

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

Western Grid Development, LLC) Docket No. EL10-19-000

**MOTION TO INTERVENE AND COMMENTS OF THE
CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION
ON PETITION FOR DECLARATORY ORDER OF
WESTERN GRID DEVELOPMENT, LLC**

Pursuant to Rules 212 and 214 of the Federal Energy Regulatory Commission's ("Commission") Rules of Practice and Procedure, 18 C.F.R. §§ 385.212, 385.214 (2009), the California Independent System Operator Corporation ("ISO")¹ submits this motion to intervene and comment concerning the petition for declaratory order filed in the above-captioned proceeding by Western Grid Development, LLC ("WGD") on November 20, 2009. Therein, WGD requests that the Commission issue a declaratory order relating to energy storage device projects that WGD has submitted for consideration in the ISO's transmission planning process. Among other things, WGD has requested that the Commission: (1) find that the energy storage devices that WGD proposes to use are properly classified as wholesale transmission facilities subject to Commission jurisdiction and that the costs of such facilities can be recovered in transmission rates; and (2) provide insight on whether the Commission perceives any barriers that could prevent the ISO from considering the WGD projects "on

¹ Capitalized terms not otherwise defined herein have the meanings set forth in the Master Definitions Supplement, Appendix A to the ISO Tariff.

equal footing with other utility and non-utility proposed transmission alternatives to solve reliability problems.”²

As explained below, WGD has not demonstrated in its filing that its proposed energy storage projects are distinguishable from other non-transmission facilities and Demand Response resources that would provide similar or identical services and functionality to the ISO Controlled Grid such that WGD’s projects merit classification as transmission facilities, with guaranteed cost recovery through the ISO’s Transmission Access Charge (“TAC”) (as opposed to Demand Response and other resources providing similar services which must recover their costs through the ISO’s markets). Therefore, for the reasons set forth herein and those applicable to the pumped storage facilities proposed by Nevada Hydro as part of the LEAPS project,³ the ISO does not believe that it would be appropriate at the present time to require the ISO to assume operational control over the WGD facilities and, consequently, include the costs of those facilities in the ISO’s TAC. Therefore, the Commission should deny WGD’s petition, or, if it believes that further information is necessary before rendering a decision, direct that the issues raised by WGD’s petition be considered in the context of the ISO’s ongoing stakeholder process relating to the integration of energy storage devices.

I. COMMUNICATIONS

Please address all communications concerning this proceeding to the following persons:

² WGD Petition at 1.

³ See *Nevada Hydro Company, Inc.*, 117 FERC ¶ 61,204 (2006) (“November 17 LEAPS Order”); *Nevada Hydro Company, Inc.* 122 FERC ¶ 61,272 (2008) (“March 24 LEAPS Order”).

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II. BACKGROUND

WGD proposes to construct and operate energy storage devices which would be installed at locations on the ISO grid where there currently exist reliability issues relating to overload and/or voltage control issues on an N-1 contingency basis. WGD maintains that the energy storage devices will facilitate reliability on the ISO system by addressing, among other things, voltage drop situations, emergency level thermal overload on transmission lines, and the prevention of the loss of load to retail customers. WGD has submitted a number of these projects in the ISO's transmission planning process, and states that it will demonstrate through this process that its proposed projects are the least cost, most feasible solutions available to resolve transmission reliability issues.

In connection with these projects, WGD asks that the Commission make several findings. First, WGD requests that the Commission find that these projects constitute wholesale transmission facilities that are subject to FERC jurisdiction. WGD contends that these projects are not generators and will not

participate in the ISO's markets, and will perform functions that are more akin to transmission facilities. WGD also requests that FERC find that its proposed projects are entitled to incentive-based rate treatment because they involve novel and innovative advanced transmission technology, are narrowly tailored to address the early-stage development risks and challenges faced by WGD, and are consistent with the Commission's Smart Grid policy. Specifically, WGD seeks an order from FERC finding that its projects are entitled to (1) 100% construction work in progress recovery; (2) abandoned plant recovery; (3) incentive-based ROE basis point adders totaling 195 basis points; (4) deferred recovery of pre-commercial expenses; and (5) a favorable hypothetical capital structure. Finally, WGD asks FERC to identify any barriers that it perceives that could prevent the ISO from considering the WGD projects on equal footing with other proposed alternatives to solving reliability problems.

