2) CAISO would periodically auction its right to operate the LEAPS facility to market participants; and (3) CAISO would contract with a third party and would be prohibited from sharing non-public information with this third party.

11. On November 17, 2006, the Commission issued an order which deferred ruling on Nevada Hydro’s requested rate incentives pending submission of additional information by Nevada Hydro and CAISO. The Commission found that the LEAPS facility met the requirements of EPAct 2005 section 1223, as an “advanced transmission technology.”

19 November 17 Order, 117 FERC ¶ 61,204 at P 27.
The Commission concluded, however, that Nevada Hydro’s proposal required further analysis and development concerning, in particular, how a CAISO-operated pumped hydro storage facility could be implemented effectively in a market-driven environment.\footnote{Id. P 32.}

12. The November 17 Order also found that CAISO had not addressed whether the services provided by the LEAPS facility would benefit CAISO ratepayers in such a way as to warrant special treatment (e.g., cost recovery of the LEAPS project through the TAC). Accordingly, the Commission directed CAISO to convene a stakeholder process and submit a compliance filing at the conclusion of the stakeholder process.\footnote{Id. P 30.} The Commission directed CAISO to address: operation/management options and recommendations; cost recovery options given CAISO’s determination of the extent to which the Combined Project reduces congestion costs or ensures reliability; whether CAISO can effectively operate the Combined Project in the context of being an independent system operator; whether it is appropriate to include a cost-based, fixed revenue requirement for a facility in its TAC, where the benefits associated with that revenue requirement would be determined by the daily operation of the market and; whether CAISO recommends inclusion of the LEAPS costs in its TAC.\footnote{Id.} Additionally, the Commission directed CAISO to address, within 60 days of the date of the November 17 Order, whether CAISO-operation of the LEAPS facility would adversely affect CAISO’s tax-exempt status.\footnote{On January 8, 2007, the CAISO requested and was thereafter granted an extension of time to file its response to the November 17 Order by May 1, 2007.}

13. The Commission also found, in the November 17 Order, that Nevada Hydro had not provided sufficient evidence to support its requested equity returns and, therefore, directed Nevada Hydro to provide an analysis to show that the requested returns fell within the range of reasonable returns.\footnote{Id. P 32.} The Commission noted that the requested hypothetical capital structure, the three-year rate moratorium, and the proposal for 100
percent CWIP recovery would be subject to a future determination that the Combined Project has met all elements of Order No. 679 before the Commission grants any of these incentives.  

II. Notice of Filings and Responsive Pleadings

14. Notice of Nevada Hydro’s filing, as later amended, was published in the Federal Register, 70 Fed. Reg. 74,796 (2005) and 71 Fed. Reg. 1,424 (2006), with interventions and protests due on or before December 22, 2005 and January 12, 2006, respectively. Timely motions to intervene and/or protests were filed by the SCE, PG&E and SDG&E, as later corrected. Late motions to intervene and/or comments or protests were filed by CAISO, the California Department of Water Resources State Water Project (DWR), as supplemented, the California Public Utilities Commission (CPUC), the Cities of Anaheim, Azusa, Banning, Colton, and Riverside, California (Cities), the California Electricity Oversight Board (CEOB), and the Elsinore Valley Municipal Water District (Elsinore Valley). Nevada Hydro filed answers on January 27, 2006 and May 16, 2006.

15. On March 20, 2006, as supplemented on March 29, 2006 and April 7, 2006, Nevada Hydro filed its response to the Commission’s data request. Nevada Hydro’s filing also contained a number of clarifications concerning the status of its proposals before the CPUC and CAISO. Notice of Nevada Hydro’s responses to the Commission’s request for more information was published in the Federal Register, 71 Fed. Reg. 19,493 (2006) and 71 Fed. Reg. 21,008 (2006), with interventions and protests due on or before April 21, 2006 and April 28, 2006, respectively. SDG&E and SCE filed comments. Nevada Hydro filed an answer.

16. On December 18, 2006, Nevada Hydro submitted its compliance filing. Notice of Nevada Hydro’s filing was published in the Federal Register, 71 Fed. Reg. 78,422 (2006), with interventions, protests, and comments due on or before January 8, 2007. In this filing, Nevada Hydro provided an equity analysis, which incorporated a proxy group

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25 Id.
26 The bulk of this response is an interconnection study performed by an independent third party in March 2005.
17. In response to Nevada Hydro’s Compliance Filing, the Transmission Agency of Northern California filed a timely motion to intervene. M-S-R Public Power Agency and the City of Santa Clara, California (M-S-R), the CPUC, and Modesto Irrigation District (Modesto) filed protests. SDG&E and SCE filed comments. Calpine Corporation and Williams Power Company, Inc. (Williams) filed motions to intervene out-of-time. Nevada Hydro filed an answer.

18. On May 1, 2007, after concluding its stakeholder process, CAISO submitted its compliance filing. Notice of CAISO’s compliance filing was published in the Federal Register, 72 Fed. Reg. 29,151 (2007), with interventions, protests, and comments due on or before May 22, 2007. Voith Siemens Hydro Power Generation, Inc. (Voith); M-S-R; the California Department of Water Resources; Modesto; Devine, Tarbell, & Associates (Devine); Jacqueline Ayer; California Municipal Utilities Association; and Nevada Hydro filed comments. CAISO, SCE, and SDG&E filed answers to Nevada Hydro’s comments. The Northern California Power Agency filed a motion to intervene. Thereafter, Nevada Hydro made a supplemental filing.

III. Discussion

A. Procedural Matters

19. Pursuant to Rule 214 of the Commission’s Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2007), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding. We will allow the late interventions and comments of CAISO, DWR, the CPUC, CEOB, the Cities, Williams, Calpine Corporation, and Elsinore Valley because they have each demonstrated an interest in this proceeding that cannot be adequately represented by any other party. Given this fact and the lack of undue prejudice or delay, we will grant the late-filed motions to intervene. Rule 213(a)(2) of the Commission’s Rules of Practice and Procedure, 18 C.F.R.

27 Nevada Hydro states that it has no publicly-traded stock at the time and argues that it faces a much higher risk profile than any of the electric utilities in the proxy group, particularly in light of the need to attract financing for the Combined Project.

28 See Nevada Hydro Compliance Filing, Attachment 1 Gaske Testimony at 7.

29 On May 15, 2007, Nevada Hydro requested and was thereafter granted an extension of time to file its response to CAISO’s May 1, 2007 filing until June 22, 2007.
§ 385.213(a)(2) (2007), prohibits an answer to a protest unless otherwise ordered by the decisional authority. We will accept SCE’s, SDG&E’s, Nevada Hydro’s and CAISO’s answers because they have provided information that assisted us in our decision-making process.

B. Ripeness

1. Comments and Protests

20. In response to Nevada Hydro’s Initial Application, SDG&E and SCE argued that Nevada Hydro’s proposal was premature, as the project appeared to be at the very early stage of regulatory development, both in terms of analysis and in terms of commercial development. SDG&E stated that the timing of Nevada Hydro’s proposal may have been an attempt to circumvent state planning and siting processes. SDG&E argued that Nevada Hydro’s system impact study application was only recently submitted to CAISO and had not yet been acted upon. SCE requested that the Commission defer action until the proposal made its way through CAISO regional planning process. If the Commission considers granting the requested rate principles prior to Nevada Hydro receiving CAISO-approval for its proposal, SCE requests the Commission hold a hearing to explore additional factual issues.  

2. Commission Determination

21. As we note above, we are approving incentives for Nevada Hydro’s proposed TE/VIS Interconnect under section 219 of the FPA and Order No. 679 to provide the regulatory certainty necessary for Nevada Hydro to proceed with its project. Our decision therefore is confined to the particular incentives being approved in the instant proceeding and does not constitute approval of any particular rate. As we discuss below, the justness and reasonableness of any such rate will be determined through a future FPA section 205 proceeding. Accordingly, we find that it is appropriate to address Nevada Hydro’s petition at this time.

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30 Southern California Edison Company’s Motion to Intervene and Protest at 3 (January 12, 2006) (SCE Protest).

