

Draft



March 29, 2013

Mr. Neil Millar
California Independent System Operator
250 Outcropping Way
Folsom, CA 95630

Dear Mr. Millar,

This letter contains Sierra Club's comments on the California Independent System Operator's (CAISO's) 2013-2014 Transmission Planning Process Unified Planning Assumptions and Study Plan, dated February 22, 2013 (the "Study Plan" or "Plan").

The Sierra Club is a national nonprofit organization of approximately 1.3 million members and supporters dedicated to exploring, enjoying, and protecting the wild places of the earth; to practicing and promoting the responsible use of the earth's ecosystems and resources; to educating and enlisting humanity to protect and restore the quality of the natural and human environment; and to using all lawful means to carry out these objectives. Sierra Club is a leader in California and the nation's fight to end dependence on fossil fuels. The Sierra Club's concerns encompass protecting our public lands, wildlife, air, and water, while at the same time rapidly increasing our use of energy conservation, efficiency improvements, and renewable energy.

Our engagement in the transmission planning process is based on an interest in replacing fossil-fuel fired resources with energy efficiency, distributed generation and thoughtfully and sustainably sited renewable energy projects, in prioritizing non-transmission alternatives for meeting the state's renewable energy policy goals and in assuring that when transmission is needed alternatives are chosen that have the least environmental impact. Additionally, the Sierra Club believes it is important for each of California's energy authorities to incorporate California's full suite of relevant energy and climate policies and programs into transmission planning. This is necessary if California is to meet its climate protection and energy policy goals while protecting the natural environment that these policies are intended to benefit.

I. Using the 33% RPS as the sole public policy objective could lead to skewed transmission planning if other climate and energy objectives are not incorporated into the transmission planning process.

The Plan's over-arching public policy objective is the state's mandate for 33%, with the sub-objectives of supporting the delivery of 33% renewable energy over the course of all hours of the year, and Resource Adequacy delivery status for all renewable resources outside the ISO balancing authority area that are needed to achieve the 33% energy goal. Focusing only on the 33% RPS requirement ignores California's other significant public policy efforts to reduce carbon pollution and move towards a clean energy

future,¹ many of which have the potential to significantly impact the transmission planning process through reducing the need for new transmission and determining the type and location of generation projects. CAISO should be clear that, if California's other energy and climate-based laws and policies--including policies which reduce demand such as California's aggressive energy efficiency and rooftop solar targets, and those which could potentially dictate the type of generation resources, such as the Energy Action Plan are not considered public policy objectives, they are otherwise incorporated into the transmission planning process. This is not clear in the Plan.

II. The Plan should include as a public policy objective facilitating transmission to as low-conservation value development focus areas within the Desert Renewable Energy Conservation Plan.

Impacts from the siting of generation and transmission projects on California's sensitive plant and animal species is a major concern for the Sierra Club along with many other groups. These concerns led to California Executive Order S-14-08, which required the development of the DRECP for approximately 22.5 million acres of federal and non-federal land in the Mojave and Colorado deserts and adjacent areas (the "DRECP Plan Area") in order to provide binding, long-term endangered species permit assurances and to facilitate the review and approval of compatible renewable energy projects. The DRECP is intended to provide effective protection and conservation for desert ecosystems and to allow for the development of compatible renewable energy projects. The DRECP will designate portions of the DRECP Plan Area as renewable energy development focus areas (DFAs).

