



FRONTLINES

FOREST RESIDENTS OPPOSING NEW TRANSMISSION LINES

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888 First Street, NE
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Subject: Obsolescence of The Commission's 2007 Final Environmental Impact Statement Prepared for the Lake Elsinore Advanced Pumped Storage Project.

Reference: Commission Docket P-14227

Dear Mr. Wright:

Forest Residents Opposing New Transmission Lines ("FRONTLINES") is writing in response to the letter dated April 22, 2014 from The Nevada Hydro Company, Inc. ("TNHC") which requested feedback on what would be required to update the 2007 Final Environmental Impact Statement ("2007 FEIS") pertaining to the combined "Lake Elsinore Advanced Pumped Storage Project" ("LEAPS") and attendant "Talega-Escondido/Valley-Serrano" 500 kV interconnect project ("TEVS")

FRONTLINES is concerned that recent and significant changes in Southern California's electrical generation and transmission system render obsolete many of the assumptions which underlie the 2007 FEIS "Purpose and Need" statement for both LEAPS and TEVS. These changes will also compel the Commission to consider alternative LEAPS and TEVS configurations and alignments which were not addressed in the 2007 FEIS. FRONTLINES is also concerned that significant changes in Elsinore Valley Municipal Water District's ("EVMWD's") water use and allocation profiles which have occurred since 2007 now render incorrect many of the 2007 FEIS conclusions, particularly in the face of California's current "mega drought" situation. FRONTLINES also shares the concerns raised by others that the 2007 FEIS fails to address the current Cleveland National Forest Plan, and ignores recent changes pertaining to other issues (such as land use profiles, biological resources, etc.). For these reasons, FRONTLINES concludes that most of the foundational elements which underlie the 2007 FEIS are obsolete and incorrect, and therefore cannot be relied upon to satisfy the Commission's NEPA obligations pursuant to Docket P-14227.

THE 2007 FEIS PURPOSE AND NEED STATEMENT IS OUTDATED AND OBSOLETE

NEPA demands that any FEIS that is issued in Docket P-14227 clearly state the purpose of the proposed project, and firmly establish the underlying need for the proposed project. The 2007 FEIS is insufficient for these purposes.

The Need For LEAPS Power

The power generation and demand landscape in Southern California has changed substantially since 2007, and projected generation requirements in Southern California differ significantly from what is assumed in the LEAPS “Need” analysis presented in the 2007 FEIS. These changes include:

New trends in utility-scale renewable generation which emphasize on-peak solar generation rather than off-peak wind generation. The 2007 FEIS assumes that “significant additions of wind power” would occur and further contends that the value of LEAPS derives specifically from its ability to transfer off-peak, intermittent wind energy to on-peak hours [Page 1-4]. However, the 2007 FEIS predictions regarding the ascendancy of wind generation have proven to be quite wrong; it is on-peak solar energy, not off-peak wind energy, which has become the preferred renewable resource¹. The rapid expansion of large, utility-scale solar generation is a trend that is expected to continue over the next decade, and it obviates the need for projects like LEAPS both now and in the future. The Commission cannot rely on the 2007 FEIS to satisfy NEPA requirements in docket P-14227 because the entire basis upon which it establishes a “Need” for LEAPS is simply invalid.

New energy storage regulations in California have shifted utilities’ interests toward new, locally imbedded, distributed storage projects and away from remote pumped storage projects like LEAPS. For example, utilities are specifically not permitted to rely on large pumped storage projects like LEAPS in order to comply with the California Energy Storage Mandate imposed by AB 2514².

The rapid expansion of distributed renewable generation within both SCE’s and SDGE’s load centers provide significant quantities of in-situ, peak power. SDGE currently has more than 150 MW of in-situ distributed generation, and it is expected that such generation will increase by as much as a factor of 10 by 2020. On-peak, in-basin distributed generation eliminates the “Need” for both LEAPS generation and TEVS transmission.

¹ According to the CAISO Generation Interconnection Queue, of the 150 new generation sources that have applied for connection in California in the last 4 years, only 5 are wind projects. Of the 71 generation projects completed since 1999, only 13 are wind projects. Nearly 100 wind energy projects proposed for grid connection have been withdrawn since 2006. Clearly, “wind” is not, and will not be, a significant renewable resource in Southern California. (see <http://www.caiso.com/Documents/ISOGeneratorInterconnectionQueue.pdf>).

² CPUC D.13.10.014, Conclusion of Law #9.

