FILED
01/16/20
04:59 PM

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

Application Of Southern California Edison Company (U 338-E) for a Certificate of Public Convenience and Necessity: Eldorado-Lugo-Mohave Series Capacitor Project.	Application 18-05-007 (Filed May 2, 2018)

WILD TREE FOUNDATION OPENING BRIEF

April Rose Maurath Sommer
Executive and Legal Director

Wild Tree Foundation
1547 Palos Verdes Mall #196
Walnut Creek, CA 94597
April@WildTree.org
(925) 310-6070

Dated: January 16, 2020

TABLE OF CONTENTS

INTRODUCTION	**1**
STANDARD OF REVIEW	**1**
ARGUMENT	**2**
I. The Application Does Not Comply with All Applicable Statutory and Procedural Requirements (Scoping Issue 1)	**4**
A. The Garamendi Principles Have Not Been Complied With	**4**
1. Demand Side Alternatives to the Proposed Project Must Be Considered in This Proceeding	**4**
2. Commission Portfolio Development and CAISO 2012-2013 and 2013-2014 TPPs Did Not Consider Demand Side Alternatives for the Proposed Project	**7**
B. Influence On the Environment Has Not Been Considered and CEQA Has Not Been Complied With (Scoping Issue 1, 3, 4)	**9**
1. Influence On the Environment Must Be Considered in an Application For A CPNC	**9**
2. An EIR is Required	**10**
3. There Are Significant Impacts	
a. The Desert Tortoise (*Gopherus Agassizi*), a State and Federally Protected Endangered Species Will Suffer Significant Impacts	**14**
b. Growth Inducing Impacts Will Cause Significant Impacts	**15**
II. The Proposed Project Does Not Serve a Present or Future Convenience and Necessity (Scoping Issue 2)	**22**
A. The Proposed Project is Not Needed to Meet RPS Requirements	**23**
B. Meeting Needs of Generators is not a Justification for Granting a CPNC	**29**
C. Granting of 1000's of MW of FCDS Does not Establish Need and is Contrary to Commission Policy	**31**
D. CAISO Analyses are Obsolete and Do not Prove Need for the Proposed Project	**34**
1. CAISO 2012-2013 and 2013-2014 TPPs Actually Demonstrate that the Proposed Project is Not needed	**36**

2. CAISO's "Updated analysis" Does Not Demonstrate Need for the Proposed Project	**39**
E. SCE Has Not Demonstrated a need for the Increase in Capacity Requested in this Application	**41**
F. The RA Shortfall Identified In R.17-09-020 Is Best Addressed With Storage	**43**
1. Most of The Identified Projects Will Not Help Meet RA Need	**46**
CONCLUSION	**47**

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

Application Of Southern California Edison Company (U 338-E) for a Certificate of Public Convenience and Necessity: Eldorado-Lugo-Mohave Series Capacitor Project.	Application 18-05-007 (Filed May 2, 2018)

WILD TREE FOUNDATION OPENING BRIEF

Pursuant to the Assigned Commissioner's Scoping Memo and Ruling and Administrative Law Judge Ruling Confirming Adjustment to Scoping Memo Schedule and in accordance with the provisions of Rule 13.11 of the Rules of Practice and Procedure of the California Public Utilities Commission ("Commission"), Wild Tree Foundation ("Wild Tree") submits this Opening Brief in Application of Southern California Edison Company ("SCE" or "Applicant") for a Certificate of Public Convenience and Necessity: Eldorado-Lugo-Mohave Series Capacitor Project.

INTRODUCTION

The proposed project has not been demonstrated to be needed to meet RPS requirements, either for delivered energy or for reliability standards or for any other need. SCE has provided no data to demonstrate or quantify RPS need for FCDS, or that this project is needed to fill them, or that an alternative might not serve the need better. The proposed project would divert significant funds from projects that can achieve significant GHG emission reduction and otherwise meet the

goals of the RPS program and grid reliability and provide additional benefits. SCE has not met its burden of proof that the project is needed and thus a CPNC should not be granted.

STANDARD OF REVIEW

As a public utility, SCE charges must be just and reasonable: "A public utility shall not change any rate or so alter any classification, contract, practice, or rule as to result in any new rate, except upon a showing before the commission and a finding by the commission that the new rate is justified."[1] Unjust or unreasonable rates are not just unpermitted but are illegal; "Every unjust or unreasonable charge demanded or received for such product or commodity or service is unlawful."[2]

Applicant's initially attempted to secure expedited review of this project by filing for a Permission to Construct ("PTC"). Upon protest from the Public Advocates Office ("Public Advocates") the Assigned Commissioner ruled that a Certificate of Public Convenience and Necessity ("CPNC") was required, ruling that, "SCE cannot avail itself of the less stringent PTC Application process for the work for which it has applied. The series capacitor work -- and all the other aspects of the project, which are part and parcel of the series capacitor work -- requires a CPCN application in accordance with GO 131-D Section III Subsection A."[3]

Applicant must obtain from the Commission "a certificate that the present or future public convenience and necessity require or will require such construction."[4] As the Applicant

[1] Pub. Util. Code, § 454.
[2] Pub. Util. Code, § 451.
[3] A.18-05-007, *Assigned Commissioner's Ruling Ordering Applicant To File Amended Application And Directing Caption Modification* (January 9, 2019).
[4] Pub. Util. Code, § 2001.

for a project that would increase rates and requires a CPCN, SCE must demonstrate a need for the Commission to issue the Certificate of Public Convenience and Necessity ("CPCN").[5] The utility "has the burden of affirmatively establishing the reasonableness of all aspects of its application. Intervenors do not have the burden of proving the unreasonableness of [the utility's] showing."[6]

Commission review of this project is subject to the Garamendi Principles. Pursuant to the Garamendi Principles, as codified in Public Utilities Code sections 1001, et seq., a CPNC cannot be issued for a transmission upgrade such as that which SCE has applied for in this proceeding unless transmission alternatives have been considered. Applicant would have the Commission believe that the Garamendi Principles are limited to SB 2431, enacted in 1988.[7] Based upon this old law, Applicant argues that the project is consistent with the Garamendi Principles because it would upgrade existing transmission.[8] This argument ignores the codification of updates to the Garamendi Principles in the Public Utilities Code in SB 1037, enacted in 2005 and further updates in 2011 per SBX2.

Public Utilities Code section 1002.3 requires, per black letter law, that for upgrades to transmission lines that require a CPNC, "the commission shall consider cost-effective alternatives to transmission facilities that meet the need for an efficient, reliable, and affordable supply of electricity, including, but not limited to, demand-side alternatives such as targeted energy efficiency, ultraclean distributed generation, as defined in section 353.2, and other

[5] D.06-11-018 at p. 22 ("The Commission has long held that the applicant carries the burden of proof in a certification proceeding, and we reiterate those determinations today.").
[6] D.06-05-016 at p. 7.
[7] SCE-1 (Chacon) at 12:12-15.
[8] *Ibid.*

demand reduction resources."[9] In SBX2, the Legislature made the application of the Garamendi Principles, including review of transmission alternatives, a *requirement* for any review of an application for CPNC for building or upgrading to a transmission line. Pursuant to SBX2, section 1005.1 was added, requiring that the Commission consider "The availability of cost-effective alternatives to transmission, such as energy efficiency measures and distributed generation."[10]

The Public Utilities Code also mandates that the Commission "shall give consideration to the following factors: (1) Community values (2) Recreational and park areas (3) Historical and aesthetic values (4) Influence on environment."[11] "The obligation to consider the factors listed in § 1002 is independent of the Commission's CEQA obligation. In addition to its CEQA obligations, Pub. Util. Code § 1002 provides the Commission "with responsibility independent of CEQA to include environmental influences and community values in our consideration of a request for a CPCN." (See Re Southern California Edison Company, D.90-09-059, 37 CPUC2d at p. 453.)"[12]

ARGUMENT

I. The Application Does Not Comply With All Applicable Statutory and Procedural Requirements (Scoping Issue 1)

A. The Garamendi Principles Have Not Been Complied With

1. Demand Side Alternatives to The Proposed Project Must Be Considered in This Proceeding

[9] Pub. Util. Code, § 1002.3.
[10] Pub. Util. Code, § 1005.1, subd. (a)(2)(D).
[11] Pub. Util. Code, § 1002.
[12] D.00-05-048 at p. 29.

The Public Utilities Code is clear that non-transmission alternatives to the proposed project must be considered. There is no record evidence regarding non-transmission alternatives – SCE has not put forth any evidence regarding non-transmission alternatives and Commission Staff ("Staff") failed to conduct any alternatives review as part of environmental review. The Code *requires* consideration of demand-side alternatives such as energy efficiency, ultraclean distributed generation, and other demand reduction resources in CPNC applications including this one.[13]

SCE argues that it complied with section 1001 because it provided transmission upgrade alternatives in its Proponents Environmental Assessment ("PEA"). SCE states, "SCE included information about *transmission* upgrade alternatives in the PEA consistent with CPUC General Order ("GO") 131-D and the requirements of CEQA."[14] Review of transmission alternatives is insufficient; SCE has put forth no evidence for Commission consideration regarding demand-side alternatives as explicitly required by law and the Garamendi Principles have not, therefore, been complied with.

The PEA does include a paragraph regarding no project alternative but dismisses this with no analysis, stating, "under the No Project Alternative, no construction and modification of the existing electrical system would occur. Therefore, the No Project Alternative would not meet any of the Proposed Project's objectives."[15] This "analysis" wrongly claims the proposed project objective to be "construction and modification of the existing electrical system." This entirely misses the point that, pursuant to the revised Garamendi Principles codified in the Public Utilities Code, non-transmission alternatives to new transmission projects are preferred. This

[13] Pub. Util. Code, § 1002.3.
[14] SCE-2 (Chacon) 16:1-3 (Emphasis original).
[15] PEA at p. 5-19.

preference is for good reason – the construction, operation, and maintenance of new transmission capacity is expensive and spending on such projects can be better allocated elsewhere especially on project with less environmental burden.[16]

SCE also claims that "given that the CPUC's analysis of the ELM Project found no potentially significant environmental impacts (and hence an MND was prepared), no further analysis of alternatives is required under CEQA.[17] First, as discussed further below, Commissions Staff's decision to not prepare Environmental Impact Review ("EIR"), in which alternatives analysis is required, is in error. Secondly, the requirements of the Garamendi Principles are independent of California Environmental Quality Act ("CEQA") requirements.

