

**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)

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**Comments of The Nevada Hydro Company  
On the Procurement Process of Southern California Edison**

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Dated this 9<sup>th</sup> day of April, 2014

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Pursuant to the Rule 6.2 of the Rules of Practice and Procedure of the California Public Utilities Commission (“Commission”), The Nevada Hydro Company (“Nevada Hydro”) herein submits comments on the implementation, by Southern California Edison (“SCE”), of the procurement process authorized in this long-term procurement plan (“LTPP”) proceeding.

**1. Background**

Nevada Hydro was very pleased to see that the Commission, in Decision 14-03-004<sup>1</sup> (“SONGS Decision”), is explicitly 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 Generation Station (“SONGS”). In its previous filings,<sup>2</sup> 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,<sup>3</sup>

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<sup>1</sup>/ Decision Authorizing Long-Term Procurement for Local Capacity Requirements Due to Permanent Retirement of The San Onofre Nuclear Generations Stations, Decision 14-03-004 in Rulemaking 12-03-014, March 14, 2014.

<sup>2</sup>/ See, for example, “Comments of The Nevada Hydro Company on Workshop Materials, Rulemaking No. 12-03-014, filed January 8, 2014.

<sup>3</sup>/ 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.

squarely in the middle of the “SONGS study area” and provide not just megawatts, but also the voltage support, other ancillary services and flexibility from within the load pocket.

Nevada Hydro appreciates that with the SONGS Decision, the Commission explicitly directs that “large pumped hydro facilities should not be excluded”<sup>4</sup> from the utilities procurement programs and that new large pumped hydro facilities like LEAPS, like all energy storage facilities, are to be treated as a Preferred Resource.<sup>5</sup> Nevada Hydro appreciates the Commission’s willingness to take this step because even though most now seem to agree that APS is essential to helping California realize its greener energy future,<sup>6</sup> today, there are few paths available that would allow such facilities to be built by providing necessary revenue. The Commission’s LTPP process is clearly the most immediate and transparent.

In D.13-02-015, the Track 1 decision of this proceeding, SCE was authorized to procure between 1,400 and 1,800 MW in the West LA sub-area of the LA Basin. As a result, on September 12, 2013, SCE launched the Local Capacity Requirements Request for Offers (“RFO”) for incremental capacity in the West LA Basin and Moorpark Sub-Areas. Although it does not directly connect to one of the distribution substations identified in the RFO, Nevada Hydro submitted a complete and timely offer to SCE for LEAPS, noting that it connects to the 500 kV grid feeding into the area (SCE’s Valley–Serrano line), and that its deliverability assessment clearly shows that it meets requirements for contributing to local reliability. Nonetheless, on January 6, 2014, Nevada Hydro was notified that, “Unfortunately, the proposal is nonconforming because the interconnection is not in the LA Basin or Moorpark area as required by the RFO.”<sup>7</sup> Having eliminated LEAPS on this technicality, SCE never analyzed the facility’s ability to meet the requirements for acceptable resources set forth by the Commission.<sup>8</sup>

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<sup>4</sup>/ SONGS Decision, at page 102.

<sup>5</sup>/ SONGS Decision, at footnote 3.

<sup>6</sup>/ 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 gasfired resources.

<sup>7</sup>/ Email communication from Daniel Walker of SCE to Rexford Wait of Nevada Hydro dated January 6, 2014. In a follow-up call, Mr. Wait again reminded Mr. Walker that LEAPS connects at the transmission not distribution level and that its deliverability analysis is long complete.

<sup>8</sup>/ These requirements are set forth in Order 8 of the SONGS Decision, and further discussed at Footnote 22, *infra*.

With the issuance of its SONGS Decision, the Commission has clarified that SCE's procurement authorization now extends throughout the LA Basin local reliability area<sup>9</sup>, and that SCE must consider APS as a preferred resource. As a result, on March 21, Nevada Hydro contacted SCE,<sup>10</sup> asking SCE to reassess its previous denial and consider LEAPS to fill the need identified in this proceeding. To date, SCE has not responded to Nevada Hydro's request.

The September 16, 2013 Assigned Commissioner/ALJ Ruling noted that, "due to long lead times for new resources, there is an urgency to start moving toward identifying and filling any identified need as soon as possible."<sup>11</sup> Nevada Hydro is concerned, therefore, that by pushing aside formal evaluation of LEAPS to fill the identified need in this proceeding, SCE is angling to ignore the elephant in the room that is LEAPS to instead select resources that are less economic to ratepayers, do less to enhance the usefulness of renewable energy resources, do less to support the grid of tomorrow and do less to reduce GHG production in the region. As the facility's interconnection and nearly all environmental work are complete, with some cooperation from regulators, including this Commission, Nevada Hydro can have LEAPS operating by as soon as 2019. Nevada Hydro is therefore submitting these comments to this proceeding to alert the Commission that SCE is apparently avoiding consideration of relevant Preferred Resources like LEAPS, as the Commission directed, to the benefit of its own favored resources.

