BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Integrate and Refine Procurement Policies and Consider Long-Term Procurement Plans.	Rulemaking No. 12–03–014 (Filed March 22, 2012)

Comments of The Nevada Hydro Company On the Track 4 Proposed Decision

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Dated this 3rd day of March, 2014

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Pursuant to the Rule 14.3 of the Rules of Practice and Procedure of the California Public Utilities Commission ("Commission"), The Nevada Hydro Company ("Nevada Hydro") herein submits its Comments on the Track 4 Proposed Decision ("PD")[1] in this long-term procurement plan ("LTPP") proceeding.

1. Introduction

Nevada Hydro was very pleased to see that the Commission is allowing advanced pumped storage ("APS") to participate in providing the solution to the reliability problems facing Southern California largely as a result of the shuttering of the San Onofre Nuclear Facility ("SONGS"). In its previous filings in this and other proceedings,[2] Nevada Hydro has noted that as its 500 MW Lake Elsinore Advanced Pumped Storage ("LEAPS") facility (FERC Project Number P-14227) and the related Talega-Escondido/Valley-Serrano 500-kV Interconnect ("TE/VS Interconnect") are located roughly ten to twenty miles from SONGS,[3] and provide not just megawatts, but also the voltage support, other ancillary services and flexibility from within the

[1]/ Decision Authorizing Long-Term Procurement For Local Capacity Requirements Due to Permanent Retirement of the San Onofre Nuclear Generations Stations, R.12–03–014, Mailed February 11, 2014.

[2]/ See, for example, "Comments of The Nevada Hydro Company on Workshop Materials, Rulemaking No. 12–03–014, filed January 8, 2014.

[3]/ Nevada Hydro has described these projects, their permit path forward and some of the benefits the projects can provide specifically in light of the needs now identified in this proceeding in, "Reply Comments of The Nevada Hydro Company on ALJ Gamson's Policy-Related Questions Presented at the September 4, 2013 Prehearing Conference," R. 12–03–014, filed October 11, 2013.

load pocket. The CAISO clearly requires resources like these to meet the mandates of the North American Electric Reliability Corporation.[4]

While it is grateful to be allowed to participate, Nevada Hydro remains concerned that the PD does not go far enough to meet the mandate of AB 2514.[5] Nevada Hydro notes that it is likely that between now and the early 2020's, California will need several thousand megawatts of new flexible capacity to accommodate all the new renewable resources that will be coming on line. Most of that new flexible capacity should be in the form of large-scale APS. Unless the Commission states, now, an affirmative preference for this technology, batteries and other storage technologies notwithstanding, a significant percentage of this new "flexible capacity" is likely to be gas-fired, which would be a tragedy for California's environment and its ratepayers, especially when gas prices go higher, which they certainly will.

Nevada Hydro's comments on this aspect of the PD, and on the PD's treatment of Nevada Hydro's proposed projects and of those of other parties, follow.

2. The Commission should modify the Proposed Decision to align its treatment of large pumped hydro facilities with the mandate in AB 2514 as it has with other forms of storage.

Nevada Hydro appreciates that with the PD, the Commission finally and explicitly acknowledges that "large pumped hydro facilities should not be excluded"[6] from the utilities procurement programs and that APS facilities, like all energy storage facilities, are to be treated as a Preferred Resource.[7]

The magnitude of need for grid–scale flexible resources strongly suggests that the Commission needs to clearly spell out a path forward for these resources (both to help integrate large amounts of new grid-scale renewable generation, but also to help meet the state's aggressive GHG goals by substituting for the development of new so–called "flexible" gas-fired resources). In D.13–10–040, the Commission set up mechanisms that granted

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[4]/ The North American Electric Reliability Corporation("NERC") is the not-for-profit entity whose mission is to ensure the reliability of the Bulk-Power System in North America. NERC develops and enforces Reliability Standardsand is the electric reliability organization for North America, subject to oversight by the Federal Energy Regulatory Commission and governmental authorities in Canada. Entities under NERC's jurisdiction are the users, owners and operators of the Bulk-Power System.

[5]/ Codified at Pub. Util. Code § 2835*et seq.*

[6]/ PD, at page 99.

[7]/ PD, at footnote 3.

procurement preferences, as required by AB 2514, to all but APS. As APS facilities are clearly included in the provisions of AB 2514,[8] this PD needs to extend preferences like those granted to other storage technologies in D.13–10–040 to APS facilities and clearly delineate how it and the utilities, will consider the value of large grid-scale APS facilities like LEAPS.[9]

The need for such a path forward is justified by the fact that the costs of pumped hydro are half the costs of the advanced battery technologies that the Commission seems to be focused on helping. Indeed, given the uncertainties in gas pricing and the ultimate price of GHG emissions from gas-fired facilities, the all-in costs of pumped storage facilities discounted to present value are already competitive with the price of "flexible" gas-fired facilities, and, in the future, when gas prices rise, as they inevitably will, the price of pumped storage at today's estimated costs, will appear to be a bargain.

