

March 13, 2014

To: California Independent System Operator
250 Outcropping Way
Folsom, CA 95630

Submitted via email to: regionaltransmission@caiso.com

Subject: Comments of The Nature Conservancy on the California Independent System Operator's 2014-2015 Transmission Planning Process Unified Planning Assumptions and Study Plan.

1. Introduction and Summary

The Nature Conservancy appreciates the opportunity to submit comments in response to the California Independent System Operator's ("CAISO") 2014-2015 Transmission Planning Process Unified Planning Assumptions and Study Plan ("Study Plan").

The mission of the Conservancy is to conserve the lands and waters on which all life depends. To achieve that mission, the Conservancy strongly supports the emission reduction goals¹ and renewable energy mandates² established by the state of California to benefit Earth's climate. We urge continued action to facilitate California's transition to a low carbon energy system; this transition should be guided by a comprehensive planning process that has the objective of meeting multiple goals, including protection of nature.

For these reasons, the Conservancy supports comprehensive planning for land-use, energy generation and transmission development as the best path forward for California's energy future. We appreciate the increased coordination between the CAISO, the California Public Utilities Commission ("CPUC"), and the California Energy Commission ("CEC") on this topic, and we encourage this to continue.

The following comments are specific to the need to improve integration of land-use planning into the Study Plan.

¹ Global Warming Solutions Act of 2006 (AB 32).

² California's 33 Percent by 2020 Renewables Portfolio Standard.

2. The Study Plan should better incorporate and address land-use planning

The CEC's 2013 *Integrated Energy Policy Report* (IEPR) identifies the need for California to better synchronize the planning and permitting processes for renewable generation and the power lines needed to bring that generation to market³. The IEPR recommends: "In the longer term, identifying preferred development areas for renewable resources and then planning the transmission to serve those areas could alleviate issues with the current unsynchronized approach and encourage renewable development that minimizes impacts on California's environment. The key to overcoming the synchronization challenge is to develop a long-term transmission plan for preferred renewable generation zones."⁴

It is the Conservancy's position that the best path forward for California is an energy future that uses landscape-scale planning to *first* identify preferred areas of least-impact for development and then strategically plans transmission investments in these areas for timely development and delivery of renewable energy.

Both California and the federal government have recognized the benefits of identifying low impact areas for renewable energy development and have invested significantly in planning efforts to create zones for renewable energy development. The Bureau of Land Management's ("BLM") Solar Energy Program, and the state and federal Desert Renewable Energy Conservation Plan ("DRECP") are both examples of landscape-scale planning for energy. Critical to the success of getting renewable energy developed in zones is ensuring that these areas are adequately studied and then are prioritized for transmission investments that may be required. This is a key building block in the foundation of comprehensive energy planning.

Improving the planning assumptions and renewable resource portfolios used the 2014-2015 Study Plan, by integrating landscape-scale planning principles and active planning efforts (e.g., DRECP and BLM Western Solar Program), appropriately and with the right weighting, is an essential part of improving this coordination.

We are concerned that the Study Plan does not adequately address how the 2014-2015 Transmission Planning Process will further and improve the integration of land-use planning.

³ California Energy Commission. 2013. **2013 Integrated Energy Policy Report**. Publication Number: CEC-100-2013-001-CMF. Page 2.

⁴ California Energy Commission. 2013. **2013 Integrated Energy Policy Report**. Publication Number: CEC-100-2013-001-CMF. Page 174.

3. Observations and Recommendation

The 33% Renewable Portfolio Standard (“RPS”) Transmission Assessment is heavily driven by procurement decisions. All four renewable resource portfolios recommended for study in the 2014-2015 Transmission Planning Process (“TPP”) give added weight to the “commercial interest” metric in the RPS Calculator⁵. The environmental methodology - where land-use planning is currently captured - has just a 10% weighting in the “commercial interest” metric. We question if this weight is significant enough to ensure that the geographic areas identified as zones, and in study as Development Focus Areas (“DFAs”), are analyzed in the 33% RPS Transmission Assessment. In our comments to the California Public Utilities Commission, we have urged the Commission to create an environmentally-constrained scenario for comparative analysis (Appendix A).