**2. SCE is required to assess the value of LEAPS to meet the identified need and has not**

Both AB 2514 and numerous Commission decisions require SCE to evaluate the ability of LEAPS to effectively meet the needs identified in this proceeding. SCE cannot simply dismiss LEAPS from consideration based upon its connection point when the Commission has mandated the proper consideration of both storage and Preferred Resources in the LA Basin. Further, as both the California Independent System Operator ("CAISO") and SCE have studied

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<sup>9</sup> / SONGS Decision, Orders 1 and 5.

<sup>10</sup> / Nevada Hydro's email was addressed, as was required in the RFO, to [LCR.RFO@sce.com](mailto:LCR.RFO@sce.com) and to [Alan.Taylor@sedwayconsulting.com](mailto:Alan.Taylor@sedwayconsulting.com).

<sup>11</sup> Assigned Commissioner and Administrative Law Judge's Ruling Regarding Track 2 and Track 4 Schedules, Rulemaking 12-03-014, September 16, 2013 P. 3.

this connection, reflected in the signed Large Generator Interconnection Agreement, SCE is well aware of the benefits the interconnection actually provides to their system.

**2.1. AB 2514 requires that APS be considered in this LTPP process, and SCE cannot simply ignore its potential benefits**

Section 1(f) of AB 2514 is clear in its purpose and directive:

*There are significant barriers to obtaining the benefits of energy storage systems, including inadequate evaluation of the use of energy storage to integrate renewable energy resources into the transmission and distribution grid through long-term electricity resource planning . . .*

Further, Section 2836.2(c) requires that the Commission “consider the integration of energy storage technologies with other programs, including demand-side management or other means of achieving the purposes identified in Section 2837 that will result in the most efficient use of generation resources and cost-effective energy efficient grid integration and management”. SCE cannot simply set aside consideration LEAPS; it must include LEAPS in its conclusions and decisions relative to how its procurement “will result in the most efficient use of generation resources and cost-effective energy efficient grid integration and management”. Failure to correct SCE’s misstep 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 at the lowest cost to ratepayers.

**2.2. The SONGS Decision requires SCE to seriously assess the value of LEAPS and the Commission must assure that it does.**

In the SONGS Decision, the Commission detailed a number of mandates, and for each, most (other than SCE, evidentially) now seem convinced that APS facilities like LEAPS will be essential to assuring the mandate is met as economically as possible. For example:

- The SONGS Decision reiterated that the Commission that it has a statutory duty to ensure that customers receive reasonable services at just and reasonable rates, protect the environment, and maintain grid reliability. Clearly, APS facilities will be essential to helping this Commission and the CAISO meet this mandate for a modern green grid.

- Further, “in D.07-12-052 at 12, the Commission stated that once demand response and energy efficiency targets are reached, ‘the utility is to procure renewable generation to the fullest extent possible’.”<sup>12</sup> Again, most agree that APS facilities like LEAPS will be essential to integrating renewable generation “to the fullest extent possible.”
- The SONGS Decision also reiterated that, “While we strongly intend to continue pursuing preferred resources to the greatest extent possible, we must always ensure that grid operations are not potentially compromised by excessive reliance on intermittent resources and resources with uncertain ability to meet LCR needs.”<sup>13</sup> Again, only APS facilities like LEAPS can help assure a stable and reliable grid (through the provision of all ancillary services and energy) while efficiently integrating renewable generation.

The Commission also noted that D.12–01–033 requires that, “Instead of procuring a fixed amount of preferred resources and then procuring fossil-fuel resources, the IOUs are required to continue to procure the preferred resources “to the extent that they are feasibly available and cost effective.”<sup>14</sup>

Although the SONGS Decision clearly and specifically requires SCE to consider APS to fill the need identified in this proceeding, Nevada Hydro sees no evidence that SCE is abiding by these mandates. Specifically:

1. Order 1.c. requires that SCE procure at least 550 MW from preferred resources consistent with the Loading Order and that “large pumped hydro facilities shall not be excluded”.
2. Order 1.e requires that any additional local capacity, beyond certain specified amounts “may only be procured through preferred resources (including bulk energy storage and large pumped hydro facilities)”.

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<sup>12</sup> / SONGS Decision, at P. 14.

<sup>13</sup> / *Id.* at P. 90.

<sup>14</sup> / *Id.* at P. 15.

3. Order 12 notes that SCE “may modify its procurement plan approved by Energy Division per Decision 13-02-015 solely so that resources in portions of the Los Angeles Basin beyond the West Los Angeles sub-area may also be procured to meet incremental local capacity needs identified in this decision.”