31 See, e.g., American Electric Power Service Corp., 116 FERC ¶ 61,059, at P 26-28 (2006) (rejecting the argument that Commission’s approval of certain rate principles was premature in the context of section 219 of the FPA).
C. **Section 219 Requirements**

22. Section 1241 of EPAct 2005 added a new section 219 to the FPA directing the Commission to establish, by rule, incentive-based (including performance-based) rate treatments related to the transmission of electric energy in interstate commerce. The Commission issued Order No. 679, which set forth processes by which a public utility could seek transmission rate incentives pursuant to section 219, including the incentives requested here by Nevada Hydro.

23. Order No. 679 provides that a public utility may submit a petition for declaratory order or a filing under FPA section 205 to obtain incentive rate treatment for transmission infrastructure investment that satisfies the requirements of FPA section 219, i.e., the applicant must demonstrate that the facilities for which it seeks incentives either ensure reliability or reduce the cost of delivered power by reducing transmission congestion.

24. To comply with the Commission’s FPA section 219 requirement, Nevada Hydro relies on independently supplied reliability studies. In its March 20, 2006 Response to the Commission’s data request, Nevada Hydro submitted the Comparative Reliability Evaluation for Alternative New 500 kV Transmission Lines into San Diego by John Kyei, CAISO Grid Planning Department (Reliability Study); and the Lake Elsinore

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33 See 18 C.F.R. § 35.35(i) (2007).

34 See id.; Order No. 679-A, FERC Stats. & Regs. ¶ 31,236 at P 47.

35 Order No. 679-A, FERC Stats. & Regs. ¶ 31,236 at P 49.

36 According to the Executive Summary provided in the Reliability Study, which references the 2003 Southwest Transmission Expansion Plan (STEP) Study, San Diego is in desperate need of a new 500 kV line to serve future load growth to increase San
Advanced Pump Storage System Study prepared by Utility System Efficiencies, Inc. (USE Interconnection Study). The main objective of the Reliability Study was to evaluate the relative reliability benefits of three transmission options: (1) the Imperial Valley-Ramona 500 kV line, which is part of the Imperial Valley-San Diego Expansion Plan (ISEP); (2) the TE/VS 500 kV line (without the 500 MW LEAPS facility) and (3) both projects combined and connected to the same substation in San Diego. In the Reliability Study, power flows were conducted for each of the above transmission options evaluated, modeled on various assumptions, to determine the maximum San Diego import level, which, at the time, was 2850 MW. This study revealed that “[a] combination of the ISEP and LEAPS projects provides additional benefits such as a 3800 MW import capability to San Diego,” a 950 MW increase from the then existing 2850 MW import capability.

25. Likewise, in the USE Interconnection Study, the TE/VS Interconnect was evaluated as a stand-alone transmission option. USE concluded that the addition of this line “would inject another source of power to the SDG&E 230-kV system; resulting in a more robust system.” Potential decreases in Reliability Must Run (RMR) contracts and increased transfer capabilities associated with Path 43 (North of San Onofre) and Path 44 (South of San Onofre) were also mentioned in the USE Interconnection Study as potential benefits.

26. Based on the evidence provided by Nevada Hydro, we find that these power flow analyses affirm that the proposed TE/VS Interconnect will add another major transmission path into the San Diego area with a potential for increasing San Diego’s import capability, which is currently 2850 MW. STEP study results concluded that this deficiency is “primarily due to the inability to permit the Valley-Rainbow 500 kV line, the planned retirement of the South Bay generation units in 2009, and increasing load in San Diego.” See Nevada Hydro’s March 20, 2006 Response, Exhibit No. TNHC-1.

37 Id. at 3.

38 Additionally, the Reliability Study determined that both projects would require additional facilities or upgrades beyond the basic project scope to achieve this 3600 MW import limit. Id. at 34.

39 Id.

40 Id.
import capability including relief on currently limiting Paths 43 (North of San Onofre) and 44 (South of San Onofre) while maintaining adequate system reliability and, therefore, satisfy the Commission’s FPA section 219 requirement. In its initial application, Nevada Hydro stated that the 2003 STEP Report “concluded that a new high-voltage electrical transmission line between Riverside and San Diego Counties is critically needed to serve future load growth.”\footnote{Initial Application at 13.} If built today, the TE/VS Interconnect would be the first 500 kV transmission line connecting SCE and SDG&E’s transmission systems.\footnote{We recognize that competing proposals have been submitted to the CAISO regional planning group for review. Our finding here is not an endorsement of Nevada Hydro’s proposal over any other proposal.} Moreover, the USE Interconnection Study determined that the addition of the TE/VS Interconnect would have benefits to both the SCE and SDG&E systems for the above stated reasons.

27. We therefore find that Nevada Hydro, through independent evidence provided in this proceeding, has adequately demonstrated that its TE/VS Interconnect project will ensure reliability, consistent with the requirement of Order No. 679.

D. \textbf{Incentives and the Commission’s Nexus Requirement for the TE/VS Interconnect Project}

28. In addition to satisfying the requirement under FPA section 219 mentioned above, a proposed incentive rate must also be shown to have a nexus between the incentive sought and the investment being made. In evaluating whether an applicant has satisfied the required nexus test, Commission precedent requires an examination of the total package of incentives being sought, the inter-relationship between any incentives, and how any requested incentives address the risks and challenges faced by the project.\footnote{18 C.F.R. § 35.35(d) (2007); Order No. 679, FERC Stats. & Regs. ¶ 31,222 at P 26. \textit{See also} Order No. 679-A, FERC Stats. & Regs. ¶ 31,236 at P 21.} Applicants must provide sufficient explanation and support to allow the Commission to evaluate the incentives.

29. In Order No. 679-A, the Commission clarified that its nexus test is met when an applicant demonstrates that the total package of incentives requested is “tailored to address the demonstrable risks or challenges faced by the applicant.”\footnote{Id. P 40.} By its terms, this
nexus test is fact-specific and requires the Commission to review each application on a case-by-case basis. Notably, the Commission chose not to adopt a list of criteria or characteristics that must be met by every applicant before an incentive would be approved. The Commission recognized that it would be impossible to identify every conceivable challenge or risk faced by an applicant, or to develop an *a priori* menu of incentives that would or would not be appropriate given a particular set of risks and challenges.

30. As part of our evaluation of whether the incentives requested are “tailored to address the demonstrable risks or challenges faced by the applicant,” the Commission has found the question of whether a project is “routine” to be particularly probative. In *BG&E*, the Commission clarified how it will evaluate projects to determine whether they are routine and the effect this evaluation has on an applicant’s request for incentives.

31. Specifically, to determine whether a project is not routine, the Commission will consider all relevant factors presented by the applicant. For example, an applicant may present evidence on: (i) the scope of the project (e.g., dollar investment, increase in transfer capability, involvement of multiple entities or jurisdictions, size, effect on region); (ii) the effect of the project (e.g., improving reliability or reducing congestion costs); (iii) the challenges or risks faced by the project (e.g., siting, internal competition for financing with other projects, long lead times, regulatory and political risks, specific financing challenges, other impediments). Further, applicants must provide detailed factual information in support of the factors they rely upon. For example, an applicant asserting that the scope of any proposed transmission expansion project is not routine should submit data distinguishing the project from other transmission projects or upgrades that are constructed in the ordinary course of maintaining a utility’s transmission system to provide safe and reliable service to its customers. An applicant also may, as in *Duquesne*, compare the total investment in a range of projects to some other aggregate measure of investment, such as total rate base or recent annual investment levels, as delineated in *BG&E*. When an applicant has adequately

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45 *Baltimore Gas & Electric Co.*, 120 FERC ¶ 61,084 (2007) (*BG&E*).

46 *Id.* P 54-55, 61.

47 This list is not exhaustive. These are merely examples of evidence that may help inform the Commission on the question of whether a project is routine in nature.

48 *Duquesne Light Co.*, 118 FERC ¶ 61,087 (2007).