The draft Study Plan does not mention landscape-scale planning efforts that have been approved, or are in development, including the BLM Western Solar Program and DRECP, respectively. The planning horizon of the draft Study Plan (2015-2024) falls squarely within the timeframe in which the DRECP should join the BLM Western Solar Program in active implementation. The DRECP intends to plan for renewable energy development in the California deserts through at least 2040. If transmission upgrades take around seven years to build, this transmission planning effort will only begin to benefit the implementation of the DRECP in 2021. We are concerned that if transmission investments to DRECP DFAs are not addressed in this cycle of the transmission plan, this omission will perpetuate the disconnect between land-use, generation and transmission planning. The CAISO should work with other agencies (e.g., California Energy Commission) and stakeholders to proactively plan for transmission to the DRECP. The following are our recommendations to start this important effort.

- **Recommendation:** The CAISO should catalyze a special study to analyze the DRECP Development Focus Areas when the draft DRECP is released in mid-2014. A special study could provide valuable information that will support ongoing planning for the DRECP. It is important for DRECP stakeholders to have information about transmission availability and capacity within the geographic vicinity of the DFAs to understand what capacity current exists, and if there are areas that have a potential to be underserved or areas that may have constraints; this information is valuable to informing ongoing planning efforts.

⁵ President Michael Peevey, Chair Robert Weisenmiller, Commissioner Michel Florio to Steve Berberich, February 27, 2014, **Base Case and Alternative Renewable Resource Portfolios for the CAISO 2014-2015 Transmission Planning Process**.

- **Recommendation:** If a special study is not feasible, the 2014-2015 Study Plan should, at a minimum, describe and outline the process and timeline for how the CAISO will integrate the DRECP into the 2014-2015 Transmission Planning Process, when documents are released later this year.
- **Recommendation:** We also encourage thinking creatively and ambitiously about broader collaborative efforts between the energy (e.g., CAISO, CPUC) and Renewable Energy Action Team (e.g., California Energy Commission) agencies to address transmission to the DRECP.
- **Recommendation:** Through the Transmission Planning Standards process, the CAISO should consider establishing a policy for addressing land-use planning efforts in the ISO transmission planning process.

4. Conclusion

The Nature Conservancy appreciates the opportunity to provide comments to the 2014-2015 Transmission Planning Process Unified Planning Assumptions and Study Plan. We strongly support and urge the CAISO to address transmission investments to low-conflict areas in the DRECP plan area, and look forward to subsequent opportunities to discuss. If you have any questions, my contact information is included below.

Respectfully submitted,



Erica Brand
Project Director
CA Renewable Energy Initiative
The Nature Conservancy
415-281-0451
ebrand@tnc.org

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Integrate and Refine Procurement Policies and Consider Long-Term Procurement Plans.

FILED
PUBLIC UTILITIES COMMISSION
DECEMBER 19, 2013
RULEMAKING 13-12-010

OPENING COMMENTS OF THE NATURE CONSERVANCY ON THE DECEMBER 18TH, 2013 WORKSHOP MATERIALS ON PLANNING ASSUMPTIONS AND SCENARIOS FOR USE IN THE CPUC 2014 LONG-TERM PROCUREMENT PLAN PROCEEDING AND CAISO 2014-15 TRANSMISSION PLANNING PROCESS

Erica Brand
Project Director, California Renewable Energy Initiative
The Nature Conservancy
201 Mission Street, 4th Floor
San Francisco, CA 94105
(415) 281-0451
ebrand@tnc.org

January 8, 2014

OPENING COMMENTS OF THE NATURE CONSERVANCY ON THE DECEMBER 18TH, 2013 WORKSHOP MATERIALS ON PLANNING ASSUMPTIONS AND SCENARIOS FOR USE IN THE CPUC 2014 LONG-TERM PROCUREMENT PLAN PROCEEDING AND CAISO 2014-15 TRANSMISSION PLANNING PROCESS

I. INTRODUCTION

The Nature Conservancy (“the Conservancy”) thanks the California Public Utilities Commission (“Commission”) for the opportunity to provide opening comments on the December 18th, 2013 workshop materials on *Planning Assumptions and Scenarios for use in the CPUC 2014 Long-Term Procurement Plan Proceeding and CAISO 2014-2015 Transmission Planning Process*, identified in the Administrative Law Judge’s (“ALJ’s”) Ruling served by electronic mail to the service list in the prior Long Term Procurement Plan (“LTPP”) Rulemaking (R.) 12-03-014 on December 19, 2013 (12-19-13 ALJ’s Ruling). These Comments are filed and served pursuant to the Commission’s Rules of Practice and Procedure and the 12-19-13 ALJ’s Ruling, which included the direction to file these Comments in R.13-12-010, the “successor proceeding” to R.12-03-014.