The SONGS Decision is clear in its directive to SCE:

*As discussed herein, we require SCE and SDG&E to procure MW ranges of certain types of resources. Each utility should solicit all resources as required by this decision, and may propose for approval any set of resources which can meet the LCR need in its portion of the SONGS service area consistent with the authorized resource ranges herein. Within the categories that include preferred resources, bulk energy storage and large pumped hydro facilities should not be excluded. [Emphasis added.]<sup>15</sup>*

With the Commission’s focus on reliability and on cost-effectively increasing reliance on renewable resources while properly managing their intermittent nature, with the apparent exception of SCE, most seem to agree that APS facilities will be essential to fulfilling these objectives. Clearly, as the only large pumped hydro with a complete interconnection in the SONGS study area, SCE has an obligation seriously assess LEAPS in this procurement process. Instead, it has swept it aside in favor of other less flexible resources.

**3. By ignoring LEAPS, SCE may fill the need identified with other inferior resources, thereby imposing its view of “available resources” over that of this Commission.**

As mentioned previously, there are few sources of revenue potentially available to pay for a 500 MW APS facility, no matter how beneficial it may be to ratepayers. Nevada Hydro has assumed the risk that the project will be able to receive its needed permits and is happy to see that many now believe, as Nevada Hydro has for years, that APS will help the State achieve its green energy goals economically. Nevada Hydro is ready to compete on a level playing field with other resources potentially able to meet needs identified in this proceeding. As the Commission notes, quoting D.13-02-015: “We consider today’s decision a measured first step in a longer process. If as much or more of the preferred resources we expect do materialize, there will be no need for further LCR procurement based on current assumptions.”<sup>16</sup> Simply, Nevada Hydro is concerned that notwithstanding the above described legislative and policy

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<sup>15</sup>/ SONGS Decision at P. 102.

<sup>16</sup>/ Songs Decision, at P. 110.

mandates, those resources SCE favors will have first crack at filling this need, and other resources, like LEAPS, may not even get a chance to be fairly assessed. The Commission cannot expect private developers to compete when discriminatory pressures are brought to bear on the process.

As Nevada Hydro has mentioned many times, LEAPS has complete interconnection agreements with SCE, San Diego Gas & Electric Company and the CAISO. The Federal Energy Regulatory Commission (“FERC”) has issued a final environmental impact statement that is now being updated in docket P–14227. FERC has indicated that with so much licensing work complete, that it may issue its license for LEAPS in two years, allowing LEAPS to be operating as soon as 2019, well within the window of this proceeding,<sup>17</sup> and ahead of other proposed projects SCE seems to favor, like its Mesa Loop in proposal.

Why therefore is SCE apparently ignoring the following mandate from the SONGS Decision?

*There is a need for expeditious action to procure further resources in response to the retirement of SONGS. It will be approximately 18 months from the date for the Track 1 decision to the time SCE files an application for approval of Track 1-authorized procurement. We cannot wait another 18 months or more beyond the date of this decision for consideration of Track 4-authorized procurement.*<sup>18</sup>

The Commission has urged area utilities to “not wait until very close to when the need is critical to acquire such resources; to the extent that additional preferred resources or energy storage is cost-effective and well suited to meet LCR needs in the subject geographical areas, SCE and SDG&E should work to procure these resources in advance”.<sup>19</sup> Why then is SCE not evaluating LEAPS now?

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<sup>17</sup> / “Procurement authorized by this decision should begin as soon as possible. Procurement needs may become critical as early as 2018, and certainly by 2020”, SONGS Decision, P. 113. In addition for the timing for LEAPS described, Nevada Hydro reminds the Commission that its Talega–Escondido/Valley–Serrano 500 kV Interconnect Project can deliver up to 1,800 MW to within a few miles of SONGS by 2016. Nevada Hydro expects to reapply to this Commission for a Certificate of Public Convenience and Necessity shortly.

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

<sup>19</sup> / *Id.* at P. 113.



The SONGS Decision quotes SCE witness Nelson’s acknowledgement that SCE is aware APS facilities like LEAPS “could add additional value to the grid.”<sup>20</sup> However, and likely expressing the view of his employer, Mr. Nelson also “was uncertain about the ‘effectiveness’ of ‘any large pumped hydro storage’ in meeting the ‘West LA Basin LCR,’ he did believe it could be ‘bid in’ for Track 1 and would contribute to the ‘balanced approach’ of using ‘all resources’ to avoid ‘the possibility of failure and being overly reliant on anyone’.”<sup>21</sup> As noted, Nevada Hydro bid LEAPS in to the Track 1 process and was politely shown the door without any evaluation as to its effectiveness for meeting the LCR need. With its deliverability and interconnection studies complete, SCE is well aware of the potential ability of LEAPS to meet LCR needs in the West LA Basin, in the LA Basin and in the SONGS Study area.