If there were a need for this project, the types of non-transmission alternatives to this project that must be considered include, but are not limited to, addition of storage to existing renewable generation facilities on lines that can provide power to SCE's coverage area.[18] As discussed further below, a storage alterative could better fill the need (if a need existed), but would also have several additional benefits compared to adding transmission capacity.

The testimony of Consolidated Edison Development, Inc. also highlights the need for analysis of alternatives to the proposed project in that it reveals that it has been granted partial and interim full deliverability capacity status for projects that are claimed by Applicant and CAISO to need the proposed project to receive full deliverability status.[19] If there were a need for this project, continued and/or expanded use of partial deliverability or interim full

[16] WTF-1 (Freehling) 2:19 – 3:7.
[17] SCE-2 (Chacon) 16:13-15.
[18] WTF-1 (Freehling) 4:3-8.
[19] CED-1 (Nicholson) 9.

deliverability would be another of several additional alternatives to the project that should be considered and analyzed.[20]

2. Commission Portfolio Development and CAISO 2012-2013 and 2013-2014 TPPs Did Not Consider Demand Side Alternatives for the Proposed Project

SCE also claims that consideration of non-transmission alternatives is not required in this proceeding because, "[t]he Commission's Portfolio development and CAISO's TPP processes have already considered demand-side alternatives and still concluded that the ELM Project's transmission upgrades are fundamental and necessary."[21] This statement is untrue on all accounts. First, reliance upon analysis conducted in previous statewide planning proceedings not specifically addressing the proposed project does not meet the clear standard set out in the Code. Secondly, non-transmission alternatives to this project were not considered in CAISO's 2012-2013 and 2013-2014 Transmission Planning Processes ("TPPs").

The Code requires that consideration of non-transmission alternative be undertaken in the application proceeding for a CPNC and specifically for the proposed transmission facility. Section 1002.3 is clear that, "*In considering an application for a certificate for an electric transmission facility pursuant to Section 1001*, the commission shall consider cost-effective alternatives to transmission facilities that meet the need for an efficient, reliable, and affordable supply of electricity. . ."[22]

Furthermore, CAISO has no power to approve non-transmission alternatives and did not consider non-transmission alternatives to the proposed project in the 2012-2013 or 2013-2014

[20] WTF-3 (Freehling) 1:19 – 2:4.
[21] SCE-2 (Chacon) 19:17-19
[22] Pub. Util. Code § 1002.3 (emphasis added).

TPPs. SCE quotes CAISO testimony as evidence that "CAISO also considers demand-side alternatives"[23] but CAISO's generalized testimony about how CAISO generally operates[24] is inaccurate in regards to the 2012-2013 and 2013-2014 TPPs.

The 2012-2013 TPP states, "Though the ISO cannot specifically approve non-transmission alternatives as projects or elements in the comprehensive plan, these can be identified as the preferred mitigation in the same manner that operational solutions are often selected in lieu of transmission upgrades. Within the 2012-2013 transmission planning cycle, the ISO has sought to increase public awareness of the opportunity to propose non-transmission alternatives for consideration in the phase 2 process, but received limited response."[25] As therein described and confirmed through the 2012-2013 TP, the 2012-2013 TPP did not include consideration of any non-transmission alternatives for the proposed project and does not include any consideration of demand-side alternatives for any projects.

The 2013-2013 TPP likewise does not fulfill the requirement that non-transmission alternatives to the proposed project be considered in this application. In the 2013-2014 TPP, CAISO appears to have considered non-transmission alternatives *in a fashion* but not for the proposed project area. CAISO explained its approach in the 2013-2014 TPP:

> In the current planning cycle, the ISO applied a variation of this new approach in the LA Basin and San Diego areas due to the unique circumstances in these areas. Because of the magnitude of the projected reliability needs in these areas incremental transmission options were also studied to complement non-conventional alternatives (i.e., preferred resources), to reduce the need for conventional generation to fill the gap. Thus, unlike the generic application of the methodology in future transmission planning process cycles where preferred resources are considered as an alternative to transmission, the main focus of this effort with respect to the LA Basin and San Diego was to evaluate non-conventional alternatives and identify performance attributes needed from these

[23] SCE-2 (Chacon) 19:2-9.
[24] CAISO-3 (Millar) 2:24 – 4:14.
[25] SCE-1 A5 at p. 585 (CAISO 2012-2013 TPP at p. 27).

> alternatives that could effectively address the local reliability needs in these two priority areas as part of a basket of resources.[26]

The proposed project is not in the LA Basin local area and thus was not studied using the "variation of this new approach." The 2013-2014 TPP does not include consideration of any non-transmission alternatives for the proposed project.[27]

B. Influence on the Environment Has Not Been Considered and CEQA Has Not Been Complied With (Scoping Issue 1, 3, 4)

1. Influence On the Environment Must Be Considered in an Application for a CPNC

The Public Utilities Code mandates that the Commission, independent of CEQA, "shall give consideration to . . .influence on environment."[28] While this obligation may be fulfilled through the CEQA process, where the CEQA process has failed to properly address environmental impacts, it cannot suffice for either CEQA review or review under the Public Utilities Code. In this case, Commission Staff failed to prepare an EIR and did not address significant environmental impacts/influences on the environment including, but not limited to 1.) harm the propose project will cause to the state and federally endangered species Desert Tortoise and other special status species and 2.) harm to a wide variety of special status animals, plants, and habitats from the growth inducing impact of the proposed project of increased development of industrial scale power generation facilities in undeveloped lands of the Mojave Desert.

[26] SCE-1 A6 at p. 1046 (CAISO 2013-2014 TPP at p. 102.)
[27] SCE-1 A6 at p. 1061-1062 (CAISO 2013-2014 TPP at p. 117-118.)

[28] Pub. Util. Code, § 1002; D.00-05-048 at p. 29..

2. An EIR is Required

This Project requires the preparation of an Environmental Impact Review because there are significant impacts; a mitigated negative declaration is insufficient under CEQA, Public Resources Code section 21000 et seq. An EIR is required and a negative declaration cannot be certified because there is substantial evidence in the record regarding impacts to designated critical habitat for the endangered desert tortoise and other special status species and growth inducing impacts that support the fair argument that significant impacts or effects may occur.

"The foremost principle under CEQA is that the Legislature intended the act 'to be interpreted in such manner as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language.'" (*The Pocket Protectors v. City of Sacramento* (2004) 21 Cal. Rptr. 3d 791, 926 quoting *Friends of Mammoth v. Board of Supervisors* (1972) 8 Cal.3d 247, 259.) The California Courts have long adhered to the proposition that, "'It is, of course, too late to argue for a grudging, miserly reading of CEQA.' (*Bozung v. Local Agency Formation Com.* (1975) 13 Cal.3d 263, 274.)" (*Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 390.)

The California Courts "have repeatedly recognized that the EIR is the 'heart of CEQA.'" (*Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 564; *Laurel Heights Improvement Assn. v. Regents of University of California, supra,* 47 Cal.3d at p. 392; see also Guidelines, § 15003, subd. (a)[29].) The purpose of an EIR is to inform the public and decision-makers of the environmental consequences of their decisions *before* they are made. "Thus, the

[29] All references to Guidelines are to the state CEQA Guidelines, which implement the provisions of CEQA. (Cal. Code Regs., tit. 14, § 15000 et seq.) The Guidelines state: "These Guidelines are binding on all public agencies in California." (Guidelines, § 15000.)

EIR 'protects not only the environment but also informed self-government.'" (*Laurel Heights Improvement Assn. v. Regents of University of California, supra,* 47 Cal.3d at p. 392; *Citizens of Goleta Valley v. Board of Supervisors, supra,* 52 Cal.3d at p. 564.)

"With certain limited exceptions, a public agency must prepare an EIR whenever substantial evidence supports a fair argument that a proposed project 'may have a significant effect on the environment.' (*The Pocket Protectors v. City of Sacramento, supra,* 21 Cal. Rptr. 3d at 926-28 citing Pub. Resources Code, §§ 21100, 21151, 21080, 21082.2; Guidelines, §§ 15002, subd. (f)(1), (2), 15063; *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 75.) "CEQA requires a governmental agency [to] prepare an environmental impact report (EIR) whenever it considers approval of a proposed project that '*may* have a *significant* effect on the environment.' (§ 21100, italics added.) (*Quail Botanical Gardens v. City of Encinitas* (1994) 35 Cal. Rptr. 2d 470, 1601.) "'May' means a reasonable possibility. (*League for Protection of Oakland's etc. Historic Resources v. City of Oakland* (1997) 52 Cal.App.4th 896, 904-905 citing (Pub. Resources Code, §§ 21082.2, subd. (a), 21100, 21151, subd. (a).)

A negative declaration may be used if there is no substantial evidence a project may have a significant effect on the environment or the initial study identifies potential significant effects, but provides for mitigation revisions which make such effects insignificant. (Pub. Resources Code, §§ 21080, subd. (c), 21064.) "However, the Supreme Court has recognized that CEQA requires the preparation of an EIR 'whenever it can be fairly argued on the basis of substantial evidence that the project may have significant environmental impact.'" (*No Oil, Inc.* v. *City of Los Angeles, supra* 13 Cal.3d at p. 75; see also *Laurel Heights Improvement Assn.* v. *Regents of University of California* (1993) 6 Cal.4th 1112, 1123.) "Thus, if substantial evidence in the record supports a 'fair argument' significant impacts or effects may occur, an EIR is required and

a negative declaration cannot be certified." (*Quail Botanical Gardens v. City of Encinita, supra,* 35 Cal. Rptr. 2d at p. 1601-2; *See also San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1996) 49 Cal. Rptr. 2d 494, 616-17.)