New generation projects in SDGE and SCE territories render LEAPS unnecessary. There are a number of large generation projects that serve SDGE load which eliminate any need for LEAPS, such as the 558 MW of new Carlsbad Energy Project generation (which replaces 321 MW of Encinas generation), and 500 MW of La Rosita plant generation³ and substantial new generation that will be delivered to SDGE load via Sunrise. In addition, the CPUC recently considered long-term utility procurement plans and the impact of the permanent shutdown of the San Onofre Nuclear Generating Station [“SONGS”]. Based on this analysis, the CPUC issued decisions authorizing SDGE to obtain 600-900 MW of new generation from gas-fired or other “non-preferred” resources. In this same Proceeding, SCE was authorized by the CPUC to obtain 1,300-1,500 MW of new generation from gas-fired or other “non-preferred” generation⁴. All of these factors, when taken together, clearly demonstrate that LEAPS is not now, and will not ever be, a *necessary* element in Southern California’s energy system.

Another example of the inadequacies of the 2007 FEIS LEAPS “Need” analysis is that it considers energy capacity profiles and production increases projected for the WECC California-Mexico power region for 2005-2014, and it concludes that LEAPS would be “useful in meeting a part of the regional need for on-peak power”. Clearly, this conclusion is erroneous, given that it is now 2014, and Southern California seems to have met its local power requirements without relying on LEAPS power.

The fact is, every single element which underlies the LEAPS “Need” analysis in the 2007 FEIS is factually both outdated and obsolete. Therefore, the 2007 FEIS cannot be relied upon to satisfy the Commission’s NEPA obligation in Docket P-14227.

The Need for TEVS Transmission

The existing and planned Southern California transmission system differs so substantially from what was anticipated in 2007 that it renders the 2007 FEIS transmission “Need” analysis of the 500 kV TEVS line both obsolete and non-representative. Every foundational element of the 2007 FEIS transmission “need” analysis is now invalid. For example:

TEVS is not a transmission congestion solution. The 2007 FEIS asserts that TEVS “would be an appropriate long-term solution to southern California’s transmission congestion bottlenecks” [Page 1-6]. CAISO showed (in the Sunrise proceeding) that little, if any power would flow on TEVS, and whatever power that could be delivered via TEVS to SDGE to decrease San Diego’s Local Capacity Requirement (“LCR”) will simply increase SCE’s LCR in

³ Commission order issued December 14, 2012 in Docket IN13-4-000 cites SDGE’s and CAISO’s reliance on La Rosita power to meet local capacity requirements.

⁴ CPUC Decisions D.13-02-015, D.13-03-029, D.14-03-004.

the Los Angeles area⁵. It must also be pointed out that, since the LEAPS FEIS was released in 2007, the CPUC has approved a number of large transmission projects (such as SDGE's Sunrise project and SCE's Tehachapi Renewable Transmission Project) based on the explicit assumption that they would serve as the long term solution for Southern California's "bottlenecks". Therefore, TEVS is not necessary for this purpose.

TEVS will not increase the import capability of Sunrise. The 2007 TEVS states (on page 1-6) that "A combination of the Talega –Escondido/Valley-Serrano and Imperial Valley – San Diego Expansion (aka "sunrise") Plan transmission lines would provide additional benefits, such as a 3,800 MW import capability". This conclusion is wrong; the CPUC approved Sunrise Project because it was sufficient to increase SDGE's import capability to 3,800 MW ***without*** TEVS.

TEVS will not provide 1,000 MW of import capability to SDGE Territory. The 2007 FEIS concludes that TEVS "could provide up to 1,000 MW of import capability into the San Diego area [pg. 1-6]". This conclusion is wrong, as CAISO demonstrated in the Sunrise proceeding before the CPUC. CAISO clarified that, even with phase shifters, the highest import capacity that TEVS could achieve was 625 MW. However, CAISO cautioned that even this value is unrealistic, because SCE lacks the excess generation needed to put any power on the TEVS line in the first place⁶.

TEVS will not import solar and wind power into the San Diego Area. The 2007 FEIS concludes that TEVS could be used to import up to 200 MW of solar power and 800 MW of wind power into the San Diego area [page B-17]. This conclusion is absurd on its face. TEVS does not access any wind or solar resources, therefore it cannot import such resources. More importantly, and as CAISO clearly demonstrated in the CPUC's Sunrise Proceeding, all of the energy generated within SCE's territory near the TEVS northern terminus is appropriated for SCE customers to address SCE's own local capacity requirements. Simply put, SCE does not possess sufficient power to supply SDGE with 1000 MW of power (renewable or otherwise) via TEVS or any other transmission path.