49 See *BG&E*, 120 FERC ¶ 61,084 at P 53.
demonstrated that the project for which it requests an incentive is not routine, that applicant has, for purposes of the nexus test, shown that the project faces risks and challenges that merit an incentive.

32. We find that the TE/VS Interconnect project is not routine, based on the project’s scope, effects, challenges or risks, in addition to other factual information provided by Nevada Hydro, as discussed below.

33. In BG&E, the Commission stated that “[t]he scope of a project involves factors such as size, dollar investment, increase in transfer capability, involvement of multiple entities or jurisdictions and effect on the region.” In its Initial Application, Nevada Hydro estimated the costs of the TE/VS Interconnect to be $350 million; however, the actual cost may prove higher if Nevada Hydro includes certain facility additions or upgrades to achieve the maximum San Diego import level of 3600 MW. As mentioned earlier, the proposed TE/VS Interconnect will be the first 500 kV link between the SCE and SDG&E’s systems and provide much needed import capability to the distressed southern California region. The effect of a project involves factors such as improving reliability or reducing congestion costs, and, as we note in the previous section, Nevada Hydro has satisfied this showing through independent studies.

34. The Commission has previously stated that the challenges or risks faced by a project include: siting, internal competition for financing with other projects, long lead times, regulatory risks, specific financing challenges and other similar impediments. Nevada Hydro states that it “has pursued the development of the [Combined Project] as a solution to California’s electricity infrastructure problems entirely at risk, having taken the risk of the loss of all of its development costs and expenses if the Commission were not to accept the rate principles” requested by Nevada Hydro. Thus, as a start-up and single asset entity, Nevada Hydro is shouldering all risks associated with permitting, financing and constructing a project of this size. The CEC report filed in this proceeding helps demonstrate that the LEAPS project faces substantial economic uncertainty and regulatory risk.

\[50\] Id. P 52.

\[51\] Id.

\[52\] Initial Application at 3.

\[53\] Nevada Hydro Answer, citing CEC Strategic Transmission Investment Plan at 106 (October 25, 2007) (stating that the “LEAPS project has reached several critical (continued…))
35. Accordingly, we find that Nevada Hydro has satisfied the Commission’s nexus requirement for certain rate incentives.

1. **Incentive ROE for the TE/VS Interconnect**

   a. **Nevada Hydro’s DCF Analysis**

   36. Nevada Hydro requests a 13.5 percent return on equity (ROE) for its TE/VS Interconnect project. In support of this request, Nevada Hydro’s Compliance Filing provided an equity analysis incorporating a proxy group of 25 publicly-traded companies. Based on this study, Nevada Hydro developed a range of equity returns from 7.41 percent to 15 percent.\(^{54}\) Nevada Hydro Witness J. Stephen Gaske determined that, given the greater risks of Nevada Hydro’s proposed project in relation to the proxy group, “it is unlikely that the proposed rates of return include much, if any, incentive above the cost of capital to encourage the construction [of the LEAPS facility].”\(^{55}\) Nevada Hydro proffers that it has no publicly-traded stock and argues that it faces a much higher risk profile than any of the electric utilities in the proxy group, particularly in light of the need to attract financing for the Combined Project.

   b. **Comments and Protests**

   37. In its protest to Nevada Hydro’s compliance filing, M-S-R argues that the issues raised in Nevada Hydro’s testimony require testing through discovery and cross-examination. Specifically, M-S-R asserts that, in its analysis, Nevada Hydro fails to recognize that its proposed recovery of costs through the TAC will greatly mitigate the risks it claims justify a high ROE. Additionally, M-S-R objects to Nevada Hydro’s permitting milestones but there are still issues to be resolved and permits to be issued. . . . The project received interconnection approval from the California ISO, for both the SCE and SDG&E interconnections in March 2007; however, this approval was contingent upon completion of an operational study. The transmission portion of the project will require a CPCN for modifications to both the SCE and SDG&E transmission grids. . . . However, there are major financial and cost recovery issues that could delay the development of this project”.

\(^{54}\) Nevada Hydro Witness J. Stephen Gaske, in his testimony, states that “For the purposes of this testimony, I have relied on several analytical approaches for estimating the cost of common equity. My primary approach relies on a DCF analysis.” See Nevada Hydro Compliance Filing, Attachment 1 Gaske Testimony at 7.

\(^{55}\) Id. at 4.
reliance on rates of return for unregulated companies to justify its proposed rate of return as a regulated entity, and concludes that all these issues would require further investigation by the Commission. Lastly, M-S-R argues that Nevada Hydro’s proposal still does not meet the requirements of Order No. 679, as “Nevada Hydro does not demonstrate either its effect on the reliability of CAISO Controlled Grid or its potential for congestion relief by producing a report of its own.”

38. The CPUC argues that Nevada Hydro’s ROE should be no more than 11 percent. The CPUC states that, while Nevada Hydro’s project may offer operational and economic benefits to southern California, Nevada Hydro has inaccurately represented the revenue requirements for both projects, inappropriately applies Order No. 679, exaggerates its transmission risk, and relies on a faulty ROE and capital structure analysis.

39. The CPUC argues that Nevada Hydro cannot claim to face higher risk while simultaneously requesting an enhanced ROE. Next, the CPUC protests Nevada Hydro’s claims of increased transmission risk as exaggerated because risks for a regulated transmission owner with a guaranteed return are significantly lower than Nevada Hydro’s requested 13.5 percent ROE, especially for a bundled generation service disguised as transmission, where generation risk will be removed and protected through transmission rates as opposed to market recovery. The CPUC also claims the following flaws in Nevada Hydro’s discounted cash flow (DCF) analysis: (1) Nevada Hydro chose proxy companies with risk profiles varying from less risky to extremely risky, which resulted in an artificially high estimate of ROE; (2) Nevada Hydro inappropriately inflates the ROE estimate by including flotation costs, which is antithetical to Commission precedent; and (3) the final ROE figure chosen by Nevada Hydro is arbitrary since it chose a number drawn from the proxy companies’ highest ROEs.

40. SCE states that the Commission should withhold issuing a final decision on Nevada Hydro’s proposal until all economic and reliability studies have been completed.

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56 M-S-R January 8, 2007 Protest at 9. M-S-R argues that instead of producing its own report, Nevada Hydro points to a preliminary report produced by CAISO staff that estimates the economic benefits of the combined Project. M-S-R asserts that the report is not comprehensive, makes no recommendation, and was found by the Commission to not be “definitive and complete.”

57 Protest of the California Public Utilities Commission at 6 (January 8, 2007) (CPUC Protest) (the CPUC claims this ROE should consist of a 10 percent baseline ROE and a 100 basis point adder).

58 Id. at 4.
or alternatively, until the Commission has held a hearing allowing all interested parties to present their arguments.

41. SDG&E challenges an assumption provided by Nevada Hydro in its expert testimony by Phillipe Auclair, that the TE/VS Interconnect project provides 1000 MW of transfer capacity for the benefit of SDG&E’s customers. SDG&E states that achieving an increase in the total capability limit would require substantial transmission improvements, a factor that Mr. Auclair does not take into consideration in his analysis.

42. Modesto protests the increased cost to California ratepayers for incentive rate treatments for new investment. Modesto states that it is not only troubled by the rate incentives proposed in this proceeding, but the cumulative effect of piling on other requests for incentive treatment for transmission projects in California, which could sum to a substantial amount for California ratepayers to bear.

c. Nevada Hydro’s Answer

43. In its answer, Nevada Hydro addresses the CPUC’s assertion that the Commission should permit a 10 percent ROE with an incentive adder of 100 basis points for Nevada Hydro’s project. Nevada Hydro argues that the DCF analysis performed by Witness Gaske is designed and supported to comply with the Commission’s requirement for incentive rates, while the CPUC alternative is not adequately supported. Moreover, Nevada Hydro believes that the CPUC is improperly using this proceeding to argue broad concepts which ignore the Congressional intent of granting a return on equity that attracts new investment in transmission facilities.\(^59\) In response to SCE, Nevada Hydro acknowledges that the proposed TE/VS Interconnect will not be the first link between SCE and SDG&E, but it will be the first 500 kV interconnection between these two systems. Nevada Hydro also responds to M-S-R’s assertion that additional study is needed by stating that it provided, in its compliance filing, the information requested by the Commission. Nevada Hydro states further that it has determined that the project will benefit reliability and provide economic benefits.\(^60\) Nevada Hydro states that the independent review of CAISO staff should provide the Commission with sufficient objective evidence regarding these factors.