Where there is substantial evidence in the whole record supporting a fair argument that a project may have a significant effect on the environment, the lead agency shall prepare an EIR, "even though it may also be presented with other substantial evidence that the project will not have a significant effect." (Pub. Resources Code, § 21151, subd. (a); Guidelines, § 15064, subd. (f)(1), (2); *No Oil, supra,* 13 Cal.3d at p. 75; *Architectural Heritage Assn. v. County of Monterey* (2004) 122 Cal.App.4th 1095, 1109; *Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 111-112.) "Substantial evidence" means "enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached." (Guidelines, § 15384, subd. (a).) Substantial evidence "shall include facts, reasonable assumptions predicated upon facts, and expert opinion supported by facts." (Guidelines, § 15384, subd. (b).)

The fair argument standard is a "low threshold" test for requiring the preparation of an EIR. (*No Oil, Inc.* v. *City of Los Angeles, supra,* 13 Cal.3d at p. 84; *League for Protection of Oakland's etc. Historic Resources v. City of Oakland, supra,* 12 Cal.App.4th at p. 905; *Sierra Club v. County of Sonoma* (1992) 6 Cal.App.4th 1307, 1316-1317; *Oro Fino Gold Mining Corp. v. County of El Dorado* (1990) 225 Cal.App.3d 872, 881.) "It is a question of law, not fact, whether a fair argument exists, and the courts owe no deference to the lead agency's determination. Review is de novo, *with a preference for resolving doubts in favor of environmental review." (The Pocket Protectors v. City of Sacramento, supra,* 21 Cal. Rptr. 3d at

p. 928 citing *Architectural Heritage Assn. v. County of Monterey, supra,* 122 Cal.App.4th at p. 1110; *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus, supra,* 42 Cal.App.4th at pp. 617-618; *Stanislaus Audubon Society, Inc. v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 151; *Quail Botanical Gardens Foundation, Inc. v. City of Encinitas, supra* 29 Cal.App.4th at pp. 1602-1603.)

Under the fair argument standard, "deference to the agency's determination is not appropriate and its decision not to require an EIR can be upheld only when there is no credible evidence to the contrary." *(Sierra Club v. County of Sonoma* (1992) 6 Cal.App.4th 1307, 1318; Evidence supporting a fair argument need not be overwhelming, overpowering or uncontradicted. (*Friends of the Old Trees v. Department of Forestry and Fire Protection* (1997) 52 Cal.App.4th 1383, 1402.)

3. **There are Significant Impacts**

The California Supreme Court has made it clear that a "potential substantial impact on endangered, rare or threatened species is per se significant." (*Cit. for Resp. Growth v. City* (2007) 40 Cal. 4th 412, 449 *citing* CEQA Guidelines, § 15065, subd. (a)(1).)

By the Staff's own words, there are significant impacts from this Project:

> [T]he Proposed Project has the potential to temporarily and permanently affect sensitive natural communities, special-status plant and wildlife species, wildlife population and movement patterns, and jurisdictional waters. The project would temporarily disturb approximately 375 acres that would be restored and permanently occupy approximately 7 acres spread over 5 locations (2 series capacitor sites; 3 repeater sites). Cumulative impacts to biological resources could occur as a result of increased ground-disturbing activities by multiple cumulative scenario projects. These cumulative activities could increase the disruption of normal animal breeding, foraging, and migration behavior, the removal of suitable habitat for multiple special-status plant and wildlife species, and the degradation of jurisdictional water features. (Final MND at p. 5-411)

The proposed mitigations in regards to biological resources do not fully mitigate these impacts and are not proposed as project revisions. "A Mitigated Negative Declaration (MND) is a Negative Declaration prepared for a project when the initial study has identified potentially significant effects on the environment but the effects now pose no significant effect on the environment because the project was revised. The revisions to the project plans must mitigate the harmful effects to the environment and there must be no substantial evidence supporting that the revised project will have a negative effect on the environment." (Public Resources Code, §21064.5.)

There have been no revisions to the project plans in the DMND. The proposed biological resources mitigation measures were all effectively proposed by the applicant. The measures in regards to wildlife are especially ill-conceived as these consist of vague instructions to conduct surveys and avoidance. Conducting surveys is not mitigation – this is work that should be done to inform the EIS. Surveying does not serve in any way to protect special status species, it serves to provide information upon which actual mitigation or project denial should be based. The proposed mitigation measures regarding avoidance are so lacking in detail for most species that the feasibility, enforceability, and effectiveness cannot be ensured. For example, the entire mitigation proposed for the Mojave fringe-toed lizard is survey and monitoring and the mitigation proposed for desert tortoise is not enforceable by the Commission.

a. The Desert Tortoise (*Gopherus Agassizi*), a State and Federally Protected Endangered Species Will Suffer Significant Impacts

The Project will have significant impacts on the desert tortoise, not mitigated by proposals in the MND. "Approximately 67 acres of the project footprint area are located in designated critical habitat for desert tortoises." (MND at p. 5-71.) This includes a large segment

of the Mojave National Preserve and the Colorado Desert, Western Mojave, and Eastern Mojave Recovery Units. The MND states:

> The ELM Project would temporarily impact approximately 45.8 acres and permanently impact 0.2 acres of suitable critical habitat for desert tortoise. Other proposed projects within 5 miles would impact large quantities of desert tortoise habitat (i.e., greater than 400 acres). In addition, the LVRAS Project could impact 95.1 acres of occupied desert tortoise habitat, including 44.7 acres of critical habitat. However, the ELM project's impacts would be spread across 84 miles of the alignment. Cumulatively, these projects could contribute to habitat fragmentation and degradation, removal of food and shelter resources, changing normal behavior patterns, and attracting predator species such as ravens (Corvus corax) and coyotes (Canis latrans). However, all of these projects would be subject to permitting and mitigation requirements under the Federal Endangered Species Act and California Endangered Species Act, which are intended to minimize and mitigate for impacts to species, both at the project level and in a regional context. The ELM Project would implement mitigation measures, including pre-activity surveys, monitoring, under vehicle checks, and excavation of desert tortoise burrows, and would restore disturbed land and/or compensate for permanent impacts as required by the USFWS. Other projects would be required to implement similar measures. These measures would reduce the ELM Project's contribution to cumulative impacts. Therefore, cumulative impacts to desert tortoise and its critical habitat are expected to not be cumulatively considerable after the required avoidance, minimization, and compensatory mitigation measures are implemented. (MND at p. 5-412.)

The fact that the Project will destroy designated critical habitat for an endangered species and will require a take permit are evidence of a potential substantial impact which must be reviewed via an EIR, not evidence that there will be no cumulative impacts! The mitigation measures will not serve to mitigate harms especially as it permits excavation of burrows, moving of tortoises, and other activities that are take as defined by the ESA. The heart of the ESA is its prohibition of "take" of endangered species. Generally, a "person," which under the ESA includes individuals, private entities, and government agencies, may not take any listed species. 16 U.S.C. § 1538(a)(1). Unless specifically exempted, the take prohibition applies to threatened species. 50 C.F.R. § 17.31. "Take" is broadly defined as harming, harassing, trapping, capturing, wounding, or killing a listed species either directly or by habitat degradation. 16 U.S.C. § 1532(19). The prohibition also applies to the acts of third parties whose acts bring

about the taking. 16 U.S.C. § 1538(g). Additionally, the adverse modification and destruction of critical habitat, as is proposed here, is prohibited by the Endangered Species Act. (See 16 U.S.C. § 1536(a)(2).)

As explained in more details in Wild Tree's comments on the draft MND (incorporated herein by reference), the western Mojave desert tortoise population segments are already facing extreme pressure from massive population losses and disease, predation, vehicle strikes and habitat fragmentation. As documented in the PEA, predation from ravens the perch on the transmission lines at issues is a serious risk for the tortoises. This population is significantly distinct from other populations, including those in closest proximity, such as the Eastern Mojave, the Northeastern Mojave, and Eastern Colorado populations. Given the extent of this genetic distinctness within the West Mojave population, genetic distinctness must be kept intact in order to maintain local adaptations to environmental conditions. This is all the more important given the extreme pressures this population is already suffering. The proposed mitigation in the DMND that conservation land be purchased is not sufficient to address the significant impact to this population and is also something that the Commission can legally enforce since this is within the purview of the United States Fish and Wildlife Service. An EIR is needed to address the significant impact for the desert tortoise, in particular the western Mojave population.

b. **Growth Inducing Impacts Will Cause Significant Impacts**

This project, by design, will be growth inducing to the detriment of the wild lands and wildlife throughout the Southwest as its stated objective is "increasing the amount of power delivered from California's Ivanpah Valley, Nevada, and Arizona to the ENA through the SCE system." Commission Staff admit that the project will have growth inducing impacts but still failed to prepare an EIR, as required by law. In its response to comments on the draft MND,

Staff demonstrates a lack of understanding of the law regarding growth inducing impacts under CEQA. Staff writes, "The requirement to consider growth-inducing impacts in CEQA applies to an EIR instead of the Initial Study and MND process."[30] This misses the point that growth inducing impacts will result in significant impacts to the environment which is cause for the preparation of an EIR.