Although the Commission does not appear to have addressed the specific issue of the treatment of battery storage projects as transmission facilities, it dealt with a very similar request made by the Nevada Hydro Company ("Nevada Hydro") in the context of its LEAPS project, in which Nevada Hydro proposed including in transmission rate base pumped storage facilities which it represented as a means to enhance the reliability of the ISO's transmission system.⁴ In that case, the ISO and the overwhelming majority of the parties opposed treating the pumped storage projects as transmission because they would not provide

⁴ The Commission has, however, addressed the issue of battery storage in other ISO and RTO proceedings and approved tariff provisions and pilot programs whereby storage facilities can participate in ISO and RTO energy and ancillary services markets. WGD is seeking to be treated differently than the energy storage facilities in other ISOs and RTOs.

services distinct from other load and generation-type market participants (including Demand Response), such treatment would discriminate against other pumped storage projects and other suppliers and load that participate in the ISO's markets, and due to the characteristics of those facilities it would be inappropriate for the ISO to assume operational control over them.

The ISO has similar concerns with the WGD projects that it had with the LEAPS proposal. Although experience thus far with the interconnection of battery storage devices of the type proposed by WGD is relatively limited in the electricity industry, the emphasis of transmission providers has focused on integrating such devices into well defined ancillary services markets in response to Commission directives that non-generation resources be treated on a comparable basis to traditional generation resources.⁵ The ISO believes this is the most appropriate approach, particularly for ISOs and RTOs which have evolved well-functioning market systems to obtain most of the services needed for reliable grid operation. In contrast, as discussed further below, the idea of treating energy storage devices as transmission infrastructure in a manner that would perform only traditional transmission-related services and refrain from providing services comparable to those procured through the markets does not appear consistent either with the market structures developed by ISOs and RTOs or with the performance capabilities of battery storage devices. Accordingly, the appropriate characterization of a particular technology between generation or transmission must rest on how that technology would operate in the context of

⁵ See Order No. 719, 73 Fed. Reg. 61400 (Oct. 28, 2008), FERC Stats. & Regs. ¶ 31,281 (2008) and Order No. 890, 72 Fed. Reg. 12266 (Mar. 15, 2007), FERC Stats. & Regs. ¶ 31,241 (2007)..

the ISO's specific operational market structure and whether the technology is helping reliability by competing with Energy and commodities or by only pure transmission operation needs without affecting commodities.

WGD has not presented a compelling case that its proposed projects are meaningfully different from pumped storage and other technologies that provide similar services and are not treated as transmission facilities and rolled into the ISO's TAC. Therefore, it would be inappropriate at this time to require the ISO to consider these projects as transmission projects in the transmission planning process and roll them into transmission rates if selected therein. If, however, the Commission believes that further information is necessary before rendering a decision on WGD's petition, the ISO submits that the Commission should direct that the issues raised by WGD's petition be considered in the context of the ISO's stakeholder process, planned for early 2010 and discussed further below, in which the ISO will examine its ancillary services products and markets in a comprehensive fashion to determine whether new product definitions and other changes are needed to better provide the operational capabilities the ISO needs to manage an increasing renewable supply fleet and to facilitate provision of such capabilities by new technologies. This initiative will follow and expand upon a stakeholder initiative currently in progress and nearing conclusion to modify the rules and specifications within the existing ancillary services product types to enable non-generation facilities to provide these products through the ISO markets, in response to the Commission's Orders 719 and 890.

III. BASIS FOR MOTION TO INTERVENE

The ISO is a non-profit public benefit corporation organized under the laws of the State of California and is responsible for the reliable operation of a grid comprising the transmission systems of Southern California Edison Company (“SCE”), San Diego Gas & Electric Company (“SDG&E”), Pacific Gas and Electric Company, and the Cities of Vernon, Pasadena, Anaheim, Azusa, Banning, and Riverside, California, and of Trans-Elect NTD Path 15, LLC and the Western Area Power Administration, Sierra Nevada Region, with regard to the Path 15 transmission lines in California. The projects proposed by WGD have been submitted for consideration in the ISO’s transmission planning process for integration into the ISO Controlled Grid and cost recovery under the TAC. WGD also states that it intends to become a Participating Transmission Owner under the ISO’s tariff. Accordingly, the CAISO has a unique interest in any Commission proceeding concerning the issues raised in WGD’s petition that cannot be adequately represented by any other party, and, indeed, given the importance of these issues to the ISO’s transmission planning process and rate design, as well as the importance to the ISO of integrating new storage technologies into the ISO markets in the most appropriate and efficient manner, the ISO is an essential party to this proceeding.