\(^{59}\) Nevada Hydro does not specifically address the “flaws” in its DCF analysis as alleged by the CPUC.

\(^{60}\) Answer of The Nevada Hydro Company, Inc., at 9-10 (January 23, 2007).
d. **Commission Determination on the ROE Incentive**

44. Consistent with our finding that Nevada Hydro has met the Commission’s FPA section 219 and nexus requirements for the TE/VS Interconnect project, we find that an incentive ROE to build this transmission line is appropriate. As explained below, this determination is consistent with our precedent of providing incentives for infrastructure investment pursuant to section 205 of the FPA, and our obligation under FPA section 219 to establish incentive-based rate treatments that specifically provide an ROE that attracts new investment in transmission facilities.

45. Order No. 679 establishes certain measures and options for evaluating an incentive-based ROE: (1) any incentive-based ROE must fall within the range of reasonableness established by the Commission for the particular entity requesting the ROE for its investment in new transmission facilities; (2) while the incentive-based ROE will continue to fall within the traditional zone of reasonableness it will be adjusted upward and will be higher than would otherwise have been granted absent the incentive; (3) no specific ROE adders are established; (4) the Commission will determine the level of the incentive-based ROE on a case-by-case basis when an application for an incentive-based ROE is filed with the Commission; and (5) to receive an incentive-based ROE, a public utility must support the ROE request by demonstrating how the new facilities will ensure reliability or reduce transmission congestion.

46. In the November 17 Order, the Commission noted that Nevada Hydro had not provided any evidence or analysis (e.g., DCF study) to date that would show the requested returns were within the range of reasonable returns. We cannot conclude that, based on the evidence Nevada Hydro has provided, it has satisfied this requirement. As discussed below, the LEAPS facility may not be turned over to the operational control of the CAISO for scheduling and dispatch and, therefore, this facility is ineligible for the requested 14.5 percent equity return.

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61 As discussed below, the LEAPS facility may not be turned over to the operational control of the CAISO for scheduling and dispatch and, therefore, this facility is ineligible for the requested 14.5 percent equity return.


63 See Order No. 679, FERC Stats. & Regs. ¶ 31,222 at P 91-93.

64 Id.

65 Id.

66 Id. P 93.
the Commission stated in *Trans-Allegheny Interstate Line Co.*, applicants must submit “compelling evidence to support a deviation from our general policy of requiring a proxy group to be comprised of transmission owners with a direct link to the same RTO or Independent System Operator in which the applicant is located.” Nevada Hydro has provided no such evidence in support of its proxy group. In addition, Nevada Hydro uses a two-step DCF analysis. Finally, Nevada Hydro has not justified its use of flotation cost adjustments and risk premiums, among other things.

47. Based on our above findings of the special risks Nevada Hydro faces with the TE/VS Interconnect, the Commission grants Nevada Hydro an ROE incentive for the TE/VS Interconnect to be set within the upper end of the zone of reasonableness. However, the DCF analysis submitted by Nevada Hydro is neither consistent with Commission policy nor complete and as such the Commission cannot establish the level of return. Accordingly, when Nevada Hydro submits its FPA section 205 filing to establish its rates, including its proposed return on equity, it must use the Commission’s established DCF methodology and our recent direction in *Atlantic Path* regarding proxy groups. Nevada Hydro should employ single-step DCF analysis, justify all other assumptions and adjustments, and use a proxy group consistent with *Atlantic Path*. A complete section 205 filing consistent with Commission policy and directives will allow the Commission to establish an incentive return on equity, which is not to exceed the

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68 The Commission has previously rejected proposals to apply a two-step DCF model to an electric utility. *See Southern California Edison Co.*, 92 FERC ¶ 61,070, at 61,261-63 (2000) (rejecting SCE’s proposal to apply a two-step growth rate, explaining in detail Commission policy on its single-step DCF (for electric utilities) and the model of a two-step DCF (for natural gas companies), and noting the critical differences between these two industries which warrant this distinction).


70 *See Atlantic Path 15, LLC*, 122 FERC ¶ 61,135 (2008) (*Atlantic Path*).
requested 13.5 percent. This return will be used in the development of rates for the TE/VS Interconnect when Nevada Hydro files with the Commission under section 205 to recover the costs of its facility through the CAISO TAC.

2. Commission Determination on the Hypothetical Capital Structure and Three-Year Rate Moratorium for the TE/VS Interconnect

48. As stated in Order No. 679-A, use of hypothetical capital structures “can be an appropriate ratemaking tool for fostering new transmission in certain relatively narrow circumstances.”\textsuperscript{71} The Commission found, however, that adoption of such a hypothetical capital structure would require a demonstration of the required nexus between the need for a hypothetical capital structure and the proposed investment project.\textsuperscript{72}

49. Some intervenors object to Nevada Hydro’s use of a hypothetical capital structure. For example, the CPUC argues that “[a]s a matter of broad policy, it is intrinsically unjust and unreasonable for ratepayers to be required to support a hypothetical 50/50 capital structure if and when a project’s actual capital structure is more like 70 percent debt/30 percent equity.”\textsuperscript{73} However, in Order No. 679, the Commission stated that “we do not believe that the Commission’s recent approvals of hypothetical capital structures for electric transmission companies have resulted in abnormally high equity ratios or over-compensation for the equity holder at the expense of the ratepayer.”\textsuperscript{74} Thus, we believe the 50/50 capital structure is reasonable given the reasons stated above and the fact that Nevada Hydro lacks an actual capital structure.

50. Nevada Hydro proposes the use of a 50 percent equity/50 percent debt capital structure during the first three years of service of the proposed transmission line. We approve Nevada Hydro’s use of this hypothetical capital structure, but only during the construction phase of the TE/VS Interconnect project instead of a three-year period. After construction is completed, Nevada Hydro should use its actual capital structure to derive its annual Transmission Revenue Requirement.

\textsuperscript{71} Order No. 679-A, FERC Stats. & Regs. ¶ 31,236 at P 93.

\textsuperscript{72} Id.

\textsuperscript{73} CPUC Protest at 12.

\textsuperscript{74} Order No. 679, FERC Stats. & Regs. ¶ 31,222 at P 134.
51. We find that Nevada Hydro has demonstrated a sufficient nexus for the hypothetical capital structure during construction in the following ways. First, as a start-up company, Nevada Hydro lacks an actual historical capital structure. Second, Nevada Hydro, through use of a hypothetical capital structure, will be able to vary its financing vehicles to the needs of construction, such as timing of expenditures, regulatory developments, and changes in financial market conditions, enabling Nevada Hydro to achieve the most workable outcomes during construction. Moreover, use of a hypothetical capital structure during the construction phase of the projects is consistent with Commission precedent.\(^\text{75}\) Accordingly, the Commission finds that a sufficient nexus has been shown to support the use of a hypothetical capital structure during the construction period.

52. With respect to Nevada Hydro’s request for a three-year rate moratorium, Nevada Hydro makes no attempt to show why a three-year moratorium is necessary. Nevada Hydro’s request for this incentive appears intertwined with its request for the use of a hypothetical capital structure for the first three years of operation. Because we are allowing the use of hypothetical capital structure only during the construction period and Nevada Hydro has not provided an explanation to support the use of a hypothetical capital structure once the TE/VS Interconnect enters commercial operation, we deny this request.

3. Commission Determination on CWIP Incentive and Recovery of Abandonment Costs

53. In Order No. 679, the Commission stated it would grant public utilities, where appropriate, the ability to include 100 percent of prudently incurred transmission-related CWIP in rate base and to expense prudently incurred pre-commercial costs.