CEQA Guidelines Section 15126.2(e) requires an EIR to discuss growth-inducing impacts of a proposed project: "Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. . . Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment."[31]

This requirement must be met and an EIR completed for the proposed project. "[A]n agency cannot avoid the EIR process simply because a project does not itself call for the construction of housing or other facilities that will be needed to support the growth contemplated by the Project. . .We also do not believe that EIR review can be avoided simply because the Project's effect on growth and housing will be felt outside of the project area. Indeed, the purpose of CEQA would be undermined if the appropriate governmental agencies went forward without an awareness of the effects a project will have on areas outside of the boundaries of the project

30

[31] CEQA Guidelines Section 15126.2(e); See *Napa Citizens for Honest Government v. Napa County Board of Supervisors* (2001) 91 Cal.App.4th 342, 367.

area. (*Napa Citizens for Honest Government v. Napa County Board of Supervisors* (2001) 91 Cal.App.4th 342, 369.)

The courts have routinely found that growth inducing impacts necessitate the preparation of an EIR. For example, in *City of Carmel - by-the-Sea v . Board of Supervisors* (1986) 183 Cal.App.3d 229, *City of Antioch v . City Council* (1986) 187 Cal.App.3d 1325, and *Stanislaus Audubon Society , Inc . v . County of Stanislaus* (1995) 33 Cal.App.4th 144 the courts held that there was substantial evidence of a fair argument that a proposed project may have a significant environmental effect and thus an EIR was required. "[These cases] establish that when evaluating the potential environmental impact of a project that has growth inducing effects, an agency is not excused from environmental review simply because it is unclear what future developments may take place. It must evaluate and consider the environmental effects of the "most probable development patterns." (*City of Antioch , supra* , 187 Cal.App.3d at p. 1337, 232 Cal.Rptr. 507.) (*Aptos Council v. Cnty. of Santa Cruz* (2017) 10 Cal.App.5th 266, 292-93.)

The court in *City of Antioch* found that a project required an EIR notwithstanding that the project itself involved only the construction of a road and sewer project which did not in and of themselves have a significant effect on the environment. (*City of Antioch v. City Council, supra,* 187 Cal.App.3d 1325.) The court recognized that the sole reason for the construction was to provide a catalyst for further development in the immediate area. It held that because construction of the project could not easily be undone, and because achievement of its purpose would almost certainly have significant environmental impacts, the project should not go forward until such impacts were evaluated in the manner prescribed by CEQA. (*Id.* at pp. 1337-1338.)

Similarly, in *Stanislaus Audubon Society*, *Inc*, the court concluded there was substantial evidence of a fair argument that a proposed country club may have significant adverse growth-inducing effects on the surrounding area. (*Stanislaus Audubon Society*, *Inc . v . County of Stanislaus, supra,* 33 Cal.App.4th at p. 152. There, after an initial study, the planning department initially found the project would have significant growth-inducing effects and may have impacts on traffic. (*Id*. at p. 153.) In a revised study, the planning department reversed its position and concluded the growth-inducing effects need not be addressed, recommending that impacts of future developments be evaluated at the time actual housing projects are proposed. (*Id*. at p. 154.) The court concluded the county improperly "avoided evaluation of this impact" by deferring consideration of the growth-inducing impacts. (*Id*. at p. 152.) Additionally, the court held: "[t]he fact that the exact extent and location of such growth cannot now be determined does not excuse the County from preparation of an EIR. Just as in [*City of Antioch*], review of the likely environmental effects of the proposed country club cannot be postponed until such effects have already manifested themselves through requests for amendment of the general plan and applications for approval of housing develop ments.... '[r]equiring [an EIR] early in the process enables decision makers to make determinations upon adequate data.' " (*Id* . at pp. 158-159.)

In this case, the draft MND provided no discussion of growth inducing impact. In response to comments from Wild Tree, Staff added the following language to the final MND:

> The development and operation of future generation facilities would not result in substantial population growth, but is likely to result in the conversion of substantial land areas to a new type of land use. The Proposed Project would be growth inducing in that it could improve the viability of development of electric power generation projects covering potentially significant amounts of land. While transmission capacity is necessary for development of these projects, it alone is not growth-inducing. The projects would require approvals from the officials having jurisdiction over the land on which they would be built. The approval process would include environmental review, implementation of conditions of approval and mitigation measures, and consideration of public policy objectives such as

> increasing the supply of renewable energy in lieu of using fossil fuels. (Final MND at pp. 7-65 - 7-66).

Staff's response to comments address this addition as follows: "The Draft IS/MND finds that the environmental effects of future generation facilities would not be direct or indirect effects of the Proposed Project because such facilities are speculative and are not the result of, or made more likely by, the Proposed Project (Draft IS/MND page 3-4, Section 3.2.3). No additional analysis is necessary." (*Ibid.*)

This analysis is illogical and completely contrary to well-established law. The final MND conclusively establishes that 1.) "the Proposed Project would be growth inducing," 2.) transmission capacity is necessary for "development of electric power generation projects covering potentially significant amounts of land", and 3.) the proposed project "is likely to result in the conversion of substantial land areas to a new type of land use." There are thus significant environmental impacts that need to be analyzed in an EIR.

The assertion that growth inducing impacts can be dismissed because induced project would require approvals "from the officials having jurisdiction over the land on which they would be built" is difficult to take seriously. Based upon such reasoning, growth inducing impacts would never need to be reviewed because any type of development - subdivision, power plant, stadium, apartment complex, factory, warehouse, etc. - requires approvals from officials having jurisdiction over the land on which they would be built.

Staff's reliance on the "speculative" nature of future generation facilities to dismiss need to analyze growth inducing impacts is a tried and true technique of agencies that don't want to engage in transparent, honest, and compliant CEQA review. The courts have routinely dismissed claims that growth inducing impacts do not need to be addressed because they are too speculative.

For example, in *City of Redlands*, the County stated it did not anticipate that future development would result from the changes made to the general plan, but the record indicated the existence of potential future development and at least one project already undergoing environmental review. (*City of Redlands v. County of San Bernardino* (2002) 96 Cal.App.4th 398, 409.) In *City of Antioch*, although the creation of the sewage line and appurtenant utilities was a catalyst for future development that was unknown, future development was reasonably foreseeable. In fact, the sewage line and appurtenant utilities were created to facilitate future development in the area. (*City of Antioch*, *supra* , 187 Cal.App.3d at p. 1337.) Similarly, in *Stanislaus Audubon Society*, the planning department itself had already determined in a prior initial study that the development of the country club would have a growth inducing effect. (*Stanislaus Audubon Society*, *supra*, 33 Cal.App.4th at p. 154.) Impacts stemming from this potential growth were therefore reasonably foreseeable. In *City of Carml* , the rezoning project represented a "commitment to expanded use of the property, in addition to finally fixing the size of an environmentally sensitive area [the wetlands]." (*City of Carmel* , *supra* , 183 Cal.App.3d at p. 244.) "*City of Redlands* , *City of Carmel* , *City of Antioch* , and *Stanislaus Audubon Society* all concerned potential impacts that were nebulous and not yet defined, because actual development had not been proposed. Yet the cases share a commonality: the potential impacts were all *reasonably foreseeable* ." (*Aptos Council v. Cnty. of Santa Cruz* (2017) 10 Cal.App.5th 266, 293.)

In this case, future generation facility development is not just reasonably foreseeable but has been demonstrated in great detail by SCE and CAISO. The facilities are far less speculative than most growth inducing impacts as SCE and CAISO have put lists of precisely such projects

in the record.[32] Staff cannot conclude that growth inducing impacts will occur but then "simply declined to consider the possible effects the Project" as it has attempted. "The FSEIR found that the Project would create a need and opportunity for employment, concluding that it would result in a need for additional housing units at locations outside of the Project area. It reasoned, however, that it was impossible to discuss the environmental effects such units would have because "the nature and extent of future, indirect development is not known at this time." The FSEIR therefore simply declined to consider the possible effects the Project might have on housing in surrounding communities. This discussion, in and of itself, is inadequate." (*Napa Citizens for Honest Government v. Napa County Board of Supervisors* (2001) 91 Cal.App.4th 342, 370.)

The proposed project will have, by design, growth inducing impacts that will significant impacts on the environment throughout the Mojave Desert and the many special status species that live there. An MND is insufficient under CEQA and an EIR must be prepared.

II. The Proposed Project Does Not Serve a Present or Future Convenience and Necessity (Scoping Issue 2)

The Applicant has not demonstrated a need for this project and a CPNC should not, therefore, be granted. Applicant claims there is a need for this project to 1.) "Increase the amount of renewable power capable of being delivered into the load serving areas to support the California Renewable Portfolio Standard (RPS) requirements"; 2.) "Meet the requirements of existing Interconnection Agreements (IAs) that require the ELM Project to achieve Full Capacity Deliverability Status (FCDS)"; and 3.) "Facilitate the Full Capacity Deliverability Status (FCDS)

[32] See CAISO-1 (Barave) 11-13.

of new renewable electric generation resources being developed in multiple areas within the California Independent System Operator (CAISO) controlled grid."[33]

A. Proposed Project is Not Needed to Meet RPS Requirements

The proposed project has not been demonstrated to be needed to meet RPS requirements, either for delivered energy or for reliability standards. SCE has already exceeded its 2020 RPS requirement and the Commission has determined in the current Long Term Procurement Proceeding Integrated Resources Planning that SCE requires no procurement through 2030 and that no out of state resources need be procured through 2030.[34]

The Application makes multiple references to the portfolio that the CPUC and CEC sent to CAISO upon which the need for this project was identified. But the Application and testimony on this point are misleading because they ignore the fact that this old portfolio has been superseded by the implementation of SB 350 in R.16-02-007, the Long Term Procurement Planning ("LTPP") and Integrated Resources Planning ("IRP") proceeding or the fact that an RPS portfolio was approved for SCE in 2018 that requires no new resources. In the application, for example, SCE writes "Moreover, the Portfolios submitted to the CAISO by the CPUC and CEC as part of the RPS required that all new generation resources be fully deliverable as detailed within the CPUC's RPS Calculator Guide" and cites to Planning Assumptions Update and Scenarios for use in the CPUC Rulemaking R.13-12-010 (The 2014 Long-Term Procurement

[33] SCE-1 (Chacon) 9:14-24.
[34] D.19-04-040.

