

**Comments of the Natural Resources Defense Council  
On the May 7, 2013 California and Western States  
Transmission Planning and Permitting Issues  
2013 Integrated Energy Policy Report (IEPR)  
Docket # 13-IEP-1  
Submitted May 21, 2013**

The Natural Resources Defense Council (NRDC) is a national non-profit organization of lawyers, scientists and environmental specialists dedicated to protecting public health and the environment. Founded in 1970, NRDC serves more than a million members supporters and environmental activists with offices in New York, Washington, D.C, Los Angeles, San Francisco, Chicago and Beijing. More than 200,000 NRDC members reside in California.

NRDC is a national leader in pioneering the use of geospatial environmental, land use and cultural resources data for renewable energy and transmission planning purposes. We helped develop the methodologies for the pioneering California Renewable Energy Transmission Initiative (RETI, Western Governors Association's Western Renewable Energy Zone (WREZ) process, and the Western Electricity Coordinating Council's (WECC) Regional Transmission Expansion Project (RTEP). We developed, in association with the National Audubon Society, a Google Earth application to assist planners and renewable energy and transmission developers in identifying and avoiding environmental resource conflicts across the Western U.S. We are members of a task force convened by the Western Governors Association to improve state permitting and siting policies to help close the gap between renewable project development timelines and transmission availability. We have advised and worked with the Department of Energy on Power Marketing Administration transmission issues, and the White House-initiated Rapid Response Team for Transmission's pre-application development process. We have supported efforts to solve generation and transmission siting challenges related to the BLM Solar Programmatic Environmental Impact Statement and the Desert Renewable Energy Conservation Plan.

### **General Discussion**

NRDC is a strong proponent of considering renewable energy generation and transmission needs simultaneously, and meeting transmission needs in the most efficient manner possible. Typical generation development timelines can be as short as several years, while transmission can take between seven and ten years to become available. Lack of coordination and duplication in permitting processes are frequently cited as major problems. Overlapping or incongruent authorities between agencies is another. Still another is the segmented and sequential transmission planning, approval and cost recovery processes in California that can lead to decisions that are not the most efficient or productive in terms of developing a system that enables rapid integration of renewable energy resources at the most affordable cost.

California has made major strides in addressing some of these issues, especially with regard to the coordination of state agencies and Federal-state coordination. In fact its work in this area is a national model. California pioneered renewable energy zoning and taken the concept to new heights through the Desert Renewable Energy Conservation Plan. It has done less well with local-state coordination and

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consolidating overlapping authorities between the CPUC, CEC and CAISO. Though coordination is better than it has been in the past, because of the sequential way the decisions are made and passed, baton-like from entity to entity, decisions on transmission improvements take longer than necessary and are overly focused on the interconnection queue and the “discounted core” of projects deemed likely to proceed and therefore worthy of transmission planning, and not enough on system needs that can greatly aid renewable integration, such as creating transfer capacity in renewable energy zones in non-desert areas of the state, such as the Central Valley. Improvements that reduce system congestion, enhancing our ability to import renewable energy from our neighbors and increasing access to ancillary services from energy storage projects such as the Helms Pump Storage project have gotten shorter shrift than they deserve. Such projects have multiple values to the system and should be prioritized. Planning done by the Midwest Independent System Operator

(<https://www.misoenergy.org/Library/Repository/Study/Candidate%20MVP%20Analysis/MVP%20Portfolio%20Analysis%20Full%20Report.pdf>) has included a major focus on “multi-value projects” (see attached presentation).<sup>1</sup> Multi Value Projects (MVPs) meet one or more of three goals:

- Reliably and economically enable regional public policy needs
- Provide multiple types of regional economic value
- Provide a combination of regional reliability and economic value

California would benefit from a similar approach. For California, renewable integration, access to storage, system reliability, allowing for development on environmentally disturbed lands, and interconnection of geographically diverse resources are examples of multiple values that could be considered and planned for in addition to the ones already considered by MISO.

**Recommendation:** Focus transmission planning on greater multi-value system benefits as opposed to the current queue-based, discounted core portfolio approach.

### **Discussion: Factors that shorten transmission development timelines**

NRDC believes the transmission development timeline can be significantly shortened by proactive planning and coordination, involving key stakeholders early in the process and by making maximum use of existing infrastructure, and by anticipating future system needs. As with generation siting, avoiding environmental and cultural resource conflicts will help reduce this time lag between generation and transmission development.

**Recommendations:** The following principles individually and especially in combination can reduce delays in transmission development:

1. Prioritize transmission needs for renewable energy zones
2. Plan for generation and transmission together

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<sup>1</sup> MISO prioritizes multi-value projects and makes extensive use of geographic diversity to reduce or eliminate the need for balancing reserves for wind integration.

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3. Involve relevant stakeholders early in planning
4. Utilize pre-application processes to identify and avoid regulatory problems for developers and regulators
5. Continue coordination between Federal and state agencies and between state agencies within California, enhance coordination between neighboring states for interstate lines, and between local jurisdictions and state authorities
6. Plan for system needs not just the interconnection queue (MVPs)
7. Prioritize transmission to geographically diverse renewable resources with uncorrelated variability to existing resources, both in and out of state
8. Consolidate or substantially improve the coordination of balancing authorities to improve overall system planning (as opposed to separate IOU/POU planning) and enable the sharing of infrastructure and reserves while increasing reliability and reducing costs
  - a. Reduce overall costs by avoiding duplicative infrastructure and reserves
  - b. Prioritize system upgrades with the broadest public benefit
  - c. Reduce integration challenges and enable reserve sharing
  - d. Improve system operations, faster schedules, better forecasting, etc.
  - e. Improve situational awareness to avoid system failures and enable faster recovery
9. Provide a regulatory roadmap for project applicants to: understand regulatory requirements across jurisdictions, identify opportunities for regulatory coordination, and provide greater procedural understanding and regulatory certainty for applicants
10. Consolidate transmission planning and approvals into a one-stop shop as opposed to the relay race process we have right now.

Attached is a white paper on renewable energy project and transmission siting issues produced as part of a larger project to identify policies needed to realize an 80% penetration of renewable energy into the nation's grid by 2050. The report was developed in response to the National Renewable Energy Laboratory's 2012 report: *Renewable Electricity Futures Study*. The attached chapter was written by NRDC's Director of Western Transmission, Carl Zichella, and Johnathan Hladik of the Center for Rural Affairs in Nebraska. This chapter goes into great detail on many of the issues raised in the May 7, 2013 IEPR workshop.

Thank you for considering these comments for more information, please contact Carl Zichella, Director of Western Transmission, (916) 837-7127, [czichella@nrdc.org](mailto:czichella@nrdc.org)

Respectfully submitted May 21, 2013



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