The DRECP term extends to 2040 and calculates 20,323 MW of renewable energy will come from the DRECP Plan Area. The DRECP is a major component of California's renewable energy planning efforts and will fundamentally change the landscape of energy development in the West. The Renewable Energy Action Team (REAT) oversees development of the DRECP and is comprised of: the California Energy Commission (CEC), California Department of Fish and Wildlife (CDFW), Bureau of Land Management (BLM) and the U.S. Fish and Wildlife Service (USFWS). Numerous other agencies and non-governmental organizations, including the CAISO and the Sierra Club, are active stakeholders in the DRECP. CAISO staff has participated in the development of a conceptual transmission plan for the DRECP as part of a transmission technical working group, but as of yet has not provided guidance for how the DRECP will be integrated into the transmission planning process. Gen-ties, transmission lines and facilities (both upgrades and new), and transmission line stringing activities are each covered activities subject to the DRECP within the DRECP Plan Area. Transmission is a key benefit of developing within DFAs. The DRECP published an interim document² (the "Interim Document")

¹ As Sierra Club California noted in comments submitted on June 15, 2012 in response to the CALIFORNIA ISO FERC ORDER NO. 1000 COMPLIANCE FILING REQUIREMENTS: STRAW PROPOSAL: "(T)o provide for a meaningful assessment of Public Policy Requirements, CAISO should develop a base case of Public Policy Requirements that is considered as part of each transmission planning exercise. A Public Policy Requirements base case would ensure that California's clean energy policies are being fully vetted as part of the transmission planning process. If additional statutes or regulations arise, those could be included in the specific planning process." (p. 6). CAISO appears to have not developed this base case, and this is reflected in the Plan's single public policy objective.

² Maps of the DFAs can be found at http://www.drecp.org/documents/docs/alternatives_eval/Section_2_Description_of_Alternatives.pdf

providing the DFA alternatives the REAT agencies will analyze in a Draft EIS/EIR this fall. Although each of the alternatives start from a nucleus of disturbed and degraded lands, and thus contain areas in common, they do represent a true range of development alternatives and have vastly different conservation impacts. (For example, Alternative 1 includes 70,559 acres of lands considered to have high and moderate biological sensitivity within DFAs while Alternative 6 includes 1,327,690 acres of lands with DFAs considered to have high and moderate biological sensitivity.)

We recommend the CAISO work with the REAT agencies to ensure coordination between the TPP and DRECP. We view consideration of the DRECP as public policy objective a potential means to ensure success of the DRECP. If the CAISO, adopts the DRECP as a public policy objective, we recommend the CAISO pursue the sub-objectives of: (i) prioritizing transmission projects to disturbed and degraded lands within the DFAs, as these areas are not only common to each alternative but also represent areas of lower conservation value and are less controversial, and (ii) working with the CPUC, CEC and other stakeholders to develop a program within the GIP / TPP to incentivize transmission to the DFAs, and in particular to those disturbed or degraded areas of the DFAs with lower conservation value. This could address tension between the long-lead time for transmission planning and the release of the Draft EIR/EIS.

III. The CAISO should adopt a state or regional plan to better utilize transmission and generation capacity in areas outside of the CAISO's balancing authority.

We agree with the CAISO that policies such as the states 33% RPS which necessitate new transmission infrastructure in and out of the ISO controlled grid should be reflected in a plan which applies to the entire state. This is important to avoid over-building of generation and transmission resources, and is particularly important for the DRECP, as each alternative includes significant generation coming from IID's service area.

Preferably, this plan would be regional, in order to take advantage of state policies regarding retirement of out-of-state coal contracts which will result in reduced claims on existing transmission by conventional power sources, freeing up transmission for physical delivery of RPS resources without constructing or upgrading transmission.

IV. The Plan should include a technical study focusing on transmission to low-conservation lands within the DRECP.

Given the importance of the DRECP the CAISO should perform a technical study which focuses on transmission to the disturbed and degraded portions of the DFAs within the DRECP.

V. Conventional Generation is favored as a non-wires mitigation option.

Generally, the guidelines for modeling new generators in a base case appear structured towards conventional generators. Additionally, it's unclear why conventional generation with an executed LGIA which are "progressing forward" will be available as a non-wire mitigation option but renewable generation would not. We support utilizing all means; including renewable generation, efficiency, and

demand response as non-wire mitigation options, in the order designated by the state's preferred loading order.