Plan Proceeding).[35] R.13-12-010 and the 2014 LTPP are irrelevant given the decision issued in the current LTPP cycle.

Applicant's testimony, notably submitted many months after D.19-04-040 was issued in R.16-02-007, repeats the claim, with no mention of the most recently approved IRP portfolio that requires no procurement by SCE through 2030, that the project was identified as needed based on these outdated portfolios. The testimony does admit that "The RPS Calculator has since been replaced as part of the new Integrated Resource Planning (IRP) process."[36] But, no further mention of the IRP process is made an no explanation is given as to how FCDS or EO are treated under the IRP process.

The SB 100 planning goal was taken into consideration in the Commission's most recent *Decision Accepting Draft 2018 Renewables Portfolio Standard Procurement Plans*.[37] That decision approved SCE's requested plan whereby it would *not procure* RPS resources in 2018 and would actually sell surplus RECs. In other words, SCE has so much renewable energy that it cannot even use it all. Furthermore, SCE's portfolio plan states, "SCE is well positioned to meet the CP 3 2020 33% RPS target with existing projects and projects under development (risk-adjusted). Therefore SCE did not hold an RPS procurement solicitation for the 2016 and 2017 cycles. Since the Commission did not adopt REC allocation PCIA methodology in the PCIA OIR proceeding, SCE forecasts that it will have excess RECs at least through 2027 without the use of its REC bank and through CP 6 (2028-2030) and beyond with the use of the REC bank for compliance purposes."[38]

---

[35] Application at p. 7fn 6.
[36] SCE-1 (Chacon) 25.
[37] D.19-02-007 at p. 4; R.18-07-002, SCE 2018 Final Renewables Portfolio Standard Procurement Plan (April 2, 2019) at pp. 55-56.
[38] R.18-07-002, SCE 2018 Final Renewables Portfolio Standard Procurement Plan (April 2, 2019) at p. 43..

In addition, SCE will have further declining load as more and more customers shift to publically owned power options, especially community choice aggregators ("CCAs"). SCE is very conservatively forecasted to have an estimated loss of its 23% of its bundled customers between 2017 and 2030.[39] This departure could be even higher as additional CCAs form. As the Commission explained in it decisions approving 2018 RPS plans, "SCE states that it expects additional cities and eligible public entities within the SCE service territory to begin CCA service. SCE had its first departing CCA load starting in May 2015 in the form of Lancaster Choice Energy. Apple Valley Choice Energy began operations at the beginning of April 2017, followed by Pico Rivera Innovative Municipal Energy in October 2017, Clean Power Alliance (CPA or Los Angeles County) Phase I implementation in February 2018, San Jacinto Power in April 2018, Rancho Mirage Energy Authority in May 2018, and CPA Phase 2 in June 2018. Desert Communities Energy (DCE) was expected to begin service in August 201849 followed by three additional phases of CPA covering much of Los Angeles and Ventura counties in 2019. Additional cities, counties, and governmental aggregations within the SCE service territory have either initiated contact, requested load data from SCE, or passed a municipal ordinance related to their interest and intention to developing CCAs. These entities have the potential to represent a significant departure of load from SCE's bundled procurement service. As additional large departures come to fruition, they will have proportionally significant impacts on SCE's compliance with RPS goals by reducing SCE's RPS need."[40]

[39] 2018 Integrated Energy Policy Report 1-in-2 peak coincident forecast, Mid Baseline Mid AAEE AAPV, available at: https://efiling.energy.ca.gov/GetDocument.aspx?tn=226367&DocumentContentId=57142

[40] D.19-02-007 at pp. 45-46

Additional transmission capacity has not been demonstrated to be needed by SCE, or generally throughout the state, to meet RPS targets and goals. The fact of the RPS does not by itself establish a need for more power line capacity; its primary significance is switching to different sources of energy. SCE has already met its 2020 RPS goal of 33%, is selling surplus RPS resources, and has not demonstrated a need for additional power line capacity to meet its RPS requirements.

Neither SCE nor any other project proponent has demonstrated that this project is needed to meet any RPS requirements. CAISO obscures the fact that current RPS requirements have been exceeded and thus, this project cannot possibly be necessary to "to integrate renewable resources sufficient to meet the State's RPS requirements."[41] CAISO states, "Full Capacity Deliverability Status *was* a necessary and reasonable requirement for the renewable generation portfolios to achieve the 33 percent RPS. Energy-only service *was not* sufficient for these resources, as explained in more detail below."[42] The use of past tense is critical here as, as discussed above, the context has changed radically since the CAISO transmission studies and plans were completed many year ago and this justification for this project is no longer valid.

Procurement of renewables by the investor owned utilities ("IOUs"), including SCE, has already exceeded the 33% target using existing transmission, adequate to meet policy requirements until at least 2026. [43] The Commission explains, "The three large IOUs are currently forecasted to continue to surpass RPS requirements and have excess procurement for the next six years. The IOUs may choose to apply excess renewable electricity procured in prior years to meet their RPS requirements in future compliance periods. Alternatively, they may sell

[41] *Ibid.*
[42] *Id.* at p. 8.
[43] WTF-4 Appendix A: CPUC*, 2019 California Renewable Portfolio Standard Annual Report* (November 2019) at pp. 3-6.

renewable energy credits (RECs) associated with the excess procurement to other load serving entities ("LSEs"), such as CCAs or electric service providers ("ESPs"), or provide higher than required amounts of renewable energy to their customers."[44]

The IOUs will most likely meet RPS requirements out to 2030 given 1) the right to roll over surplus credits into future years, and 2) the high likelihood of additional load departure as described further above. SCE, in fact, stated that it has excess RECs through 2030 "and beyond."[45] Any need for construction of new renewable projects to meet the RPS going forward will be for other LSEs although this is further mitigated by the opportunity for other LSE's to purchase excess RECs from the IOUs.

"SCE has so much renewable energy that it cannot even use it all"[46] and did not hold RPS procurement solicitations in past years. But the picture is even more dramatic; as the Commission explains, "Given that the IOUs have significant excess eligible RPS procurement to apply in later years, they did not conduct annual RPS solicitations in 2016, 2017, 2018, or 2019, nor do they plan to undertake solicitations for additional renewables in 2020."[47]

CAISO argues for the project based on the claimed RPS need of municipal power agencies, specifically Los Angeles Department of Water and Power ("LADWP").[48] Wild Tree is aware of no data that SCE or CAISO presented in this proceeding about LADWP's need for meeting the RPS. CAISO claims that its support of this project is now also based upon an "expedited deliverability assessment" independent from its 2019-2020 transmission planning

[44] *Id.* at p. 4.
[45] Direct Testimony of Robert Freeling (Wild Tree Foundation) at p. 11 quoting R.18-07-002, SCE 2018 Final Renewables Portfolio Standard Procurement Plan (April 2, 2019) at p. 43.
[46] WTF-1 (Freehling) 7:1-4.
[47] CPUC*, 2019 California Renewable Portfolio Standard Annual Report* (November 2019) at p. 6.
[48] Direct Testimony of Neil Millar (CAISO) at pp. 6-12.

process.[49] CAISO provides no analysis, data, or any information on this assessment other than to state that this expedited assessment is not based upon comprehensive results from the 2019-2020 transmission planning process.[50] In addition, publically owned utilties are generally outside the scope of CPUC regulation.

According to LADWP,[51] it had 32% renewable energy in 2018, which should already meet the 2020 target because the RPS is measured as a percentage of retail sales rather than percentage of generation.[52] With retail sales of about 22,000 gigawatt-hours, LADWP should have 7,000 gigawatt-hours of renewable energy today. To reach 60% RPS in 2030 implies LADWP should have 13,000 gigawatt-hours of renewable energy by 2030, an additional 6,000 gwh compared to what they have now. LADWP owns a transmission line to their Utah coal plant which they are planning to retire by 2025.[53] That should free up about 1800 MWs of existing transmission capacity for renewable energy, which should be able to carry 5,000 gwh of solar and wind energy, or much more if energy storage is added. This demonstrates that when conventional power sources are replaced with renewable generation, the transmission capacity is freed upon on existing wires. Capacity factor would be lower with replacement of conventional power sources with solar and wind but the additional of storage increases the capacity factor.

The only other LSEs that might have a large "need" are the CCAs. But they were already procuring an average 45% renewable energy last year[54], and are likely near 50% this year given

[49] CAISO-1 (Barave) 6.
[50] *Ibid.*
[51] LADWP, *Power Content Label*, https://www.ladwp.com/ladwp/faces/ladwp/aboutus/a-power/a-p-powercontentlabel?_adf.ctrl-state=i0znntstf_4&_afrLoop=220498763897324, [accessed November 18, 2019].
[52] Due to line losses, 32% of generation should be at least 33% of retail sales.
[53] WTF-4 Appendix B: CEC, *California's Declining Reliance on Coal* (October 2018) at p. 9, available at: https://www.energy.ca.gov/data-reports/tracking-progress/declining-reliance-coal.
[54] CPUC, *2019 California Renewable Portfolio Standard Annual Report* (November 2019).

their publicly available claims. A 60% RPS for 2030 is equivalent to about 56% of generation, so the gap (called the "net short") to the 2030 target for CCAs to reach this target is relatively small today. Also, like the IOUs, CCAs are way over-procured compared to the current requirement. Therefore they should have the right to "roll over" extra credits into future years and, as mentioned above, can also purchase also RECs from the IOUs.