**4. SCE must properly assess LEAPS now as a Preferred Resource to fill the need identified in this Proceeding**

Order 8 of the SONGS Decision set forth the evaluation criteria against which the effectiveness of LEAPS (and all resources) is to be measured (repeated at the following footnote).<sup>22</sup> Clearly, not only has SCE not met any of these mandates for the LEAPS facility, having eliminated it based upon its point of connection outside of the West LA area, but it may have violated criterion “e” by unfairly preventing the only APS project able to meet these identified needs from within the load pocket from participating in the evaluation process.

Perhaps SCE is avoiding LEAPS due to the difficulty of properly evaluating APS? Nevada Hydro is aware that SCE had difficulty properly evaluating LEAPS in its 2009 “All Source Request for Offers”. There, for example, SCE presented Nevada Hydro with a sample power purchase

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<sup>20</sup> / *Id.* at P. 100.

<sup>21</sup> / As quoted at *Id.* at P. 101.

<sup>22</sup> / These evaluation criteria identified in Order 8 of the SONGS Decision are:

- a. Cost-effectiveness;
- b. Consistency with the Loading Order, including a demonstration that it has identified each preferred resource and assessed the availability, economics, viability and effectiveness of that supply in meeting the LCR need;
- c. Compliance with Ordering Paragraphs 1 or 2 (as applicable);
- d. For applicable bilateral contracts, compliance with Public Utilities Code Section 454.6; and
- e. A demonstration of technological neutrality, so that no resource was arbitrarily or unfairly prevented from bidding in SCE’s or SDG&E’s solicitation process. To the extent that the availability, viability and effectiveness of resources higher in the Loading Order are comparable to fossil-fueled resources, SCE and SDG&E shall show that it has contracted with these preferred resources first.

agreement for LEAPS containing heat rate matrices and milestones from the Energy Commission's approval process! It was an arduous process to modify the provided documents and analysis to one more suitable for even a basic hydroelectric facility. In the end, the analysis failed to evaluate the full range of benefits LEAPS could provide while SCE was "unable" to accommodate FERC's hydro licensing approval schedule with the processes used by completing gas-fired bidders.

This Commission is also aware of the difficulty of properly assessing modern APS facilities. On January 16, 2014, it sponsored a technical workshop addressing APS issues. One presenter from Argonne National Laboratories provided a presentation describing a study it undertook addressing Modeling and Analysis of Value of Advanced Pumped Storage Hydropower in the U.S.<sup>23</sup> Nevada Hydro is presently in discussions with Argonne and its analysis team members to use LEAPS as a real world test case for the analytical techniques they developed. In addition, one of Nevada Hydro investors, Morgan Stanley has also expressed its willingness to help in this process. Nevada Hydro hopes that SCE would be willing to call on these resources to help it properly analyze LEAPS in connection with the evaluation process set up by this Commission.

However, in the event SCE does not promptly incorporate LEAPS into its present Commission authorized analysis, Section 206 of the Federal Power Act (16 U.S.C. § 824e) and FERC Rules (18 CFR §385.206) provide a venue at which issues identified in this filing may be addressed Federally. For convenience, Exhibit 1, (attached) summarizes these issues as discussed herein.

## **5. Conclusion**

As Nevada Hydro has pointed out,<sup>24</sup> while, most of the parties to this proceeding are trying to help the Commission manage the situation SCE created, SCE seems inclined to limit the options before this Commission. Let us not forget that the only reason this proceeding even has a "Track 4" is due to the actions of SCE; neither this Commission, nor the state's ratepayers, nor the stakeholders to this proceeding caused the problem we are all now facing.

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<sup>23</sup>/ This presentation may be accessed at: [http://www.cpuc.ca.gov/NR/rdonlyres/86FB9E26-5239-4AD7-8C51-DE70054F06E4/0/Koritarov\\_CPUC\\_PSHWorkshop\\_20140116.pdf](http://www.cpuc.ca.gov/NR/rdonlyres/86FB9E26-5239-4AD7-8C51-DE70054F06E4/0/Koritarov_CPUC_PSHWorkshop_20140116.pdf)

<sup>24</sup>/ Nevada Hydro Company's Motion Opposing SCE's Motion to Strike Portions of Nevada Hydro' Opening Brief, Rulemaking No. 12-03-014, December 6, 2013, at page 2.

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 economically solving the immediate reliability needs that are being addressed in this proceeding.

Because of the unique characteristics of APS and the unique locational attributes specific to LEAPS, LEAPS is the optimal resource to meet the needs identified in this procurement allocation and this procurement program 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 trusts that the Commission will assure that the procurement playing field is level and does not discriminate against any potential player.

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Dated this 9<sup>th</sup> day of April, 2014