IV. COMMENTS ON WGD'S REQUEST

A. WGD's Description of the Physical and Operational Characteristics of the Energy Storage Projects Does Not Support a Finding That They Should Be Classified as Transmission Assets

The ISO has existing storage facilities connected to the grid. Specifically, there are three pumped hydro storage units in the ISO's footprint. These resources act both as loads (when consuming energy to operate their pumps) and as generation when they release energy onto the grid. These resources currently earn revenues by participating in the ISO's energy and ancillary services markets. They are not treated as transmission, and their costs are not recovered through transmission rates. WGD seeks different, preferential and discriminatory treatment that is not accorded to these existing storage facilities that provide similar services to those that the battery storage resources are able to provide.

In its petition, WGD sets out several arguments why it believes that the physical and operational characteristics of its proposed battery storage facilities support a Commission finding that they are "wholesale transmission facilities." None of these arguments, however, meaningfully distinguishes WGD's proposed facilities from other similar facilities and Demand Response, which are not treated as transmission facilities on the ISO system and must earn their revenues through market mechanisms including participation in ISO markets and bilateral energy and capacity transactions.

WGD asserts that the energy storage devices that it proposes to connect to the ISO grid should not be treated as generation facilities because they are

reliant on Energy provided by the electric grid rather than through the conversion of a source of fuel, which it asserts is the “commonly-understood meaning of ‘generation facilities.’”⁶ This argument misses the point. WGD is requesting that the Commission determine that WGD’s proposed facilities should be classified and treated as transmission facilities *when interconnected to the ISO Controlled Grid*. As such, the relevant examination is not whether WGD’s proposed energy storage devices convert a primary fuel source into energy (which Demand Response resources also do not do), but rather, how WGD’s projects would operate in the context of the ISO’s market-based structure for allocating transmission and managing and operating the transmission grid. In this context the services that WGD’s battery storage units would provide are similar to the services that generation, pumped storage and Demand Response provide, and those services are provided and paid for through the ISO markets and bilateral transactions; they are not treated as transmission and recovered in transmission rates.

In the ISO structure, market participants bid to purchase and supply energy and ancillary services, and the ISO clears those markets, schedules other market transactions, and ensures that there are sufficient ancillary services available to maintain the reliability of the ISO Controlled Grid. Participants who purchase energy off of the grid are also charged a rate reflecting the cost of the transmission assets needed to deliver energy to their loads, including costs associated with congestion on those transmission assets. Under this structure, WGD’s proposed energy storage projects would appear to combine the attributes

⁶ WGD Petition at 13.

of a Participating Load, when they consume energy from the grid to charge, and a Participating Generator, when they produce energy by discharging stored capacity back onto the grid or offer ancillary services based on that stored capacity.⁷ Under the ISO's Commission-approved tariff, the ISO does not categorize either Participating Generators or Participating Loads as transmission, and the CAISO does not include the costs of either Participating Generators or Participating Loads in its TAC rates. Rather, they provide their services and products through the ISO's markets for energy and ancillary services.

In this respect, WGD's energy storage projects appear to closely resemble the pumped storage devices proposed by Nevada Hydro as part of the LEAPS project, which the Commission agreed should not be treated as a transmission asset for purposes of operating and cost recovery on the ISO Controlled Grid.⁸ Both types of devices store energy taken from the grid – in the case of batteries, that energy is stored by means of a chemical process, while in the case of pumped storage, the energy is stored in the form of pumped water – and both provide energy to the grid when dispatched, and can offer ancillary services based on their stored energy. The primary purpose of neither type of storage

⁷ Under the ISO Tariff, a Participating Load is defined as “[a]n entity providing Curtailable Demand, which has undertaken in writing to comply with all applicable provisions of the ISO Tariff, as they may be amended from time to time.” A Participating Generator (also known as a Participating Seller) is defined as “[a] Generator or other seller of Energy or Ancillary Services through a Scheduling Coordinator over the ISO Controlled Grid from a Generating Unit with a rated capacity of 1 MW or greater, or from a Generating Unit providing Ancillary Services and/or submitting Supplemental Energy bids through an aggregation arrangement approved by the ISO, which has undertaken to be bound by the terms of the ISO Tariff, in the case of a Generator through a Participating Generator Agreement.”