B. Meeting Needs of Generators is not a Justification for Granting a CPNC

Applicant has made no attempt to demonstrate that this project will benefit ratepayers and certainly has not met its burden of proof to do so. Instead, SCE openly admits that the proposed project is designed to benefit generators, stating, "Q: Who would benefit from the ELM Project? A: The ELM Project would benefit generators interconnecting to the CAISO-controlled grid . . . certain generators requesting to interconnect in other areas including areas served by the Valley Electric Association (VEA), GridLiance West (GLW) and San Diego Gas & Electric (SDG&E), all of which are a part of the CAISO-controlled grid . . . Load Serving Entities (LSEs) that are required to meet the requirements of the California RPS by providing electricity from renewable energy resources."[55]

Serving the needs of generators is not the role of the Commission; the Commission is tasked with providing just and reasonable rates and reliable and safe service to ratepayers. Further, in reviewing an application for a CPNC the Commission shall give consideration community values, recreational and park areas, historical and aesthetic values, and influence on environment."[56] A CPNC should, therefore, only be granted where benefit to ratepayers outweighs harm to communities and our environment. Meeting the needs of generators, as

[55] SCE-1 (Chacon) 14:12-21.
[56] Pub. Util. Code, § 1002.

defined in contracts written by SCE and freely entered into by the generators, is not a valid justification for the granting of a CPNC.

Applicant's entire argument that there is a need for this project to meet the requirements of existing IAs that allegedly require the Project to achieve FCDS, hinges on two projects: "SCE's [RPS] compliance is also reliant on projects such as Q855 (Copper Mountain Solar 4) and Q993/Q994 (Sunshine Valley Solar) which currently have both Interconnection Agreements (IAs) and Power Purchase Agreements (PPAs) with SCE. Without the ELM Project, those generators will not be able to achieve FCDS and would not be eligible for RA, thus hindering their ability to provide renewable energy to SCE in support of the California RPS."[57] This is little more than a bait and switch. This argument conflates meeting the RPS which is based on percentage of megawatt hours of retail sales, and meeting capacity needs which is not the primary metric by which compliance with the RPS program is measured.[58] Furthermore, modifications could be made to the proposed projects, such as adding energy storage or utilizing temporary FCDS, which might allow FCDS to be achieved with existing wire capacity.[59] But, as discussed further below, there is no need for the additional FCDS claimed by Applicant or CAISO.

Applicant has not provided sufficient detail about these projects, but according to CAISO's Public Queue Report, the Sunshine Valley Solar projects are two joint 50 MW solar project in NV without storage connected to VEA through the Valley Substation.[60] Copper Mountain Solar project is a 92MW solar project in NV without storage connected to SDG&E

[57] SCE-1 (Chacon) 23:10-15.
[58] WTF-1 (Freehling) 7:1-6.
[59] *Ibid.*
[60] WTF-2 Appendix A: CAISO, *Public Queue Report*, http://www.caiso.com/PublishedDocuments/PublicQueueReport.xlsx (report run October 22, 2019).

through the Merchant Substation. [61] The potential granting of FCDS to two out-of-state projects, totaling less than 200 MW, without storage, interconnecting to other load serving entities, not on the subject transmission lines, is insufficient to demonstrate need for a project that will costs $250 million in upfront capital expense, plus hundreds of millions more for operating, financing and profit costs.

C. Granting of 1000's of MW of FCDS Does not Establish Need and is Contrary to Commission Policy

Granting of FDCS for individual projects is not a justification for this project and would be contrary to Commission policy. Applicant's claim that there is a need for this project to facilitate the FCDS of new renewable electric generation resources being developed in "multiple areas" within the CAISO grid is contradicted in its own testimony. Applicant testifies that these projects are not even "associated" with SCE RPS requirements: "All remaining generation interconnection projects with completed IAs that SCE has identified as requiring the ELM project to achieve FCDS are not discussed within the context of this explanation since SCE does not have PPAs with those projects. *Therefore the renewable power that those projects deliver are not associated with SCE's individual RPS requirements*. However, the renewable power that those projects deliver *may* be associated with the RPS requirements of other LSEs within California."[62] SCE has not and cannot demonstrate a need for SCE ratepayers to $100 millions dollars, for a project that *might* help generators that do not provide power to SCE ratepayers get FCDS on the grounds that this "*may* be associated with the RPS requirements of other LSEs within California."

[61] *Ibid.*
[62] SCE-1 (Chacon) 23:fn30 (emphasis added).

Applicant does not explain that the consequences of a resource operating as energy only delivery instead of FCDS can still contribute to the RPS.[63] Without FCDS there may occasionally be some curtailment, which is an expected and healthy part of any optimized grid.[64] Furthermore, as an alternative, projects could potentially deliver less capacity to FCDS, either through downsizing the project, or making use of energy storage, or derating the FCDS capacity to what is available on the line. As described further below, limited capacity of a transmission line can be utilized as a grid integration tool.[65]

Even more importantly, Applicant and CAISO's testimony obscures the fact that granting of 1000s of MW of FDCS is not just no longer relevant but is in fact against Commission policy given recent Commission decisions. CAISO states, "Full Capacity Deliverability Status *was* a necessary and reasonable requirement for the renewable generation portfolios to achieve the 33 percent RPS. Energy-only service *was not* sufficient for these resources, as explained in more detail below."[66] The use of past tense is critical here; granting of FDCS was never a justification for this project but is most certainly not now, given clear Commission decision to the contrary.

Speaking out of both sides of its mouth, CAISO states that "In developing renewable generation portfolios to achieve higher levels of RPS, and in particular, the Reliability and Policy-Driven Base Case transmitted for the purpose of the current 2019-2020 transmission planning process, the Commission identified volumes of generation requiring Full Capacity Deliverability Status and additional volumes of Energy Only resources"[67] but omits the fact that the FDCS volumes identified by the Commission are an order of magnitude less than CAISO

[63] WTF-1 (Freehling) 8:12-19.
[64] *Ibid.*
[65] *Ibid.*
[66] CAISO-3 (Millar) 8:12-14 (emphasis added).
[67] CAISO-3 (Millar) 9:4-10.

claims are needed. CAISO, without support, states that "these updated portfolios do not detract from the previously-identified needs or the volumes requiring Full Capacity Deliverability Status, but build on previous plans."[68] This statement is inaccurate. Nonetheless, CAISO persists in claiming that this project must be approved so that a long list of projects can achieve FDCS.[69]

In its opening testimony, CAISO claims there are "There are currently proposed projects with a total nameplate capacity of approximately 10,900 MW in the CAISO's interconnection queue that depend on the Proposed Project for achieving Full Capacity Deliverability Status."[70] In its most recently-approved Long Term Procurement/Integrated Resources Plan portfolio, the Commission provided CAISO a final portfolio to be studied in the CAISO's TPP which allocates resources to specific substations on the CAISO transmission grid."[71] Based on this current portfolio, the Commission has determined that the new renewable and storage buildout *for 2030* should include 7304 MW FDCS resources *for the entire state*.[72] The Commissions' portfolio allocated just *800 MW* of FDCS for *solar only* for S. Nevada area[73] and thus CAISO's argument that this project should be approved so that over 10,000 of MWs, including MWs from many speculative projects and wind and natural gas projects, should be granted is in contradiction to Commission policy. CAISO and SCE lists of projects also include projects that are planned

[68] CAISO-3 (Millar) 9:9-10.
[69] CAISO-1 (Barave) 11-13.
[70] CAISO-1 (Barave) 11:3-6.
[71] D.19-04-040 at p. 120 ("The final portfolio to be studied in the CAISO's TPP also required allocating the resources to specific substations on the CAISO transmission grid to facilitate power flow analysis. The final portfolio is posted on the Commission's web site at: http://www.cpuc.ca.gov/General.aspx?id=6442460548.)

[72] CPUC, *Reliability and Policy-Driven Base Case*, available at: https://www.cpuc.ca.gov/General.aspx?id=6442460548
[73] *Ibid.*

online dates from 2019-2024. The Commission's portfolio does not call for any new solar prior to 2022 and specifically does not call for any new resources in the S. Nevada area prior to 2022.[74]

D. CAISO Analyses are Obsolete and Do not Prove Need for the Proposed Project

Over the past seven years, there have been many material changes to conditions and the law that make CAISO's previous plans no longer relevant. The passage of time has also shown this project to be unnecessary to achieve the claimed policy objectives.[75] CAISO claims that "No material changes in circumstance have been identified by the CAISO or other stakeholders that would render the Proposed Project unnecessary."[76] In this same testimony, CAISO admits that "some changes have occurred since the time the Proposed Project was approved as part of the 2012-2013 and 2013-transmission Plans" but asserts that "the Proposed Project remains necessary to integrate renewable resources necessary to meet the State's RPS goals and provide adequate transmission capability to reliably operate the grid."[77]

This characterization is inaccurate. Planning that occurred in 2012-2014 relied on even older demand forecasts and policies that do not, in any way, reflect the current or forecasted circumstances.[78] As discussed further below, the forecasting has been proven to be wildly

[74] D.19-04-040 at p. 114; CEC, *Energy Commission staff's allocation of the CPUC's Integrated Resource Planning (IRP) renewable energy portfolios to California Independent System Operator (CAISO) controlled substations* (March 3, 2019), available at: https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=17-MISC-03 .
[75] WTF-3 (Freehling) 7:3-5.
[76] CAISO-3 (Millar) 4:24-26.
[77] *Id.* at p. 11.
[78] CAISO-1 (Barave) (CAISO) 3-4 ("To identify the need for the Proposed Project, the CAISO relied on the March 12, 2012 letter from the Commission and CEC providing the recommended portfolios for use in the CAISO 2012-2013 transmission planning process and a second letter issued February 7, 20134 providing the recommended portfolios for the 2013-2014 transmission planning process.")

inaccurate. CAISO's planning in 2012-2014 did not include many subsequently enacted legislative mandates including multiple programs for energy storage (1325 megawatts of new storage for the IOUs, plus 500 megawatts of IOU distributed storage, over 200 megawatts of CCA and DA storage, and the current forecast for over 1500 megawatts of customer storage supported by the SGIP program and declining costs), the dramatic expansion of rooftop solar, the doubling of additional energy efficiency from SB 350, the growth of community choice and direct access, and the expansion of the RPS to 60% of retail sales by 2030.[79] There have also been large reductions in forecast future growth of electricity demand, to the point where LSE sales are now projected to be flat or shrinking over the next decade.[80] The process for procurement planning has been entirely changed due to the 2015 enactment of SB 350 regarding integrated resources planning and procurement planning. Most critically, as discussed further below, the RPS goals have been exceeded for many years.