II. RESPONSE TO KEY TECHNICAL QUESTION 1

Among the attachments to the 12-19-13 ALJ’s Ruling was a list of “Key Technical Questions” for parties’ responses. The Conservancy offers its response to Question 1 below. However, the Conservancy reserves the right to address this and other questions posed in the attachment in Reply Comments due on January 15, 2014.

Key Technical Question 1 – “Is the current range of scenarios sufficient to cover current policy issues facing the CPUC?”

The Conservancy is concerned that the scenarios do not sufficiently incorporate landscape-scale planning efforts ongoing within the California deserts, including the Bureau of Land Management (“BLM”) Solar Energy Program and the state and federal

Desert Renewable Energy Conservation Plan (“DRECP”). The Conservancy’s primary recommendation is for Scenario 4 (High DG) to be modified to place a greater emphasis on landscape-scale planning for energy in the California deserts, and ensure that the significant investment the state and federal governments have made in identifying locations for renewable energy development are adequately modeled and analyzed in the 2014/2015 Transmission Planning Process. The Conservancy discusses this further below.

III. DISCUSSION

A. SUMMARY:

The mission of the Conservancy is to conserve the lands and waters on which all life depends. To achieve that mission, the Conservancy strongly supports the emission reduction goals¹ and renewable energy mandates² established by the state of California to benefit Earth’s climate. We urge continued action to transition California to a low carbon energy system; this transition should be guided by a comprehensive planning process that has the objective of meeting multiple goals, including the protection of nature, reliability, and sustainability.

For these reasons, the Conservancy supports comprehensive planning for land-use, energy generation and transmission development as the best path forward for California’s energy future. We appreciate the increased coordination between the Commission, the California Energy Commission (“CEC”) and the California Independent System Operator (“CAISO”) on this topic, and we encourage this to continue.

There is a critical connection between the planning assumptions and scenarios used in the Long-Term Procurement Plan Proceeding, the CAISO Transmission Planning Process

¹ Global Warming Solutions Act of 2006 (AB 32).

² California’s 33 Percent by 2020 Renewables Portfolio Standard.

(“TPP”), and the success of landscape-scale planning for energy. The energy agencies have taken steps to forge this connection; however it is in the early stages and must be strengthened to create an energy blueprint for California that achieves multiple goals. We are also sensitive that there should be a common scientific data platform that is applied across the energy agencies. Such a platform would provide a greater sense of consistency and certainty afforded by a common scientific baseline that is more easily understood, more efficient, and provides greater understanding, transparency and public accountability for all interested parties.

The Conservancy’s comments are focused on ensuring that renewable energy planning is comprehensive and incorporates land-use and environmental considerations. Specifically, the Conservancy recommends that the CPUC:

- Modify the weighting of the High DG scenario to place a greater emphasis on landscape-scale planning for renewable energy in the California deserts; and
- Evaluate the environmental weighting process and policies associated with the Long-Term Procurement Plan and Transmission Planning Process processes.

B. BACKGROUND: COMPREHENSIVE ENERGY PLANNING

The only way to design an energy future that will meet multiple goals is to develop a plan that will accomplish these goals. To adequately protect ecologically important areas, and to incentivize development in areas of low impact, the appropriate land-use, environmental, and ecological information must be incorporated into the earliest stages of energy system planning.

Renewable energy can have significant impacts when sited in ecologically important areas. These impacts may also translate into project viability risks, including:

- more complex permitting, requiring more time from natural resource agency staff;
- project delays, greater costs due to mitigation and additional studies; and
- project failure.

There are ways to minimize ecological impacts, and the likelihood of viability risk, by siting in areas of lower ecological impact.

It is the Conservancy's position that the best path forward for California is an energy future that uses landscape-scale planning to *first* identify preferred areas of least-impact for development and then strategically plans transmission investments in these areas for timely development and delivery of renewable energy.