SDGE does not have any credible expansion plans which justify the construction of TEVS to 500 kV standards. The 2007 FEIS asserts that 230 kV transmission would be more than adequate to transmit LEAPS power to SDGE. Nonetheless, the 2007 FEIS presumes a 500 kV connection to SCE via TEVS based solely on the unsupported assertion that "the SDGE expansion plan calls for the addition of this line at 500-kV". This conclusion is

⁵ CAISO's "Errata to the Initial Testimony of the California Independent System Operator Corporation – Part V" offered in CPUC proceeding A.06-08-010.

⁶ CAISO Phase 2 Opening Brief in CPUC Proceeding A.06-08-010.

technically insupportable, given the fact that SDGE's Talega-Escondido line is constructed to 230 kV standards, and SDGE has no plans to upgrade this line to 500 kV either now or in the future. More to the point, the CPUC and/or the CAISO have continuously and repeatedly rejected every plan SDGE has proposed for a 500 kV connection to either SCE's Valley substation or SCE's Valley-Serrano line. The most recent rejection occurred just 3 months ago, when CAISO chose not to carry forward SDGE's proposed "HV Line" Powerlink alternatives which were submitted for consideration in CAISO's 2013/2014 transmission plan request window⁷. Simply put, *there are no credible SDGE expansion plans which call for a 500 kV interconnection to SCE's Valley-Serrano system*. This fact completely invalidates the 2007 FEIS premise for constructing TEVS to 500 kV standards, therefore it cannot be relied upon in Docket P-14227.

CAISO does not consider TEVS necessary to meet transmission needs for at least 10 years. Since 2006, the CAISO has approved a number of large scale, high-voltage transmission projects to address Southern California's transmission concerns (including TRTP and Sunrise). In the most recent planning cycle (2013-2014), CAISO focused on infrastructure solutions that address residual transmission needs in Southern California. CAISO considered TEVS in this planning cycle⁸, categorized it as a "Group II" project that strengthens LA/San Diego connections, and concluded that it was not needed to address residual transmission needs over the 10 year CAISO planning horizon⁹. In fact, CAISO concluded that new "Group III" transmission projects which bring additional resources to the Los Angeles Basin and San Diego area may ultimately be preferable to "Group II" projects like TEVS¹⁰. CAISO even considered TEVS in conjunction with LEAPS (referred to as "enhanced TEVS"), but concluded that this configuration was not currently needed, and that it would require TEVS to be advanced as either an interconnection facility ("gen-tie" line) or a network upgrade¹¹. Notably, LEAPS is not deemed an "additional generation resource" as that term is contemplated by CAISO in its consideration of Group III projects¹².

TEVS does not qualify as a "project primary" line. The 2007 FEIS describes TEVS as a line that can connect LEAPS to SCE in the north and can also connect LEAPS to SDGE in the south. It also seems to purport that this configuration could allow the Commission to designate TEVS as a "project primary" line which can be included in the LEAPS license until such time as it is reconfigured to carry non-LEAPS power [page B-5 to B-8]. This

⁷ CAISO request window submittal #24.

⁸ CAISO request window submittal #52.

⁹ Page 105 of the CAISO 2013-2014 Transmission Plan issued March 25, 2014.

¹⁰ Ibid p. 105.

¹¹ Ibid p. 99.

¹² This makes sense, given the fact that LEAPS is not a new generation resource, rather it is a generation storage facility that actually acts as a generation "sink" because it absorbs more energy than it releases.

description is inaccurate, as evidenced by every single document pertaining to TEVS which has been filed by TNHC since the 2007 FEIS was issued. TNHC has made it clear in applications filed with the Commission, CAISO, the CPUC, the California Water Boards and the US Forest Service that it intends to construct and operate TEVS as a fully integrated, CAISO-controlled transmission asset long before LEAPS construction is complete. For this reason, the entire analysis of the regulatory framework underlying the inclusion of TEVS in the LEAPS license is invalid.

The elements that comprised the 2007 FEIS “Purpose and Need” statement for both LEAPS and TEVS are clearly outdated, obsolete and demonstrably invalid. If the Commission and the USFS intend to produce a credible and relevant NEPA document in Docket P-14227, then it is clear that the Purpose and Need Statement from the 2007 FEIS cannot be relied upon for this purpose.