CAISO's testimony itself, in a footnote, explains why the results of the old transmission plans are no longer relevant: "The CPUC declined to provide a base RPS portfolio for policy-driven transmission planning in the 2018-2019 Transmission Plan, citing the status of the integrated resource planning process and the expectation that additional policy-driven transmission was unlikely to be needed to achieve 2030 goals."[81] The planning is also based on outdated assumptions that do not take into account installation of large quantities of behind the meter solar; energy efficiency; or past load departure due to formation of community choice aggregators ("CCAs") and future load departure due to expansion of CCAs and direct access and

[79] WTF-2 (Freehling) 7:16 – 8:9.
[80] *Ibid.*
[81] CAISO-1 (Millar) 6:fn1.

potential load departures due to the creation of new public power agencies (i.e. municipally-owned power, irrigation districts, and cooperatives) in response to deenergization policies.[82]

Furthermore, CAISO's testimony stresses that it "targeted an initial operation year of 2016"[83] for upgrades to the Eldorado-Lugo and Lugo-Mohave lines for which "the policy-based purpose of the project was to integrate renewable resources sufficient to meet the State's RPS requirements."[84] Yet many years later, without the upgrades requested in this project, the RPS goals have still been exceeded.

1. CAISO 2012-2013 and 2013-2014 TPPs Actually Demonstrate that the Proposed Project is Not needed

As explained above, the 2012-2013 and 2013-2014 TPPs are obsolete and do not provide justification for this project. But, even assuming the old TPPs were still relevant under current conditions, they actually demonstrate that the proposed project is not needed. In the 2012-2013 TPP, CAISO describes its analysis process as follows:

> In consultation with interested parties, CPUC staff developed four renewable generation scenarios for meeting the 33 percent RPS goal in 2020. These scenarios vary by technology, location, and other characteristics and were developed by considering transmission constraints, cost, commercial interest, environmental concerns, and timing of development. A major enhancement in the development of the scenarios in this planning cycle was, with the support of the CEC, the incorporation of input from the Desert Renewable Energy Conservation Plan on environmental scoring into the scenario development. The CPUC proposed that one of these, the commercial interest scenario, be considered as a base case for ISO planning purposes, and the other three scenarios, the cost-constrained scenario, the environmentally-constrained scenario, and the high distributed generation scenario also be studied. In consultation with the CPUC, the ISO further modified the commercial interest scenario based on stakeholder feedback to place further emphasis on potential development in Nevada to better reflect permitting requirements for projects connecting to the ISO in that state.[85]

[82] WTF-3 (Freehling) 8:14-20.
[83] CAISO-1 (Millar) 11:4-5.
[84] *Id.* at p. 10:23-24.
[85] SCE-1 A5 at p. 572-573 (CAISO 2012-2013 TPP at p. 14-15).

This results of this process do not demonstrate need. First and foremost, the study was designed to meet the 33% RPS goal in 2020. As discussed in more detail above, this goal has been met and exceeded prior to 2022 and thus any conclusions reached in 2013 that the proposed project was needed to meet 2020 RPS goals is moot. Additionally, the scenario selected as the base case scenario has been proven to be wrong in that there has been far greater penetration of behind-the-meter solar and renewable generation in general than assumed. And finally, as discussed further below, the proposed project was found to be not needed when analyzed under other portfolios.

The Commission's old portfolio development and CAISO's old TPP processes did not consider demand-side alternatives to the proposed project and did not "conclude[] that the ELM Project's transmission upgrades are fundamental and necessary." They showed that even under scenarios that greatly underestimated distributed generation, the Eldorado-Lugo series capacitor project is not needed.

The following table shows the forecasted MWs of distrbuted solar used in the 2012-2013 TPP.

Table 1. CAISO 2012-2013 TPP Scenarios Assumed Distributed Solar all IOUs in 2022[86]

Scenario	MWs of distributed solar
Base Case (Commercial interest)	2051
Cost-constrained	2051
Environmentally-constrained	4241
High distributed generation (DG)	7357

[86] SCE-2 (Chacon) 15:fn44 (CPUC and CEC, *Letter to CAISO Re: Revised Base Case and Alternative Scenarios for CAISO 2012-2013 Transmission Planning Process* (May 16, 2012) available at http://www.caiso.com/Documents/2012-2013-FinalRenewableGenerationPortfoliosRecommended_CPUC-CEC.pdf.

As you can see in Table 1, the base case assumed far less distributed solar than the high DG scenario and even the high DG scenario assumptions were highly inaccurate. The assumptions upon which the 2012-2013 TPP were extremely inaccurate. As of October 31, 2019, there were 8730 MW of installed distributed solar in California.[87] With average installation of more than 1000 MW a year since 2015[88], installed distributed solar in California will continue to grow.

The base case scenario used to justify the proposed project in the 2012-2013 TPP underestimated distributed solar penetration by more than 4 times. Even the high DG scenario underestimated distributed solar by a huge margin and the environmentally-constrained scenario assumed less than half of actual installed distributed solar. The base case scenario was made even more results-oriented and less realistic by CAISO baking into its results an increased need for capacity on lines that connect to Nevada including those at issue by modifying the base case to "place further emphasis" on development in Nevada.

As you can see in the following table from the 2012-2013 TPP, even with greatly underestimated assumptions about distributed generation, CAISO's analysis showed that the Eldorado-Lugo series project is not needed under the high DG and environmentally constrained scenarios.[89]

Table 4.3-6: Summary of ISO proposed mitigation for policy-driven studies

ISO Proposed Mitigation	High DG	Environmentally Constrained	Commercial Interest	Cost Constrained
Reconfigure Eldorado – Lugo 500 kV to classify outage as L-1-1	X	X	X	X
Upgrade series cap Eldorado - Lugo 500 kV	-	-	X	X

[87] California Solar Initiative, *California Distributed Generation Statistics website*, https://www.californiadgstats.ca.gov/ [as of January 15, 2020.]
[88] *Ibid.*
[89] SCE-1 A5 at p. 838 (CAISO 2012-2013 TPP at p. 280.)

The 2013-2014 TPP only utilizes three scenarios – commercial/base case, environmental, high DG.[90] These scenarios assumed even less distributed solar than the 2012-2013 TPP even though they are for further in the future, making the results even less reliable.

Table 2. CAISO 2013-2014 TPP Scenarios Assumed Distributed Solar all IOUs in 2023[91]

Scenario	MWs of distributed solar
Base Case (Commercial interest)	1692
Environmental	2974
High distributed generation (DG)	5951

Again, there is currently more than there were 8730 MW of installed distributed solar in California.[92] The 2013-2014 TPP states "The following two transmission upgrades are needed for the base portfolio, plus at least one other portfolio: Lugo–Mohave series cap and terminal equipment upgrade."[93] As in the 2012-2013 TPP, the Lugo-Mohave series capacitor project was found to be not needed under either the high DG or environmental portfolios even when these portfolios drastically underestimated distributed generation.

2. CAISO's "Updated analysis" Does Not Demonstrate Need for the Proposed Project

CAISO's claims regarding an updated analysis that provide new justifications for the project are not credible. First, CAISO claims that it has performed an "expedited deliverability

[90] SCE-1 A5 at p. 1095 (CAISO 2012-2013 TPP at p. 151.)
[91] SCE-2 (Chacon) 15:fn44 (CPUC and CEC, *Letter to CAISO Re: Revised Base Case and Alternative Scenarios for CAISO 2012-2013 Transmission Planning Process* (May 16, 2012) available at http://www.caiso.com/Documents/2012-2013-FinalRenewableGenerationPortfoliosRecommended_CPUC-CEC.pdf.
[92] California Solar Initiative, *California Distributed Generation Statistics website*, https://www.californiadgstats.ca.gov/ [as of January 15, 2020.]
[93] SCE-1 A6 at p. 1142 (CAISO 2013-2014 TPP at p. 198.)

assessment" independent from its 2019-2020 transmission planning process.[94] It provides no analysis, data, or any information on this assessment other than to state that it is not based upon comprehensive results from the 2019-2020 transmission planning process.[95]

Secondly, CAISO's claims that there is a project need based on its assessment of scheduling limitation on the West of Colorado River path is similarly without evidentiary support and is based on claims regarding entitlements that contradict claims SCE has made. CAISO states, "Based on the WECC 2019 Path Rating Catalog, CAISO load serving entities maintain 3,579 MW of entitlements on the Northern West of River Path, which is used to deliver renewable resources from Eldorado, Mountain Pass, and Southern Nevada. If more than 3,579 MW of CAISO generation develops in these areas, LADWP's system will experience loop flows leaving it inadequate for LADWP's own resources that are supposed to be delivered on these lines."[96] CAISO's testimony is not supported by attachment of or even citation to the WECC 2019 Path Rating Catalog from which it cites these figures as evidence. According to WECC, the Northern system of the West of Colorado River Path aka Path 46 includes the following lines: Eldorado - Lugo 500 kV, Eldorado – Cima- Pisgah 230 kV lines 1 & 2, Mohave - Lugo 500 kV, Julian Hinds - Mirage 230 kV, McCullough - Victorville 500 kV lines 1 & 2, Mead - Victorville 287 kV, Marketplace - Adelanto 500 kV. According to SCE, its entitlements just on the Eldorado-Lugo and Mohave-Lugo lines are 3723 MWs, which is greater than the entitlements CAISO claims exist on this entire path.