54. Additionally, in Order No. 679, the Commission stated that an applicant may request 100 percent of prudently-incurred costs associated with abandoned transmission projects in transmission rates if such abandonment is outside the control of management. The Commission stated further that, “a utility that receives approval to recover abandoned plant in rate base would likely face lower risk and thus may warrant a lower ROE than would otherwise be the case without this assurance.”\(^\text{76}\)

\(^{75}\) *Trans-Allegheny Interstate Line Company*, 119 FERC ¶ 61,219, at P 74-6 (2007).

\(^{76}\) Order No. 679, FERC Stats. & Regs. ¶ 31,222 at P 167.
55. In its September 2006 supplemental filing, following the issuance of Order No. 679, Nevada Hydro amended its request for rate incentives to include full recovery of CWIP and abandoned plant costs. With respect to the former, Nevada Hydro stated, “[a]llowing recovery of CWIP would reduce costs by an estimated $100 million, further benefiting ratepayers.” Nevada Hydro also noted that the Commission had granted this incentive to American Electric Power. Similarly, in its Compliance Filing, Nevada Hydro requested that, “if the LEAPS and TE/VS projects are cancelled or abandoned for reasons that are outside of Nevada Hydro’s control, the Commission allows [Nevada Hydro] to recover all prudently incurred costs associated with the transmission facilities,” including the ability to recover development costs.

56. Beyond these simple statements, Nevada Hydro has failed to show how these requested incentives are related to the risks it faces. Accordingly, we deny Nevada Hydro’s request for these rate incentives without prejudice to Nevada Hydro resubmitting its request for recovery of CWIP and abandoned plant costs. Any subsequent request, however, will be evaluated against the total package of incentives granted in this proceeding. Order No. 679-A provides that if some of the incentives in the total package reduce the risk of the project, that fact will be taken into account for any request for an enhanced ROE.

4. Total Package

57. With respect to Nevada Hydro’s request for rate incentives for the TE/VS Interconnect, we find that Nevada Hydro has demonstrated a nexus between certain incentives sought and the investment being made and that the proposed transmission project is not routine in nature, but will provide a critical link between two major transmission corridors in California, linking the San Diego basin to the main CAISO grid. With respect to the other incentives requested for the TE/VS Interconnect, we note that Nevada Hydro is free to request these incentives again in its subsequent filing under section 205 of the FPA.

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77 Supplemental Response of the Nevada Hydro Co. at 12 (September 11, 2006).

78 Id. at 11, citing Allegheny Energy, Inc., 116 FERC ¶ 61,058 at P 127 (permitting recovery of prudently-incurred development and construction costs associated with abandoned transmission projects as appropriate to encourage new investment and consistent with Order No. 679 and the intent of FPA section 219).

E. Incentives for the LEAPS Facility

1. CAISO’s Recommendation

In response to the November 17 Order requiring a stakeholder process on the issues raised regarding the Combined Project, CAISO submitted its response on May 1, 2007, stating that it had conducted a robust stakeholder process, issued two draft white papers with opportunity for comment and held two face-to-face meetings to solicit stakeholder input on all of the issues raised in the November 17 Order. CAISO submits that, based on stakeholder input and its own evaluation of the issues, recovery of the LEAPS facility through CAISO’s TAC should not be permitted and CAISO should not assume operational control of the LEAPS facility, other than its normal role with respect to the operation of generating units. Thus, CAISO recommends market recovery for the LEAPS facility, pursuant to the Large Generator Interconnection Procedures (LGIP) in the CAISO Tariff.

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80 White Paper 1 evaluated six potential options for the control and operation of the LEAPS facility: (1) CAISO will schedule/bid LEAPS into the market, with a firewall separating operating personnel; (2) CAISO will auction the right to schedule/bid LEAPS into the market for a specific period of time; (3) CAISO contracts with a third-party to schedule/bid LEAPS into the market, with the terms set by CAISO; (4) LEAPS will be incorporated into the grid as any other transmission facility of a transmission owner; (5) hybrid TAC and market cost recovery – Nevada Hydro would schedule/bid LEAPS into the market and receive a portion of its fixed revenue requirement from the TAC with the remainder coming from CAISO markets, similar to a Condition 1 RMR unit; and (6) if LEAPS is not completed, abandoned plants costs would be shared between Nevada Hydro and TAC. Of the 86 participants of the first stakeholder meeting, CAISO states that only one party did not reject the proposals of cost recovery through the TAC and CAISO involvement in operating the LEAPS facility. White Paper 2 reflected that conclusion.

At the second stakeholder meeting, CAISO recommended that the LEAPS facility’s costs should be excluded from the TAC unless further study revealed that the LEAPS facility’s services could not be obtained from other sources, that its benefits far exceeded its costs, that it would not be developed but for cost recovery in TAC, and that it would not compromise CAISO’s independence or tax status. All of the commentors responding to White Paper 2, with the exception of Nevada Hydro, agreed that market recovery for the LEAPS facility is the only appropriate scenario, pursuant to the Large Generator Interconnection Procedures (LGIP) in CAISO OATT.
59. CAISO maintains that EPAct 2005 does not compel a particular cost recovery mechanism for an “advanced transmission technology.” CAISO argues that classifying such technologies as transmission for cost recovery purposes could distort the market price signals. Further, Order No. 679 and the other statutory sections cited by Nevada Hydro create a framework in which the Commission must conduct a case-by-case policy determination based on record evidence, and do not establish a legal mandate.

60. CAISO opposes TAC cost recovery for the LEAPS project. First, CAISO argues it would be inappropriate to discriminate between LEAPS and existing pumped storage hydro units that are currently interconnected to CAISO network and provide generation services to California ratepayers. Although these existing pumped storage hydro facilities produce the same type of benefits and services offered by the LEAPS facility, their costs are not included in TAC, and they pay transmission rates and CAISO load-based charges (e.g., intra-zonal congestion, reliability costs) when in pumping mode. Further, having CAISO control the LEAPS facility would provide Nevada Hydro with substantial benefits not provided to owners of other pumped storage hydro units in CAISO. Second, CAISO states that providing TAC cost recovery for LEAPS could disrupt the development of competitive markets, including the implementation of locational marginal pricing (LMP). Finally, CAISO concurs with shareholders’ concern that Nevada Hydro’s proposed, unprecedented cost recovery scheme for LEAPS would shift the development risks of a generation project to the ratepayers. CAISO argues that the benefits provided by the LEAPS project should be derived from the market in the same way that other merchant generation facilities are compensated.

61. Next, CAISO opposes taking operational control of the LEAPS facility. CAISO argues that any transfer of control analyzed in its proceedings would compromise CAISO’s independence as envisioned in Order No. 2000 (or create the perception thereof). CAISO argues that placing it in this untenable position of being both a

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81 CAISO Compliance Filing at 19. CAISO notes that one of these units is owned and operated by PG&E, one is owned and operated by SCE, and the others are owned and operated by the California Department of Water Resources State Water Project. Id.

82 The CAISO states that an RTO must be independent of any entity whose economic or commercial interests could be significantly affected by the RTO’s actions or decisions; otherwise, it would be difficult for an RTO to act in a non-discriminatory manner. Also, an ISO/RTO’s control of generation should be through a market where generators offer their services and the ISO/RTO chooses the least cost option, stressing that an RTO should attempt to rely on market mechanisms to the maximum extent practicable to manage congestion, citing Regional Transmission Organizations, Order No. 2000, FERC Stats. & Regs. ¶ 31,089, at P 195, 384 (1999), order on reh’g, Order (continued…)
generator operator and overseer of the transmission network is a step backwards from the restructured, efficient, competitive market that CAISO has worked hard to achieve. Further, CAISO operation of LEAPS could dramatically affect on-and-off peak pricing. CAISO contends that by establishing a “bidding and scheduling arm” of CAISO (Option 1 of CAISO’s White Paper), CAISO would become an interested market participant that will compete with other market participants in CAISO markets rather than function wholly as an independent and neutral market facilitator. Efficient operation of the LEAPS facility would necessitate making use of the excess capacity from LEAPS after all reliability needs are met, thus creating an inconsistency with CAISO’s stated mission to provide “cost effective and reliable service, well-balanced energy market mechanisms, and high quality information for the benefit of the customers.”