For the Commission to fail to set forth such a clear path forward in its ultimate decision in this proceeding would do a disservice not only ratepayers, but also, more importantly, such a failure would set back the Legislature's main purposes in advocating policies to address energy storage, namely, to facilitate the integration of increasing amounts of renewable generation and to achieve the state's policies to reduce greenhouse gas emissions to the target levels.

AB 2514 does not require APS, uniquely, to compete with other generation sources for a seat at this table. Rather it needs to be treated equally with the treatment other storage resources have received from this Commission.

3. The Commission should not have removed consideration of Nevada Hydro's transmission project while considering as Fact the proposals of other project sponsors in this proceeding.

As part of its consideration of potential forecast adjustments in Section 3.3.7, the PD discusses transmission proposals of a number of parties, concluding: "We find that there is a reasonable possibility that at least one of the transmission solutions examined by SCE and

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[8]/ As required under Sec 2835(a)(4), APS isan "energy storage system"that uses mechanical, chemical, or thermal processes to store energy (A) that was generated at one time for use at a later time (C)generated from renewable resources for use at a later time, and (D) generated from mechanical processes that would otherwise be wasted for delivery at a later time.

[9]/ Nevada Hydro is not advocating for the reverse auction mechanism described in D13–10–040. As Nevada Hydro sees many methodological uncertainties about the comparative evaluation ofAPS projects, as compared to other storage technologies and to traditional generation projects, as well as the different range of benefits that different technologies provide, it is unclear whether a RAM would either be fair or would result in an optimal outcome.

SDG&E will be operational by 2022."[10] At the same time, the Commission apparently agreed with Nevada Hydro's view that "the Commission did not intend this proceeding to be used to advocate for the merits of any particular solution . . ."[11]

Nevada Hydro did not present as evidence its proposed TE/VS Interconnect and LEAPS projects, and the Commission agreed with Nevada Hydro's understanding of the appropriate venue for this advocacy. Nevada Hydro is therefore at a loss to understand how the Commission is able to "consider this potential"[12] of projects proposed by SCE and SDG&E. If the Commission is here considering the potential of any proposed project, it must allow all to be described with an equal voice.

The Commission further characterizes what is essentially advocacy by SCE and SDG&E as "solutions examined by SCE and SDG&E", treating as a Finding of Fact[13] what is really competitive marketing of their own pet projects. Clearly, SCE and SDG&E are using this proceeding to advocate for their own interests by "examining" their own projects. If the Commission is allowing some parties to "examine" the benefits of their particular projects and rely on this "examination", it should not exclude other projects, like Nevada Hydro's, from an "examination" on the record, as it has here. Nevada Hydro is troubled by this different treatment of utility and non-utility sponsored projects, and believes it needs to be remedied in the final decision.

4. Conclusion

Renewable resources, integrated by appropriately sited energy storage, can provide both operational and reliability benefits, meeting all of the system needs of the evolving greener grid. Nevada Hydro's TE/VS Interconnect and LEAPS projects are critical components for making this greener grid a reality while simultaneously solving the immediate reliability needs that are being addressed in this Phase 4 of the LTPP proceeding.

As the Commission is well aware, the TE/VS Interconnect can be in service by the summer of 2016, faster than any other large project or collection of smaller fixes can be implemented.

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[10]/ PD, at page 52.
[11]/ PD, at page 21.
[12]/ PD, at page 52.
[13]/ PD, Finding of Fact 44.

Further, the TE/VS Interconnect and its 500 kV-permitted right-of-way can become the first phase of the solution to the longer-term problem. With ratings of from 2,600 MW to 4,500 MW (depending on coordinated planning choices), the use of 500 kV lines into the area between SCE and SDG&E can be the keystone of a major system upgrade that can provide the transmission capability to meet a large percentage of the replacement needs for generation retirements.

Further, because of the unique characteristics of APS and the unique locational attributes specific to LEAPS, it is the optimal resource to meet the needs identified in this procurement allocation and needs to comply with AB 2514.

Given the State's exacting clean energy policies, there is an unquestionable need for the electric power system in California to move toward an environmentally sustainable future, while still maintaining highly reliable and efficient service at the least possible cost. Given this policy imperative, there can be no doubt that APS generally and LEAPS specifically are the very best facilities that could be developed in the region in order to meet the challenges of:

- The ever-increasing need for highly flexible resources;
- The ever-expanding reliance in the region on variable renewable resources;
- The evident and hidden limitations on power flows into the region;
- The long-term imperative for California to move away from carbon-based energy resources; and,
- The permanent shutdown of SONGS.

Nevada Hydro is pleased that the Commission has now opened the door to fair consideration of APS to solve the reliability crisis in Southern California.

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