⁸ March 24 LEAPS Order at PP 82-83.

facility is to move energy in bulk from generation to load, which is the purpose of a transmission facility.⁹

WGD claims, however, that their proposed energy storage projects are distinguishable from the pumped storage units proposed in the LEAPS project. First, WGD states in its petition that unlike pumped storage units, which are designed to provide energy as a capacity resource on the grid, its projects are designed to primarily provide voltage support to address identified transmission reliability issues.¹⁰ However, there are a number of other statements in WGD's filing suggesting that the scope of the services that would be provided by these projects would go well beyond just voltage support. For instance, in Mr. Perez's supporting affidavit, he states that among the benefits of the battery technology selected by WGD is that it can provide "regulation up and down [and] spinning and non spinning reserve at a very fast ramp rate."¹¹ Mr. Perez also states that the WGD projects would be used when transmission facilities are taken out of service for maintenance or are tripped, and in such situations, would prevent "interruption of electricity service to customers" by providing needed "load reduction."¹² In effect, Mr. Perez is describing the ability of the battery storage devices to provide energy, regulation and a type of capacity reserve product, all of which are services provided by generation and demand response resources and go beyond the provision of voltage support. Under the ISO's market

⁹ The NERC Glossary of Terms defines "transmission" as:
An interconnected group of lines and associated equipment for the movement or transfer of electric energy between points of supply and points at which it is transformed for delivery to customers or is delivered to other electric systems.

¹⁰ WGD Petition at 13.

¹¹ WGD Petition, Perez Affidavit at P 9.

¹² *Id.* at P 27.

structure, these types of products are procured from suppliers and Demand Response in the ISO markets, not from transmission assets and operators.

Furthermore, Section 8.1 of the ISO tariff expressly provides that Scheduling Coordinators for *non-generation resources* can submit bids into the markets for the various ancillary services products under the tariff provided they meet the certification criteria. The Commission required that the ISO include these provisions in its tariff in response to protests from Beacon Energy who argued that the tariff would not permit storage and other technologies to provide Ancillary Services.¹³ However, rather than provide Ancillary Services from storage resources through the ISO's market structure, as the tariff contemplates and the Commission has required, WGD seeks to bundle such services into transmission rates.

Regardless, even if the WGD projects were used primarily for voltage support, this does not meaningfully differentiate them from pumped storage facilities or generation units. Pumped storage units, generating units and the battery units proposed by WGD all operate by discharging stored energy onto the grid, and all are capable of providing voltage support to relieve the impacts of transmission contingencies or outages. The condition that a technology provides voltage support is not sufficient to consider that technology as a transmission facility. Indeed, voltage support is an ancillary service that any certified

¹³ *California Independent System Operator Corporation*, 126 FERC ¶ 61,009 at PP 18-21 (2009).

generator (or non-generation resource) on the ISO's system can provide in accordance with existing ISO tariff provisions.¹⁴

In Order No. 888, the Commission ordered the functional unbundling of generation, transmission and ancillary services (including voltage support service which was one of the specified ancillary services under Order No. 888).¹⁵ WGD is essentially seeking to turn back the clock and undo a primary tenet of open access by essentially asking the Commission to allow ancillary services to be bundled into transmission rates. The Commission rejected this concept in its LEAPS Order and should reject it here.

WGD suggests that its battery storage units would be "very similar, from an electrical standpoint, to very large capacitors which provide voltage support to the grid," and which the Commission has "assumed to be" transmission facilities.¹⁶ Although there are some superficial similarities between capacitors and battery storage devices in that they can both provide a form of reactive power, from a grid operational standpoint, there are significant and important differences between the two types of equipment. The most important difference is that, unlike capacitors, which charge and release their capacity in a fraction of a second, batteries are *dispatchable*; they have the capability to charge and release their stored energy in a controlled fashion over a period of time

¹⁴ Generally voltage support as required by Sections 8.2.3.3 and 8.3.8 of the ISO tariff is factored into the energy dispatch, and generators are required to provide that level of voltage. If the ISO needs extra voltage support service for whatever reason, the ISO has the option of procuring it either from RMR units (See ISO Tariff Section 8.2.2.3) or Exceptional Dispatch (ISO Tariff Section 34.9). Voltage support is not procured through transmission rates.

¹⁵ *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, 61 Fed. Reg. 21540 at 21,579 (1996).