62. CAISO contends that Options 2 and 3 (noted supra in footnote 80) would also compromise CAISO’s independence by requiring indirect control over the manner by which services provided by LEAPS are bid into the market because CAISO would have to establish the terms of the auction or third-party contract, continuously supervise to ensure third-party compliance with the contract, and structure the auction. Option 4 would involve direct involvement on the part of CAISO regarding operational decisions, as well as a lack of separation between CAISO bidding and transmission functions and a lack of motivation to optimize the revenue stream produced by LEAPS. Stakeholders considered Option 5 to be a step in the wrong direction as CAISO is moving away from using RMR contracts in favor of more competitive solutions.

63. In response to the Commission’s inquiry regarding the status of CAISO’s discussions with the IRS, CAISO states that it would be premature to initiate discussions with the IRS until the specific circumstances under which CAISO would assume operational control had been determined.

2. Comments and Protests

64. CDWR, CMUA, Modesto, and M-S-R submitted comments in support of CAISO’s recommendations and urged the Commission to accept those recommendations. CMUA asserts that transmission rate-based treatment for pumped storage is not a statutory requirement, and Modesto contends that EPAct 2005 allows the Commission considerable discretion in determining when an “advanced transmission technology” should be encouraged, noting that such encouragement does not include inclusion of such costs in a transmission charge. M-S-R adds that there is no justification for forcing ratepayers to accept the risk that the costs of the LEAPS project will far outweigh its

questionable benefits. CMUA expresses its concern that this task is outside CAISO’s core competency and would be a major initiative that will distract CAISO from meeting other goals.

65. Additionally, Jacqueline Ayer and the CEOB submitted comments. Jacqueline Ayer states that since the LEAPS facility is not a transmission facility but is a generation facility, its designation under EPAct 2005 section 1223 is irrelevant for purposes of the instant filing. Further, noting that the interconnection diagram provided in Nevada Hydro’s application does not include a grid intertie line connecting the LEAPS facility to the TE/VS Interconnect, Jacqueline Ayer argues that since the TE/VS Interconnect is intended to operate as a fully integrated transmission line for years before the LEAPS facility is completed, a grid intertie line will be required before power from the LEAPS facility is put on the grid. Finally, Jacqueline Ayer asserts that the only viable alternative for Nevada Hydro’s proposal is that Nevada Hydro retains control and seeks cost recovery through the market.

66. The CEOB argues that the cost of the Combined Project will outweigh the benefits accruing to California ratepayers because: (1) based on the CEOB’s analysis, the expected revenue from the sale of energy and ancillary services will not be sufficient to cover the Project’s costs; (2) Nevada Hydro’s proposal will operate as an imperfect hedge because the price spread between peak and off-peak energy prices will shrink over time, proving fewer opportunities for ratepayers to recover their stranded costs in the Project; and (3) any economic benefit arising from the imperfect price hedge will dissipate over time as California implements its comprehensive energy and environmental policies.  

The CEOB opposes including any costs for the LEAPS facility in the TAC and any transfer of control of the LEAPS facility, noting potential conflicts with California’s resource adequacy policy.

67. Voith and DTA submitted comments opposing CAISO’s recommendations in its filing. Voith and DTA state that CAISO erred by classifying the LEAPS project as the same as any other type of generation and that CAISO needs to focus on the benefits of pumped storage power plants to the system grid from a transmission, ancillary service, and reserve generation scenario. DTA argues that the primary function of pumped storage units is not to produce energy but to provide significant grid stabilization benefits to balance load and power flow, by permitting the grid system operator the flexibility to

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83 The CEOB explains that California has adopted a policy of maximizing peak savings, which will result in a decrease in the spread between peak and off-peak energy prices. Further, it argues California’s Greenhouse Gas initiative may impact the project’s benefits.
manage power swings of about 2000+ MWs in a ten minute period. Voith asserts that the transmission business and ancillary service business is not defined in a manner that allows pumped storage projects to continue forward on a non-rate based basis; many past projects were financed on the utility balance sheet as a rate-based investment. Voith claims that the direct non-energy benefits attributable to the LEAPS project are estimated to be nearly $175 million.

3. **Responses of Nevada Hydro and CAISO**

68. Nevada Hydro responds that the plain meaning of section 1223 compels treatment of the LEAPS project as a transmission facility, including inclusion in the TAC, because Congress’ selection of the word “transmission” in “advanced transmission technology” should be given meaning and consequence. Thus, although the Commission has discretion to grant incentives to be applied to advanced transmission technology, it cannot ignore that pumped hydro storage is transmission and deny basic transmission treatment such as cost recovery under just and reasonable rates. Further, Nevada Hydro argues that there is no basis to disallow cost recovery for advanced transmission facilities simply because they are advanced and not traditional. Nevada Hydro argues the list of advanced transmission technologies enumerated in section 1223 includes both wire and non-wire technologies. Congress’ treatment of these technologies as transmission implements a sensible policy vision. All of the enumerated technologies in section 1223 promise to reduce congestion, either by building new or better wires or by reducing the need for wires.

69. Nevada Hydro states that, under longstanding jurisprudence, the Commission has treated natural gas storage facilities\(^\text{84}\) as transmission with their costs recovered under cost-based rates, and it argues that electricity storage is transmission as well. CAISO answers that the concept of storage differs between the natural gas and electricity industries,\(^\text{85}\) and the Commission has traditionally treated hydroelectric facilities, including pumped storage facilities, as part of the generation function.

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\(^{84}\) Nevada Hydro states that interstate natural gas systems often have underground gas storage facilities that are traditionally used to meet seasonal load variations on the system and that such natural gas storage facilities are treated as transmission for rate making purposes.

\(^{85}\) Specifically, when natural gas is gathered, it already contains all of its energy without going through a change of physical state. In contrast, electric energy must be generated by undergoing a change of form, from chemical or kinetic energy to electric energy.
70. Nevada Hydro refutes claims that the costs of the LEAPS project outweigh the benefits, arguing that the Combined Project and the TE/VS Interconnect Project alone will result in cost savings of $151 million and $23 million in 2015, respectively. Further, Nevada Hydro states that the LEAPS and TE/VS Interconnect Projects in tandem will provide annual benefits to ratepayers aggregating about $324 million in 2015, or nearly $179 million per year in excess of the combined levelized annual cost of $145.33 million.

71. Nevada Hydro contends that CAISO’s argument that TAC recovery for LEAPS leads to discrimination effectively amounts to a request to the Commission to ignore the implementation of EPAct 2005, as Congress intended to encourage the enumerated technologies in section 1223.

72. Nevada Hydro refutes CAISO’s contention that there is nothing “unique or compelling” about the LEAPS and TE/VS Interconnect Projects that cannot be provided in the market because Nevada Hydro’s analysis shows that both projects would bring substantial savings to the market and LEAPS provides unique storage capability. Nevada Hydro argues that LEAPS will not displace generation or disrupt markets because it is a storage device that produces no net energy and will simply resolve congestion by shifting load from peak to off-peak.\(^\text{87}\)

73. Nevada Hydro claims that CAISO’s argument that the implementation of LMP will be undermined implies that inefficiencies must be preserved to allow LMPs to give stronger signals.

74. According to Nevada Hydro, CAISO’s arguments that operational control of LEAPS will compromise its independence and distort markets are exaggerated and based on the faulty view that a storage facility is the same as a generator. Nevada Hydro states that to the extent that LEAPS, a transmission addition, could impact any relevant markets, it is no different than any new transmission wire, tower, substation, transformer, switch, or other facility. Nevada Hydro states that it has carefully crafted its proposal to avoid distortion; CAISO would take its ancillary services consistently and to the extent

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\(^{86}\) Nevada Hydro notes that LEAPS cannot be built without a connection to the grid (i.e., the TE/VS Interconnect project).