Both California and the federal government have recognized the benefits of identifying low impact areas for renewable energy development and have invested significantly in planning efforts to create zones for renewable energy development. The Bureau of Land Management's Solar Energy Program, and the state and federal Desert Renewable Energy Conservation Plan are both examples of landscape-scale planning for energy. Critical to the success of getting renewable energy developed in zones is ensuring that these areas are adequately studied and are prioritized for transmission investments, if required. This is a key building block in the foundation of comprehensive energy planning. However, currently there is a disconnect between generation and transmission planning and permitting, as noted by the CEC in the final draft of the 2013 *Integrated Energy Policy Report* ("IEPR"):

“the key to overcoming the synchronization challenge [between generation and transmission planning and permitting] is to develop a long-term transmission plan for preferred renewable generation zones.”³

Improving the planning assumptions and scenarios used in the LTPP and TPP, by integrating landscape-scale planning principles and active planning efforts (e.g., DRECP and BLM Solar Program), appropriately and with the right weighting, is an essential part of improving this coordination.

C. COMPREHENSIVE ENERGY PLANNING: ROLE OF THE LTPP AND TPP

There is a critical connection between the assumptions and scenarios used in the LTPP, the TPP, and the success of landscape-scale planning for energy. For example, based on our current understanding of the process, if projects located in zones identified through landscape-scale planning efforts are not given the appropriate weighting in the LTPP portfolios, they are not likely to be analyzed in the TPP process. Transmission projects currently have a long lead-time, and access to transmission with available capacity within zones is one of the major benefits, and a key development incentive for landscape-scale energy plans. Failing to plan for serving zones will have significant impacts on the success of these planning efforts. The Conservancy urges the energy agencies to address this issue through continued agency coordination, evaluation, and modification and improvement of existing methodologies. We also encourage thinking creatively and ambitiously about broader collaborative efforts, such as a memorandum of understanding between the energy (CPUC, CAISO) and Renewable Energy Action Team agencies to address transmission to the DRECP.

³ California Energy Commission. 2013. *2013 Integrated Energy Policy Report*. Publication Number: CEC-100-2013-001-LCD. Page 133.

The CEC and CPUC have already taken the first step towards integrating land-use planning and energy planning into the LTPP and TPP by incorporating the Desert Renewable Energy Conservation Plan through environmental scoring in the LTPP scenario development process. We strongly support this decision, but have concerns about the accuracy of the scoring methodology and how the score has been incorporated (i.e., weighted) within the process and offer recommendations for improvement.

Our concern is that the weight of the environmental score is too low to ensure that the areas of renewable energy development focus (e.g., solar zones, draft Development Focus Areas) identified by landscape-scale energy planning efforts (e.g., DRECP, BLM Solar Energy Program) are analyzed in the CAISO Transmission Planning Process. As a stakeholder to the CAISO Transmission Planning Process, we have observed little to no discussion of the DRECP draft Development Focus Areas in the 2013/2014 Transmission Planning Cycle, even after the DRECP was incorporated into the environmental scoring process of the LTPP in December of 2012. This leads us to question the weighting system and its effect on successful integration of comprehensive energy planning into procurement and transmission planning processes.

In the draft assumptions for the 2014 LTPP and 2014/2015 TPP, all portfolios use the “Commercial Interest” score weighting: 70% weight on the Commercial Interest score and 10% weight on each of the Environmental, Permitting, and Cost scores. A process that awards the highest weight to projects that have a power purchase agreement (“PPA”) and a complete application for a major permit is not always the best indicator of project viability, and is not consistent with comprehensive land-use, generation, and transmission planning. It is important to reevaluate the weighting of the metrics to move past a reliance on PPAs to

designate needed transmission and realize a future where achieving multiple values, including development in areas of low ecological impact (e.g., zones) drives transmission planning.

The CEC sums up the issue well in the 2013 IEPR: “This issue of environmental score weighting remains a barrier to more robust consideration of environmental data in the CPUC and California ISO planning process.”⁴ The Conservancy supports the CEC’s recommendation that the energy agencies (CEC, CPUC, and CAISO) evaluate the environmental weighting process and policies associated with the Long-Term Procurement Plan and Transmission Planning Process processes.⁵

D. RECOMMENDATIONS FOR THE 2014 LTPP AND 2014/2015 TPP

In order to begin to address the need to incorporate DRECP and BLM Solar Program planning into the LTPP and TPP planning processes, we recommend the following approach in the near term:

1. **In the High DG scenario, use the “Environmental Scenario” scoring methodology⁶ instead of the “Commercial Interest” scoring methodology.** This should result in a scenario that gives greater weighting to the environmental score, thereby allowing study and analyses of an energy future that emphasizes sustainable siting, including within zones and draft DFAs designated by landscape-scale energy planning efforts (e.g., BLM Solar Program, DRECP).
2. **In the CEC’s Environmental Scoring methodology, limit Category 1 projects as follows:** The Conservancy recommends that the CPUC and CEC take a “least regrets” approach to analyzing the draft Development Focus Areas, and recommends that the CEC revise the environmental scoring methodology to limit “Category 1” (a score of 25/100) to only projects located within draft DFAs contained within Alternatives 1 and 2 of the *Description and Comparative Evaluation of Draft DRECP Alternatives*

⁴ California Energy Commission. 2013. **2013 Integrated Energy Policy Report**. Publication Number: CEC-100-2013-001-LCD. Appendix B, Page B-2.