[94] CAISO-1 (Barave) 6:18-25.
[95] *Ibid.*
[96] *Id.* at p. 9:21-26.

CAISO claims that "4,268 MW9 of existing and planned resources will rely on the Northern West of River Path to deliver renewable energy to CAISO load."[97] This does not explain why SCE would then need 5716 MW of entitlements, as it claims it would have on just the two lines if this project were approved.[98] With entitlements on other lines in path 46, the system would be greatly oversized with more than 1400 MW of excess capacity as alleged by CAISO for the entire system just on the two lines. Furthermore, SCE claims it has 3723 MW of entitlements on the two lines but maximum historical usage on the two lines combined is 2305 MW (2018).[99] There appears to be approximately 1418 MW of used capacity on this line. Neither CAISO nor SCE have explained why there is a need for 1400 more MW than claimed is needed to meet the Commission's 2018 LTPP/IRP in additional to 1400 MW beyond what is actually used on the lines.

E. SCE Has Not Demonstrated a need for the Increase in Capacity Requested in this Application

SCE has made no demonstration that there is a need for the amount of increased power line capacity they have requested be approved in this application. It has provided only unsupported statements that the project is needed to meet RPS requirements and that the project can assist in meeting resource adequacy requirements without providing any corresponding data regarding their current portfolio, current capacity of the lines, or planned upgrades.

It appears, in fact, that there is unused capacity on the lines. According to SCE, the "The maximum amount of MWs that the Eldorado-Lugo 500 kV Transmission Line (T/L) is currently rated to deliver under normal operating conditions is based on the existing rating of the T/L,

[97] Id. at p. 10:1-4.
[98] CAL ADV-7 (ORA DR#4Q5 SCE Response).
[99] WTF-2 (WTF DR#2 SCE Response).

which is identified as approximately 1,610 MVA"[100] and the Lugo-Mohave Line is rated under normal operating conditions as approximately 2078 MVA.[101] SCE appears to equate MVA with MWs that can be delivered on these lines.[102]

According to SCE, the maximum MWs that have ever flowed across the El Dorado-Lugo line is 1418 MW[103] and the maximum MWs that have ever flowed across the Lugo-Mohave line is 926.[104] According to SCE, the requested upgrades to the Lugo-Mohave line will increase capacity by 780 MVA, from 2078 to 2858[105] and will increase the capacity of the Eldorado-Lugo line by 1248 MVA, from 1610 to 2858.[106] But, SCE adds that under "emergency operating conditions" the Lugo-Mohave lines will be rated at 3429 MVA and the Eldorado-Lugo line at 3429 MVA.[107]

As demonstrated in the following Table 3, assuming that the MWs that can be delivered on the lines is roughly equivalent to MVA, there is a large amount of capacity on the existing lines that is not being utilized, especially on the Lugo-Mohave Line. The Lugo-Mohave Line appears to currently be used for less than half of its available capacity.

As explained above, storage of renewable generation should be considered as an alternative to the proposed project. Storage can be used to meet resource adequacy, increase reliability, decrease GHG emission, and provides many other benefits. In this case, since there is existing unused capacity on the lines, the Lugo-Mohave in particular, an alternative analysis

[100] Appendix B: SCE Response to Wild Tree Foundation DR#2 (October 29, 2019) at p. 1.
[101] *Id.* at p. 2.
[102] *Id.* at pp. 1,2,20,21.
[103] *Id.* at pp. 4,6.
[104] *Id.* at pp. 3, 5.
[105] *Id.* at p. 21.
[106] *Id.* at p. 20.
[107] *Id.* at pp. 14-15.

should be performed on adding storage to existing renewable generation facilities that import power on the subject lines.

Table 3. Current and Planned Usage of Eldorado-Lugo and Lugo-Mohave Transmission Lines

Transmission Line	Eldorado-Lugo	Lugo-Mohave
Current rating under normal operating conditions	1610 MVA	2078 MVA
Maximum lifetime MW flow on the line	1418 MW	926 MW
Approximate unused capacity	192 MW	1149 MW
Normal operating conditions rating if upgrade is approved	2858 MVA	2858 MVA
Emergency operating conditions rating if upgrade is approved	3249 MVA	3249 MVA

F. The RA Shortfall identified in R.17-09-020 is Best Addressed with storage

The claimed RA shortfall identified in the proposed decision in R.17-09-020 is best served with storage. The Commission has determined that there is a resources adequacy need in SCE territory of "at least 60 percent of each LSE's portion of the 2,500 MW obligation be online by August 1, 2021, with 80 percent by August 1, 2022, and 100 percent by August 1, 2023."[108] The speed of this claimed requirement is best met with resources that can be deployed quickly. Also, the addition of transmission capacity to out of state increases the possibility of importing

[108] R.16-02-007, Proposed Decision at p. 40.

dirty power, given the fact that transmission lines must provide non-discriminatory access, and the political challenges to California's clean energy policies from other western coal heavy states.

Furthermore, the extreme vulnerability and financial liability of the state's transmission system, which has recently been made painfully obvious, shows the urgent need to rapidly develop alternatives to adding more capacity to, and reliance on, long distance transmission. The notion that long distance transmission lines provide reliability has been shown to millions of people in California to be an illusion and vast waste of resources that the Commission should not continue to sink unnecessary money into.[109]

It is now well past time for the Commission to learn this lesson, and not repeat mistakes of the past. We need leadership from the Commission to shift its focus, and to prioritize investment in local clean energy resources, not in 20 or 30 years, but today. Utility customers sitting for days and weeks in dark and cold homes with millions of dinners spoiling in powerless refrigerators, and businesses losing billions of dollars with power shut off events at risk for closing their doors and firing employees, are looking to regulators to start making the right decisions right now.[110]

In fact, not increasing transmission capacity could result in an increased market for storage because it becomes the primary way to get more wind and solar energy through existing wires. More energy storage, in turn, improve the market for renewable generation by greatly increasing its reliability and value, providing benefits that additional transmission capacity does not.

The addition of storage on transmission lines that carry renewable generation has multiple other benefits that adding additional transmission capacity does not including, but not

[109] WTF-1 (Freehling) 13:9-16.
[110] WTF-1 (Freehling) 13:16-22

limited to: 1.) storage can absorb excess generation from solar and wind and shift the time of delivery to when there is capacity on the wires; 2.) storage improves the capacity utilization of transmission lines by spreading out the energy over more hours of the day; 3) storage improves the market for renewable generation by increasing its value; 4) storage can address duck curve issues; 5) storage can be used for resources adequacy.

Increased storage is required to remove the ceiling on the amount of solar that California can rely upon. A study by the National Renewable Energy Laboratory found that when solar grows much above 20% of California's electricity supply, it becomes necessary to curtail an increasing fraction of any new solar development.[111] In addition to reducing the minimum load of existing gas and renewable generators to make room for solar energy, storage becomes the best way to resolve this limitation. On the other hand, increasing delivery of peak solar production by building extra line capacity exacerbates the ramp problem; does not address the duck curve issue; does not, in of itself, allow the additional storage capacity to provide resource adequacy; does not improve line capacity utilization; and does not address limitations on use of solar.

Data provided by SCE shows that a lot of capacity exists on the existing wires during many hours, which could be used for delivering renewable energy, particularly if energy storage is used to time the delivery to when the extra capacity is available. As the following graphs demonstrate, the usage of the subject lines is highly variable throughout the day and throughout the year. [112]

---

[111] National Renewable Energy Laboratory - Paul Denholm and Robert Margolis, *Energy Storage Requirements for Achieving 50% Solar Photovoltaic Energy Penetration in California*, available at: https://www.nrel.gov/docs/fy16osti/66595.pdf.

[112] WTF-2 Appendix B to Direct Testimony of Robert Freehling (Wild Tree Foundation): SCE Response to Wild Tree Foundation DR#2 (October 29, 2019).

According to SCE's data, as shown in the graphs, there are times when little to none of the capacity of the lines is being used. SCE and CAISO claim there are or will be periods where generation exceeds capacity on the lines. Both these situations present an opportunity for added storage to provide the host of benefits described above. Where storage is available, at times when there is excess generation compared to line capacity, renewable generation can charge on-site batteries. The energy stored is thus available for use during times when there is spare capacity on the wires. This could allow solar and wind, combined with storage, to provide increased resources adequacy, and improve effective load carrying capacity ("ELCC").

1. **Most of The Identified Projects Will Not Help Meet RA Need**

In regards to the resource adequacy requirement recently approved, CAISO claims that its listed projects could meet the resource adequacy requirement because they all have a commercial operation date earlier than August 1, 2023.[113] First, CAISO's includes project that do not have an online date prior to August 1, 2023 and includes a new natural gas project, which is not eligible to meet the RA need. Secondly, the resource adequacy ruling requires procurement on a rolling basis: 50 percent delivered by August 1, 2021, 75 percent by August 1, 2022, and 100 percent by August 1, 2023[114] and only a handful of the projects would meet the earlier 2021 and 2022 deadlines, where most of the procurement is ordered. The decision also calls for shorter term contracts – 10 years for new resources and 3 years for existing.[115] The use of partial or interim full deliverability status would thus be appropriate should any of these resources be eligible to meet the resource adequacy need, which is not certain.

[113]CAISO-1 (Barave) 13.
[114] D.19-11-016 at p. 80
[115] *Ibid.*

CONCLUSION

For all the foregoing reasons, Wild Tree urges the Commission to reject SCE's application and deny a CPNC for the proposed project.

Respectfully submitted,

/s/ April Rose Maurath Sommer

April Rose Maurath Sommer
Executive and Legal Director

Wild Tree Foundation
1547 Palos Verdes Mall #196
Walnut Creek, CA 94597
April@WildTree.org
(925) 310-6070

Dated: January 16, 2020