\(^{87}\) Nevada Hydro explains that a pumped hydro storage device must expend as much electric energy to pump water into storage before it can produce any electric energy. During an off-peak period, the device uses electric energy to pump water from a stagnant body of water into an elevated reservoir. During peak periods, the water is released from the reservoir to produce electric energy. The value of the reduced peak energy exceeds the cost of off-peak pumping energy, but no net electricity is produced.
required from LEAPS, and Nevada Hydro would consistently bid LEAPS’ stored energy in at zero. CAISO would not be involved in operational decisions, as energy will be taken as needed by CAISO’s computerized dispatch model, not based on some subjective standard. Nevada Hydro states that storage and release can add market stability and system reliability not cause market distortion.

75. As to the potential effect to CAISO’s tax status, Nevada Hydro points out that tax exemption is not a required characteristic for an RTO/ISO and that CAISO does not provide evidence that its tax status will change, as CAISO will provide LEAPS service to the grid in the same manner it provides service on any other transmission facility.

76. Finally, Nevada Hydro clarifies that the Commission should grant all requested incentives to the TE/VS Interconnect Project as a stand-alone transmission upgrade, in the event that LEAPS is not constructed. Nevada Hydro states that this Project, as a stand-alone facility, would yield energy savings of $22 million in 2015 and total net benefits of more than $96 million per year, and it notes that this request is not protested.

77. CAISO replies that Nevada Hydro must follow the existing CAISO processes to seek approval and TAC cost recovery for the TE/VS Interconnect project, noting that Nevada Hydro has not yet done so.

78. CAISO answers that simply because the November 17 Order found that the LEAPS project was an advanced transmission facility that does not automatically mean that LEAPS’ costs should be rolled-in TAC rates. It states that while Congress did not mandate the treatment of any particular advanced transmission technology in any particular way, including rolled-in rate treatment, Congress did specify that both sections 1223 and 1241 must be applied in a manner that is consistent with the FPA, and inclusion of LEAPS’ costs in CAISO’s rolled-in TAC would be unduly preferential and discriminatory.

Further, the CAISO argues that the Commission’s policies under sections 205 and 206 of the FPA have recognized that including the costs of some transmission facilities in rolled-in transmission rates would not result in just and reasonable rates because those facilities do not form part of the integrated network from which transmission customers benefit, citing Kentucky Utilities Co., 85 FERC ¶ 61,274, at 62,111-13 (1998) (finding that generation step-up transformers should be excluded from rolled-in transmission rates); Nevada Power Co., 100 FERC ¶ 61,077, at P 13-14 (2002) (excluding the costs of radial generator leads from rolled-in transmission rates, even though they are transmission facilities).
79. Assuming arguendo that LEAPS would provide service analogous to gas storage, CAISO argues that the Commission requires gas pipelines to unbundle gas transportation services from gas storage services and stresses that costs associated with the pipeline’s merchant storage capacity must be recovered by the pipeline solely as part of its market-based sales rate.\textsuperscript{89} In contrast, Nevada Hydro wants to bundle recovery of the costs for LEAPS storage service with the rate for transmission service on CAISO grid. Further, the Commission has stated that a pipeline proposing a new project must be prepared to financially support the project without relying on subsidization from existing customers.\textsuperscript{90} Thus, CAISO contends that in order for LEAPS to receive rolled-in rate treatment, Nevada Hydro must show that LEAPS would be financially viable without subsidies from existing customers. However, Nevada Hydro has not shown any contracts with a load-serving entity.

80. CAISO argues that Nevada Hydro’s claims of cost savings undermines the foundation of its proposal – to the extent that Nevada Hydro is correct that LEAPS would provide a large economic benefit, the less Nevada Hydro would need to rely on TAC cost recovery rather than the market. CAISO responds that section 1223 does not condone or require undue discrimination and the fact that LEAPS is newer than other participating generators and participating loads is a weak basis for allowing guaranteed cost recovery for LEAPS only. CAISO also states that LEAPS would essentially combine the attributes of a participating load, when it consumes energy to pump water into storage, and the attributes of a participating generator, when it produces energy and ancillary services by using the stored water to run turbines. Thus, LEAPS should be considered a hybrid device, not a unique storage device that should be treated as transmission.\textsuperscript{91} Further, all pumped storage facilities function as both loads and generators, as recognized by the


\textsuperscript{91} The CAISO points out that the CAISO OATT does not categorize either participating generators or participating loads as transmission or include their costs in TAC rates.
Commission,\(^92\) and the fact that LEAPS would do both of those things in a single entity does not change the fact that it will be consuming and selling products in CAISO markets.

81. CAISO responds that since energy from LEAPS would be bid into CAISO markets at zero dollars, not at the marginal cost, energy from LEAPS would be the lowest priced energy available in the bidding process and would always be selected whenever it was offered, even when use of other resources might be more efficient. CAISO expresses concern that over time, zero-dollar bids would artificially depress market prices, discouraging entry by other suppliers who will not have similar TAC recovery for their costs, possibly leading to shortages or to other suppliers seeking similar cost recovery. Moreover, even if LEAPS’ output is bid into the market at a price of zero, CAISO’s independence would still be compromised, as it would still have to decide when LEAPS would operate, how much energy it would produce, and when it would operate the pumps to store water for future generation.

4. Commission Determination

82. The Commission concludes that it would not be appropriate to require CAISO to assume any level of operational control over the LEAPS facility. In reaching this conclusion, we examined an extensive record in this proceeding and the results of and whitepapers from CAISO’s stakeholder process in which it sought comment from market participants on whether operational control of the LEAPS facility could be turned over to CAISO. Through this stakeholder process, CAISO explored six alternatives under which it could, directly or indirectly, operate the LEAPS facility. After reviewing these proposals and comments in support of and against CAISO’s evaluation of these proposals, the Commission agrees with the majority of intervenors on this issue that it would be inappropriate for CAISO to assume control of the LEAPS facility. Despite the numerous opportunities for comment this Commission and CAISO have provided in this docket, Nevada Hydro has not persuaded us that in this instance it is reasonable (or necessary) to require CAISO to take operational control of the LEAPS facility. As such, we deny the request of Nevada Hydro to require the CAISO to assume operational control of the LEAPS facility.

83. As to the issue of cost recovery through the CAISO’s TAC, we find that it would not be appropriate to allow the costs of the LEAPS facility to be rolled-in through

CAISO’s transmission rates. The purpose of the TAC is to recover the costs of transmission facilities under the control of the CAISO; the purpose is not to recover bundled services. As discussed above, we are denying the request that the LEAPS facility be placed under the CAISO’s operational control. For these reasons, the LEAPS facility’s costs are not properly recovered through the TAC. In addition, as CAISO points out, each of the existing pumped hydro facilities in CAISO’s footprint provides generation services and none receives the benefits of rolled-in transmission pricing.\footnote{CAISO Compliance Filing at 20.} Although Nevada Hydro describes many of the benefits of pumped hydro in general, there is not sufficient record support to justify treating LEAPS differently from these other pumped hydro facilities.\footnote{As we note \textit{supra} at n.16, Nevada Hydro asserts that LEAPS, once built, will be the largest and most powerful pumped hydro facility. These characteristics, on their own, fail to persuade us that the LEAPS facility should be treated differently than other pumped hydro facilities in CAISO’s footprint.} Absent such information, we conclude that allowing LEAPS to receive a guaranteed revenue stream through CAISO’s TAC would create an undue preference for LEAPS compared to these other similarly situated pumped hydro generators. Therefore, the Commission must reject Nevada Hydro’s proposal to include the costs of the LEAPS facility in CAISO’s rolled-in transmission charges.

84. Moreover, we are not persuaded that section 1223 of EPAct 2005 compels us to provide any rate-related incentives for LEAPS in this case. The Commission is mindful of the importance that “advanced transmission technologies” such as those listed in section 1223 of EPAct 2005 will have in securing affordable and reliable energy. Nevertheless, under that section, the Commission is required to “encourage, as appropriate,” such technologies.\footnote{Pub. L. No. 109-58, § 1223(b) (emphasis added).} In Order No. 679, the Commission observed that we would consider on a case-by-case basis whether any “advanced transmission technologies” under section 1223 of EPAct 2005 should be considered for incentive-based rates.\footnote{Order No. 679, FERC Stats. & Regs. ¶ 31,222 at P 288-93.}

85. In the November 17 Order, the Commission recognized that pumped storage is an advanced transmission technology identified in section 1223 of EPAct 2005. However, for the reasons discussed above, we do not agree with Nevada Hydro or Voith that transferring control of LEAPS to CAISO or allowing Nevada Hydro to pursue cost
recovery for LEAPS through CAISO’s TAC is an appropriate means of encouraging the
deployment of such technologies. We note that this determination does not foreclose
Nevada Hydro from seeking other regulatory incentives for the LEAPS project.