¹⁶ WGD Petition at 10; WGD Petition, Perez Affidavit at P 24.

determined by their operator. Also, batteries, unlike capacitors, release energy; capacitors only release VARS. As a result, battery devices can participate in the ISO's energy and ancillary services markets, while capacitors cannot. Batteries compete with load, Demand Response, generators and pumped storage facilities because they can shift energy consumption, release energy across time intervals and compete in the markets, thereby affecting the energy imbalance and the locational marginal prices ("LMPs") for energy on the ISO system. Capacitors do not change the energy imbalance equation or LMPs. They are simply *passive* transmission components that maintain voltage on the transmission system. Battery projects such as those proposed by WGD do not have the same performance limitations as capacitors and therefore, as discussed in more detail below, the ISO is concerned that permitting WGD guaranteed cost recovery will place projects with similar characteristics, including other energy storage projects, Demand Response and generation at a competitive disadvantage. Moreover, as also discussed below, because the operation of such facilities can affect market prices, placing them under ISO operational control raises issues with respect to the independence of the ISO and market participants' perception of the ISO's neutrality.

WGD also relies on the fact that the Texas PUC found a battery storage unit to be properly classified as a transmission asset.¹⁷ The Texas PUC found that a battery could be recovered as a transmission cost of service by a Texas transmission utility "because the battery provides benefits associated with

¹⁷ *Application of Electric Transmission Texas, LLC for Regulatory Approvals Related to Installation of a Sodium Sulfur Battery at Presidio Texas*; PUC Docket No. 35994 (April 6, 2009).

transmission grid operation, including voltage control, reactive power and enhanced reliability.” WGD ignores, however, that Texas is not subject to the Commission’s jurisdiction in these matters. Under the Commission’s open access requirements, voltage support and reactive power are ancillary services that must be functionally unbundled from transmission. In compliance with those requirements the ISO procures voltage support from both generation and non-generation resources through separate procurement mechanisms specified in its tariff, not through transmission rates.

The Texas PUC Decision also concludes that a battery cannot be a generation device because it does not convert another source of energy to electricity, and that it performs more of a transmission function than a distribution function. As indicated above, this argument misses the point because the services the batteries would provide are similar to the services that generation, pump storage, Demand Response and non-generation resources provide through the ISO’s markets, and therefore, these resources recover their costs through market revenues and bilateral transactions, and not through bundled transmission rates. The applicability of the Texas PUC decision is further undermined by the Commission’s directive in Order No. 890 that public utilities revise their tariffs to permit non-generation resources to provide Ancillary Services.¹⁸

WGD also states that the facilities will be located at strategic portions of the grid where they can provide reliability services. However, any local reliability

¹⁸ See Order No. 890, 72 Fed. Reg. 12,266 at 12,379; *California Independent System Operator Corporation*, 123 FERC ¶ 61,180 at P 29 (2008).

services can similarly be provided by generation located on load pockets, Demand Response or other non-generation facilities. The similar services these resources provide are not recovered in transmission rates.

WGD claims that it will not participate in any ISO markets because “its facilities would only be operated when a transmission reliability problem is at hand.”¹⁹ WGD seems to be trying to support its capacitor analogy by saying that it intends to limit the operation of its proposed battery storage facilities to capacitor-like uses, even though, as explained above, they will possess much greater capabilities. If WGD’s statement were to be accepted at face value, it would mean that ratepayers would be required to pay for the full cost (including any approved incentives) of the battery storage units without being able to realize all the benefits and services these resources can provide. The ISO submits that this would not constitute a prudent investment of ratepayer funds.

Alternatively, if WGD does envision any utilization of the dispatch capability of these resources, then its statement above is merely an attempt to limit the circumstances under which WGD’s facilities would participate in the markets; it certainly does not support a claim that those facilities *would not* participate in the markets. To the extent that WGD’s projects will provide dispatchable energy, regulation, or even contingency-only operating reserve capacity to the grid, they must necessarily participate in the ISO’s markets. At a minimum, their use (either taking in energy as a load or releasing energy as a generator) will impact the amount of electricity that flows on the system, thereby

¹⁹ WGD Petition at 9.

influencing energy prices and impacting the markets.²⁰ In particular, in order to charge, the devices will need to draw power from the grid. Therefore, at an absolute minimum, WGD's facilities would need to participate in the markets as a purchaser. WGD's claim that it will not participate in any ISO markets is thus unrealistic.