WATER AVAILABILITY AND USE ALLOCATION ASSUMPTIONS IN THE 2007 FEIS ARE NO LONGER VALID.

The 2007 FEIS identifies the minimum water level (1,240-1,247 feet msl) required in Lake Elsinore to maintain water quality at an acceptable level, and it briefly describes the ongoing difficulties associated with maintaining this water level due to continuous and substantial evaporation losses that are as high as 15,500 acre-feet per year [page 3-28]. Additional evaporation losses of 38.2 inches per year from the LEAPS upper reservoir will also occur [page 3-41]. The 2007 FEIS assumes that these evaporative losses would be balanced by 4,480 acre feet/yr of reclaimed “make-up” water from EVMWD’s “Lake Elsinore Stabilization and Enhancement Project” (“LESEP”) and 5,000 acre-feet/yr of ground “make-up” water from EVMWD’s “Island Wells” [Page 3-28]]. Besides the obvious fact that these “make-up” water sources are insufficient to balance Lake Elsinore’s evaporative losses, this analysis fails to consider current and future water allocation trends in the EVMWD. For example, EVMWD’s Urban Water Management Plan (published in 2011) shows that, for an “average” rainfall scenario, the continual extraction of groundwater at a rate as low as 900 acre-feet per year for lake replenishment purposes will result in a significant “deficit” of the local groundwater basin¹³.

The “solution” to these water resource deficits offered by the 2007 FEIS relies on the payment of “water management fees” to EVMWD which will somehow enable EVMWD to simply conjure up the necessary volume of clean make up water. This 2007 FEIS “solution” fails to consider current EVMWD water usage and planning trends, and is therefore insufficient for the purpose of satisfying the Commission’s NEPA obligations in Docket

¹³ Table 4-6 on page 4-13 of the EVMWD “Urban Water Management Plan”. The Plan is available at: <http://www.evmwd.com/civica/filebank/blobdload.asp?BlobID=6033>.

P-14227. Beyond issues related to make up water quality and availability, there is the fact that the FPA will not allow the Commission to simply terminate EVMWD's rights to Lake Elsinore surface water or Island Wells ground water or LESLEP reclaimed water and hand these rights over to TNHC without first considering the significant and far reaching consequences of such action. None of this is addressed or even mentioned in the 2007 FEIS which renders this prior NEPA document obsolete.

THE 2007 FEIS ANALYSIS OF WATER QUALITY IMPACTS IS NO LONGER VALID

The few mitigation measures advanced by the 2007 FEIS to address LEAPS water quality impacts rest largely on EVMWD's LESLEP [See Section 3.3.2.2]. The 2007 FEIS explicitly assumes that 100% of the LESLEP water would be available to the LEAPS project *by right* because EVMWD was a designated co-applicant for the LEAPS license. The 2007 FEIS actually states that "no water acquisition rights would be needed to purchase reclaimed water" for the LEAPS project [page 3-28]. This fundamental assumption is no longer valid because EVMWD is not a co-applicant for the LEAPS license sought in Docket P-14227. TNHC is not entitled to EVMWD's resources and projects *by right*, and the perfunctory assumption to the contrary that is explicitly stated in the 2007 FEIS is invalid. Furthermore, the 2007 FEIS declares (on page 3-38) that the LEAPS and TEVS projects will not cause any adverse impacts on water quality. This conclusion is legally and technically unsupportable because:

- No water quality certification was ever completed for either LEAPS or TEVS, therefore the conclusion that LEAPS will not cause adverse water quality impacts has no basis in fact. Indeed, it was TNHC's failure to complete the water quality certification process in the previous LEAPS license (P-11858) which resulted in the Commission's decision to dismiss that application in 2010.
- The 2007 FEIS conclusion that LEAPS would pose no adverse water quality impacts was based on a superficial impact assessment which assumed that substantial quantities of make-up water would be available to the LEAPS project. As stated above, changes in local water use and allocation profiles that have occurred since 2007 render this assumption inaccurate.
- The small quantity of firm make-up water from "LESEP" which does exist (4,480 acre feet) is actually owned by EVMWD (who is not a party to the instant proceeding) and therefore its availability to the LEAPS project cannot be merely assumed.

CONCLUSION

The passage of time has proven that many of the 2007 FEIS assumptions were quite wrong, and it has rendered other foundational assumptions to be obsolete. For these reasons, the 2007 FEIS is not sufficient to satisfy the Commission's NEPA obligations, and must not be relied upon for this purpose in P-14227.

Respectfully submitted;

/s/ Jacqueline Ayer

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