The Commission orders:

(A) We will grant certain of the requested incentives for the TE/VS Interconnect project, as discussed in the body of this order.

(B) We will deny the requested incentives for the LEAPS project, as discussed in the body of this order.

By the Commission. Commissioner Kelly dissenting in part with a separate statement attached.
Commissioner Wellinghoff concurring in part with a separate statement attached.

(SEAL)

Nathaniel J. Davis, Sr.,
Deputy Secretary.
This order addresses, among other things, the Nevada Hydro Company, Inc.’s (Nevada Hydro) requested rate incentives for the proposed Talega-Escondido/Valley-Serrano Interconnect project (TE/VS Interconnect). Nevada Hydro proposes to build the TE/VS Interconnect project, a 30 mile, 500 kV transmission line, as well as the Lake Elsinore Advanced Pump Storage project (LEAPS facility). In response to Nevada Hydro’s request, the Commission grants certain incentives for the TE/VS Interconnect but finds that the LEAPS facility may not be operated and/or managed by the California Independent System Operator Corporation (CAISO) or functionalized as transmission for rate recovery purposes. I agree with these decisions. What I disagree with is the decision to provide incentives for the transmission line even if the LEAPS facility is not built.

Because the Commission concludes that it would be inappropriate to require CAISO to assume any level of operational control over the LEAPS facility, it is not apparent that Nevada Hydro will proceed with development of the LEAPS facility, and there is nothing in the record that provides guidance on this question. If Nevada Hydro were to construct the 30 mile, 500 kV transmission line but not construct the pumped storage project, I am concerned that the benefits flowing only from the transmission line would not be sufficient to justify the award of incentives to it.
It is the record developed in this case that leads to my concerns. As part of its response to Commission requests for additional information,\textsuperscript{1} Nevada Hydro filed a technical analysis that included an examination of a “transmission line only” alternative, which estimates the effects of building the TE/VS Interconnect but not the LEAPS facility. Based on the results of the “transmission line only” alternative, Nevada Hydro’s submitted analysis concludes that “the transmission line would be under utilized by simply constructing a transmission line between the two proposed points of connection.”\textsuperscript{2} The report also concludes that, based on a 2009 heavy summer set of assumptions, 13 MW would flow in the north-to-south direction without the LEAPS facility. I cannot, at this time, support incentive rate treatment for a transmission line (with an estimated cost of at least $350 million) that, in the absence of the LEAPS facility, will be under utilized and does not appear to provide proportionate benefits to those paying the incentive rates, at least initially. I dissent in part from this order because I would prefer to see the Commission defer ruling on incentives for the TE/VS Interconnect until the future of the LEAPS is clearer. The TE/VS Interconnect will provide greater benefit in conjunction with the LEAPS facility than if built on its own and a Commission ruling on incentives in the absence of a clear future for the LEAPS facility strikes me as premature.

For these reasons, I respectfully dissent from this order.

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Suedeen G. Kelly
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\textsuperscript{1} See Exhibit No. TNHC-2 to Nevada Hydro’s Response of The Nevada Hydro Company, Inc. to Commission's Letter dated February 17, 2006, filed March 20, 2006 in Docket Nos. ER06-278-000 and ER06-278-002.

\textsuperscript{2} Exhibit No. TNHC-2 at p 7.a
WELLINGHOFF, Commissioner, concurring in part:

In today’s order, the majority finds that an incentive ROE adder is appropriate for Nevada Hydro’s proposed TE/VS Interconnect, a 500 kV transmission line that would connect the transmission systems of SoCal Edison and SDG&E. Specifically, the majority grants Nevada Hydro an ROE incentive for the TE/VS Interconnect to be set within the upper end of the zone of reasonableness. The majority also finds that Nevada Hydro’s ROE, including any incentive ROE adder, is not to exceed the requested 13.5 percent. The majority states, however, that the DCF analysis submitted by Nevada Hydro is neither complete nor consistent with Commission policy and, as such, precludes setting a precise level of return. The majority also provides direction on how Nevada Hydro can correct those shortcomings when it submits its FPA section 205 filing to establish its rates, including its proposed ROE.

I agree that some incentive ROE adder is likely to be appropriate for the TE/VS Interconnect and that the Commission cannot yet establish a precise ROE for the project. I write separately to explain considerations that led me to that conclusion and to highlight additional information that I encourage Nevada Hydro to include in its section 205 filing as support for its proposed ROE.

As I have stated before, in considering an incentive ROE adder for transmission, the Commission should focus on encouraging investment decisions beyond upgrades simply required to meet a utility’s service obligations or the minimum standard of good utility practice. An incentive ROE adder should be more narrowly targeted to transmission investments that provide incremental benefits, such as those that result from the deployment of “best available
technologies” that increase operational and energy efficiency, enhance grid operations, and result in greater grid flexibility.\(^1\) Such investments recognize that efficient transmission facilities and state-of-the-art transmission technologies are essential to solving our energy delivery problems.

In addition, promoting such investments is consistent with section 1223 of EPAct 2005, in which the Congress directed the Commission to “encourage, as appropriate, the deployment of advanced transmission technologies.”\(^2\) For the reasons discussed in today’s order, I agree with the majority that Nevada Hydro has not demonstrated that transferring control of the proposed Lake Elsinore Advanced Pump Storage (LEAPS) project to CAISO or allowing Nevada Hydro to pursue cost recovery for the LEAPS project through CAISO’s Transmission Access Charge is an appropriate means of encouraging the deployment of advanced transmission technologies. Nonetheless, because the Congress and the Commission have recognized pumped hydro as an advanced transmission technology, it is important to recognize that increasing the availability of pumped hydro is one purpose of the TE/VS Interconnect. I believe that this potential incremental benefit warrants recognition with some incentive ROE adder.

The TE/VS Interconnect may well warrant some incentive ROE adder in the event that the LEAPS project is not constructed, though I believe that the argument for the incentive would be less compelling in those circumstances. Among other considerations, it is noteworthy that the TE/VS Interconnect, as described in today’s order, will provide a critical link between two major transmission corridors, linking the San Diego basin to the main CAISO grid. Another important consideration, however, is missing from the record because Nevada Hydro has not submitted the technology statement required by Order No. 679.\(^3\) That failure may be attributable to the unusual procedural history of this case, in which Nevada Hydro’s original filing predated the Commission’s issuance of Order No. 679. Subsequently, the Commission stated its intention to apply

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\(^1\) See, e.g., Southern California Edison Co., 121 FERC ¶ 61,168 (2007), Wellinghoff concurrence at 1.


\(^3\) Order No. 679 at P 302 (“In as much as EPAct 2005 requires the Commission to encourage the deployment of transmission technologies, we will require applicants for incentive rate-treatment to provide a technology statement that describes what advanced technologies have been considered and, if those technologies are not to be employed or have not been employed, an explanation of why they were not deployed.”).
Order No. 679 in this case, and Nevada Hydro did not request rehearing on that issue.

I have frequently highlighted the importance of the technology statement requirement in Order No. 679, and I have stated the use of advanced technologies and their corresponding efficiency and reliability benefits deserve significant consideration in the Commission’s evaluation of requests for incentive ROE adders. Consistent with those statements and recognizing the unusual procedural history of this case, I strongly encourage Nevada Hydro to submit a technology statement for the TE/VS Interconnect as part of its FPA section 205 filing to establish its rates, including its proposed ROE.

For these reasons, I concur in part with today’s order.

Jon Wellinghoff
Commissioner

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