Finally, if battery storage devices provide voltage support in a manner similar to capacitors, as WGD asserts, and capacitors would address the reliability issues for which the battery storage devices are being proposed, the ISO questions why battery storage devices would be the most cost-efficient mitigation solution. If the full functionality of the storage devices is intentionally not being deployed so that the facilities can somehow be classified as transmission (like capacitors), it would seem that installing capacitors would be the more cost-effective and therefore preferred choice.

B. WGD's Proposal Raises Significant Unanswered Concerns Regarding Discrimination Against Similar Market Participants.

Because it appears that the energy storage devices proposed by WGD would provide the same products that other market participants provide on a competitive basis in the ISO's markets for energy and ancillary services, the ISO has the same concerns that it articulated in its LEAPS filings with respect to avoiding preferential treatment to particular market participants in the form of

²⁰ WGD suggests that they will pay retail rates when they take energy from the grid and receive a retail credit when they deliver energy on the grid. WGD Petition at 15. If, however, WGD's facilities are transmission facilities and are connected to the grid, it is not clear why WGD would be paying or receiving retail prices. They would be taking in energy from the transmission system much like Participating Loads and would be delivering energy onto the transmission system just like wholesale generators. This appears to be another unsustainable attempt by WGD to distinguish their facilities from generators, loads, Demand Response, pump storage and other non-generation resources who receive/provide these services through the ISO's markets.

guaranteed cost recovery through TAC. As the ISO explained in the LEAPS proceeding, such an entity should bear a heavy burden to justify such preferential treatment. The ISO does not believe that WGD's petition meets this burden.²¹

The ISO's first concern is that Sections 205 and 206 of the Federal Power Act forbid undue discrimination or preference, and Sections 1223 and 1241 of EPCRA 2005 state that they are subject to the requirements of the FPA, including Sections 205 and 206. Therefore, absent a meaningful distinction between WGD's proposed projects and other similar projects and resources that provide the same types of services, the ISO believes it would be unduly discriminatory to allow WGD to recover its costs through the ISO's rolled-in transmission rates, because other Market Participants do not receive the same guarantees of cost recovery. WGD's proposal would thus create an uneven playing field between its battery storage devices and other resources that participate similarly in the ISO's markets, including Demand Response.

A second concern that the ISO has with allowing WGD to recover its costs and a return on equity through the ISO's rolled-in transmission rates is that doing so would distort the ISO's markets. For example, with its costs recovered through and subsidized by transmission rates, any energy or ancillary service products provided by WGD's energy storage facilities would not be priced at marginal cost and compete in the markets for these products. Depending on how these resources were operated, the energy produced by the WGD facilities would either be bid into the market at zero dollars (*i.e.* as a price taker), or would be injected into the ISO grid similar to must-take energy. This would both distort

²¹ See ISO Reply Comments, Docket Nos. ER06-278-000, et al., July 9, 2007 at 21-24.

the economics of supply and demand in the ISO market and give WGD an economic advantage vis-à-vis other similar suppliers because the energy from WGD would invariably be the lowest-priced energy available and therefore always selected in that process whenever it was offered. This would have the potential to distort market signals in terms of evaluating which resources are the most efficient to address particular system conditions, thereby discouraging entry by other suppliers who do not have access to the subsidy that WGD is seeking from the ISO's transmission customers. The ISO does not believe that this represents the sort of innovation that the Commission's pro-competition policies are intended to promote.

These concerns are not merely theoretical in nature. The ISO is currently conducting a market initiative to allow non-generator resources to provide ancillary services through the ISO markets, which is scheduled to be reviewed at the March 2010 Board meeting. The scope of the initiative includes reviewing the operating characteristics and technical requirements of current ancillary service products against how the ISO uses the resources to meet operational needs. The ISO is working with stakeholders to make changes with regards to resource type restrictions, minimum rated capacity, and continuous energy requirements to ensure comparable treatment independent of the resources underlying technology. The stakeholder process continues to have broad participation including generators, limited energy storage (battery and flywheel), demand response, and pumped storage market participants. The changes proposed will deepen the pool of resources able to participate in the ancillary

services market and remove barriers which previously limited the participation of new technologies. Additionally, with regard to the energy storage pilot projects that the ISO is considering, none would be treated as transmission technology; instead, all would participate in the ISO's markets for ancillary and energy services.