VI. Renewable Portfolio adopted by PUC are problematic.

We are disappointed the CPUC did not change the renewable portfolios in response to comments, and hope these can be changed during the 2013/14 transmission planning process. These comments were mischaracterized as “*largely consisting of recommendations to improve the assumptions used in the RPS calculator as well as requests for technical clarifications*”.³ Sierra Club and Defenders of Wildlife submitted joint comments on the renewable resource portfolios on January 11, 2012 which identified: outdated DFAs and inaccuracies in the scoring methodology for projects within DFAs, military lands, projects outside of the DRECP area and agricultural lands. Our comments also noted that, in addition to defects in the environmental scoring methodology, we also doubted the scoring would have any real impact in transmission planning if the commercial interest portfolio was chosen as the base case. Given the importance of transmission in guiding generation we think that the improved environmental scoring methodology should be incorporated into the CAISO's transmission planning process outside of the environmentally constrained portfolio, which seems to be rarely, or ever, be utilized. We note the following additional inconsistencies in the final portfolios, and hope these can be explained:

- 1,140 MW less in the environmentally constrained portfolio for the Imperial CREZ, despite the relative environmental benefits of siting projects in Imperial County.
- 437 MW less of geothermal resources in the environmentally constrained portfolio, despite the small footprint of geothermal projects and importance of geothermal as a potential baseload resource.
- 200 MW more in the Riverside East CREZ in the environmentally constrained portfolio.

VII. The CAISO should use the best information on generator project status to avoid skewed transmission planning.

We request the CAISO describe what databases it uses to track non-thermal generation projects. We recommend the CAISO utilize the most recent version of the CPUC's RPS status table to track renewable projects (both thermal and non-thermal) as it is updated monthly and tracks power purchase agreement status.

VIII. The Demand Forecast is too high and does not adequately reflect energy efficiency savings.

The Plan utilizes the mid-case CEC Demand Forecast 2012-22 dated June 2012 with the Mid-Case LSE and Balancing Authority Spreadsheet updated as of August 16, 2012. We would recommend the CAISO use the low-case CEC Demand Forecast, to adequately capture the range of energy efficiency programs, increase in distributed generation, and Department of Finance population trends which project a marked decrease in California's population (even within the last year). Because over-estimating load can lead to over-building of generation and transmission, causing both costs to customers and impacts to biological resources, we urge the CAISO to use the lowest demand forecast and to include the full amount

³ Formal Transmittal Letter to the CAISO dated February 7, 2013 providing California Energy Commission and the California Public Utilities Commission's recommended renewable resource portfolios for the CAISO's 2013-2014 Transmission Planning Process.

of the California Energy Commission's (CEC) best available estimate for energy efficiency, which is 5,513 MW (or the equivalent of 11 giant power plants) in 2022.⁴

The Plan will additionally incorporate the CEC's Low-Savings identified in the Energy Efficiency Adjustments for a Managed Forecast: Estimates of Incremental Uncommitted Energy Savings Relative to the *California Energy Demand Forecast 2012-22*, dated September 14, 2012.⁵ While we are pleased to see the CAISO utilizing some incremental energy efficiency assumptions, we are disappointed that they have chosen the low-savings estimate (particularly given they have chosen to study the mid-case CEC demand forecast) and would urge the CAISO to use the mid estimate. Failure to do so would contradict the state's adopted loading order and state law, and will result in skewed and unrealistic estimates of generation needs and corresponding unnecessary and expensive transmission projects.

Thank you for your consideration of these comments.

Sincerely,

A handwritten signature in cursive script that reads "Sarah K. Friedman".

Sarah K. Friedman
Senior Campaign Representative
Beyond Coal Campaign
Sierra Club

⁴ CEC, "Spreadsheet - Estimates of Incremental Uncommitted Energy Savings Relative to the California Energy Demand Forecast 2012-2022," Mid Savings tab, (September 20, 2012) (4,232 of program, standards, and naturally occurring savings, and 1,281 MW from BBEES).