⁵ California Energy Commission. 2013. **2013 Integrated Energy Policy Report**. Publication Number: CEC-100-2013-001-LCD. Appendix B, Page B-3.

⁶ Environmental Scenario Weighting Methodology: 70% environmental, 10% commercial interest, 10% cost and 10% permitting.

(released in December 2012) or established solar energy zones from the BLM Solar Program. (Note: This suggestion pertains to this planning cycle. For future planning cycles we recommend additional modifications to the environmental scoring methodology, as discussed in Section 5 of this letter).

The purpose of these recommendations is to ensure that this cycle of the LTPP and TPP adequately addresses the DRECP and BLM Solar Program so that transmission availability and future transmission needs are considered as soon as possible. If transmission investments to DRECP DFAs are not addressed in this cycle of the Transmission Planning Process, we are concerned that this will perpetuate the identified disconnect between land-use, generation and transmission planning.

E. THE RENEWABLE PORTFOLIO STANDARD (RPS) CALCULATOR

In addition to the near-term changes suggested above, the Conservancy believes that the methods for how environmental considerations are incorporated into the scenario development process and weighted in those scenarios must be improved. At the workshop, Commission staff indicated that the RPS Calculator will be revised in 2014; we support this plan and urge the CPUC to improve the incorporation of environmental considerations in long-term procurement and transmission planning through this process.

The RPS Calculator should function to create scenarios that support sustainable and environmentally-responsible development of renewable energy. To accomplish this, the RPS Calculator must be revised. The Conservancy has a number of detailed comments on the environmental and permitting scores and their methodologies, including, but not limited to what is discussed within this letter.

First, the scoring methodologies employed in this planning cycle are not transparent. It is not clear if the CEC staff responsible for scoring the projects use the environmental and permitting score methodologies that were developed in 2012 or if

modifications were made before the start of this planning cycle. The methodology for scoring projects must be transparent and should be clearly articulated in the planning documents.

Second, the permitting score criteria is not comprehensive and should be revised to reflect the full suite of permits that may be required to successfully construct and operate a renewable energy generation project. The permitting score methodology⁷ scores projects as such:

Permit Application Status	Permitting Score (0 is best, 100 is worst)
Application not complete or not data adequate	100
Application complete or data adequate	50
Permit received	0

A more accurate evaluation of permit application status would include all permits and/or discretionary approvals required from local, state, federal, and/or tribal authorities for the project.

Third, the environmental scoring methodology, while a good start, must be revised. The Conservancy has a number of concerns and recommendations for improvement. One concern is with how projects outside the DRECP and all non-California projects are treated. Currently, these projects are awarded a score of 50/100, which is overly broad and misses important environmental and land-use designations that have the potential to impact project and portfolio viability. For example, a renewable energy project that is proposed in an area that the Bureau of Land Management has identified as an Area of Critical Environmental Concern has a much higher viability risk due to permitting than a project that is located on salt-affected soils of low conservation and agricultural value in the San

⁷ Dudney, K. et. Al. *Description of 33% RPS Calculator Updates*. March 23, 2012.

Joaquin Valley. A project proposed in an Area of Critical Environmental Concern would also have a much higher viability risk than a project proposed in an established solar energy zone outside of California. These types of differences can and should be reflected in an environmental scoring methodology outside of the DRECP area.

IV. CONCLUSION

The connection between land-use planning and energy planning is a critical nexus that should inform long-term procurement and transmission planning. We urge the Commission to take immediate action in this planning cycle to ensure that renewable energy development zones are appropriately analyzed and modeled in transmission planning. We support the Commission's interest in revising the RPS Calculator and we look forward to subsequent opportunities to discuss.

Respectfully submitted,



Erica Brand
Project Director, California Renewable Energy
Initiative
The Nature Conservancy
201 Mission Street, 4th Floor
San Francisco, CA 94105
(415) 281-0451
ebrand@tnc.org