This is consistent with efforts ongoing at other independent system operators, which have also been focused on integrating energy storage devices into their systems as market participants rather than transmission assets, mainly for purposes of providing ancillary services such as regulation.²² Other than denying any participation in the ISO markets, which as explained above is simply not a realistic outcome, WDG offers no answer as to why its projects should be treated differently than the other energy storage projects that the ISO is considering in its ongoing stakeholder process.

C. Treating WGD's Proposed Energy Storage Projects as Transmission Raises the Same Concerns Regarding Independence and ISO Neutrality as in LEAPS.

Even if the Commission determines that the WGD facilities are sufficiently distinguishable from other participants providing the same type of services in the ISO's markets, the ISO does not believe, based on the information provided in

²² See, e.g., Market Rule 1 Revisions Regarding the Provision of Regulation by Non-Generating Resources, *ISO New England, Inc.*, Docket No. ER08-54-006, August 5, 2008 (revising Market Rule 1 and implementing a pilot program to allow "alternative technologies" such as energy storage, to provide regulation service); *New York Independent System Operator, Inc.*, 127 FERC ¶ 61,135 (2009) (accepting tariff revisions to integrate energy storage devices into the New York ISO's day-ahead and real-time markets); <http://www.marketwire.com/press-release/Altair-Nanotechnologies-Inc-NASDAQ-ALTI-923337.html>, retrieved Dec 18, 2009 (noting that PJM had approved for the first time a battery device to provide regulation service on its system); *Midwest Independent Transmission System Operator, Inc.*, 125 FERC ¶ 61,319 at P 26 (2008) (accepting the Midwest ISO's proposal to allow stored energy resources to participate in its energy and operating reserve markets).

the petition, that it would be appropriate for it to assume operational control over WGD's energy storage facilities at this time, which is a necessary adjunct to permitting these facilities to recover their costs through the TAC.²³

In the LEAPS proceeding, the CAISO explained that Nevada Hydro's proposal to treat its proposed pumped storage facilities as transmission assets would have serious negative implications regarding the real and/or perceived independence of the ISO, and therefore would run afoul of Commission's policy that ISOs and RTOs must be "independent both in reality and perception"²⁴ and, specifically, that ISOs and RTOs "must be independent of any entity whose economic or commercial interests could be significantly affected by [its] actions or decisions."²⁵ After a thorough stakeholder process in which the parties explored various options for turning over operational control of the LEAPS facilities to the ISO, the ISO and the majority of the parties concluded that under all of these scenarios, the ISO's independence would be compromised to some degree because all of the scenarios would require the ISO to exercise some level of control, even if indirect, over the facilities' participation in the ISO's markets.

The same concerns apply to the WGD projects because, in order to be included in transmission rate base, they would need to be under the operational control of the ISO, and would therefore require the ISO to make decisions regarding how these assets would participate in the ISO's markets. WGD does not propose any practical solution to these concerns, but rather, simply contends

²³ See tariff Section 26.1.

²⁴ Docket No. RM99-2-000, *Regional Transmission Organizations*, 89 FERC ¶ 61,285, 153, 205.

²⁵ *Id.* at 195.

that its proposed storage projects will be distinguishable from the LEAPS pumped storage facilities because “the WGD Projects will be operated by WGD and not the CAISO.”²⁶ It is unclear precisely what WGD means by this statement. One interpretation is that WGD does not intend the ISO to have “operational control” over WGD’s facilities, as that term is used in the ISO’s tariff.²⁷ If this is the case, then WGD’s petition can be summarily rejected without further consideration. By definition, all facilities on the ISO Controlled Grid are under the ISO’s operational control, and these are the only facilities that are eligible for recovery through the TAC.²⁸

Other statements in the petition suggest, however, that WGD acknowledges that the ISO must have some level of “operational control” over its proposed facilities as a prerequisite for treatment as a transmission asset on the ISO Controlled Grid. For instance, in his attached affidavit, Mr. Alaywan states that “the roles and responsibilities between WGD as a Participating Transmission Owner . . . CAISO and other PTOs will be defined in a CAISO Transmission Control Agreement (‘TCA’).”²⁹ Mr. Alaywan suggests that the TCA for WGD would provide that WGD would perform “all duties associated with the daily 24 x 7 operations and maintenance” of the energy storage devices, but does not specify the scope or process by which ISO would exercise its operational control

²⁶ WGD Petition at 14.

²⁷ Operational Control is defined in the ISO Tariff as “the rights of the CAISO under the Transmission Control Agreement to direct Participating TOs how to operate their transmission lines and facilities and other electric plant affecting the reliability of those lines and facilities for the purpose of affording comparable non-discriminatory transmission access and meeting Applicable Reliability Criteria.” FERC Electric Tariff, Fourth Replacement Volume No. II, Appendix A.

²⁸ *Id.* at Section 26.1

²⁹ WGD Petition, Alaywan Affidavit at P 22.

over the WGD facilities.³⁰ Regardless, based on the information provided in WGD's filing, the ISO cannot envision how it would be possible to realistically exercise "operational control" over the WGD facilities without involving the ISO in some level of market-related decision making on the facilities' behalf – for instance, defining the circumstances under which the facilities will be dispatched and in what increments and over what time periods.

In this context, WGD's suggestion that it is fundamentally different than the LEAPS project because its facilities will be "operated" by WGD rather than the ISO is flawed. As stated above, in the LEAPS stakeholder process, the ISO and parties considered a variety of different alternatives for the ISO to exercise operational control over the LEAPS projects, including two options that included the feature of having the daily operations of the pumped storage facilities performed by a third party. However, stakeholders (and the Commission) still rejected these options because although the ISO would be ostensibly removed from plant operations, they would still require that the ISO exert indirect control over the manner in which the services provided by the facility were bid into the market, and would require continuous supervision by the ISO to ensure compliance with the objectives supporting the incentives requested by LEAPS in the first place. The ISO does not see how it could avoid exercising a similar manner of control over the WGD projects as they have been proposed in the petition. Therefore, the ISO does not believe that WGD has made an adequate case for the ISO to assume operational control over these facilities sufficient to

³⁰ *Id.* at P 23.

overcome the serious concerns relating to actual and perceived ISO independence.

D. If the Commission Does Not Reject WGD's Petition It Should, in the Alternative, Direct the ISO to Consider WGD's Projects as Part of its Upcoming Stakeholder Process to Address Energy Storage and Other New Technologies.

If the Commission determines that WGD's petition should not be rejected outright, the ISO suggests that, in the alternative, the Commission direct that the issues raised therein be considered in an upcoming stakeholder process that will undertake a comprehensive review of ancillary services products and markets. This would be consistent to the approach adopted by the Commission in the LEAPS proceeding, in which it directed the ISO to convene a stakeholder process in order to determine how best to integrate the LEAPS project into the grid and what role the ISO should have with regard to that project.³¹ The ISO recognizes that there are a number of ambiguities and unanswered questions in WGD's petition. The ISO believes that it is ultimately WGD's burden to establish why its projects merit treatment as transmission assets and recovery through transmission rates. However, the ISO recognizes that WGD's proposal involves a relatively new technology which the ISO, as well as other transmission operators, are still examining in order to determine how best to integrate these assets into the system. The ISO has no operational experience with battery storage units and needs to test their technical characteristics and business model. To that end, the ISO is currently evaluating pilot programs that would permit the ISO to study the operations of these resources and evaluate their

³¹ November 17 LEAPS Order at P30.

participation in the markets and impacts on the ISO grid, which will allow the ISO to determine the appropriate role of storage going forward.

Moreover, as stated above, the ISO intends to initiate another relevant stakeholder process in the second quarter of 2010. The ISO will conduct this initiative to examine in a holistic way issues regarding how the ancillary service product definitions and markets may need to be changed to: (1) enable the ISO to obtain services from resources with the performance capabilities needed to operate the grid reliably as the mix of resources changes in response to environmental policy goals and technological change; and (2) efficiently accommodate new technologies that are able to provide needed ancillary services to support reliable grid operation.

If the Commission does not believe that WGD's petition should be rejected outright pending the consideration of further information, then the ISO requests that the Commission order that the ISO's upcoming ancillary services stakeholder process be utilized to consider the issues raised in WGD's petition, with a report from the ISO following the conclusion of that process.

V. CONCLUSION

For the reasons set forth above, the Commission should deny WGD's petition for declaratory order, or, in the alternative, direct that the issues raised by WGD's petition be considered in the ISO's upcoming stakeholder process in which the ISO will examine its ancillary services products and markets in a comprehensive fashion.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing document upon all parties listed on the official service list in the captioned proceeding, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Washington, D.C. this 22d day of December, 2009.

/s/ Daniel Klein
Daniel Klein