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Comments of the Natural Resources Defense Council (NRDC) on the Draft Scope of the 2014 Integrated Energy Policy Report (IEPR)

Docket 14-IEP-1

March 4, 2014 Submitted by: Lisa Xue lxue@nrdc.org

I. Introduction

The Natural Resources Defense Council (NRDC) appreciates the opportunity to offer comments on the "Scope of the 2014 Integrated Energy Policy Report (IEPR) Update" (IEPR Update). NRDC is a nonprofit membership organization with a long-standing interest in minimizing the societal and environmental costs of providing the reliable energy services that Californians demand. We represent our nearly 80,000 California members' interests in receiving affordable energy services and reducing the environmental impact of the state's energy consumption.

NRDC appreciates the ongoing effort of the California Energy Commission (CEC) staff to address the numerous energy issues that California is facing and applauds the IEPR's continued focus on increasing energy efficiency and meeting renewable energy targets. We provide the following comments on the Scope of the 2014 Integrated Energy Policy Report Update.

II. Renewable projects in Desert Renewable Energy Conservation Plan

NRDC will submit separate comments on the Desert Renewable Energy Conservation Plan jointly with The Nature Conservancy, Defenders of Wildlife, Sierra Club, The Wilderness Society, Audubon California, Center for Biological Diversity, Pacific Gas and Electric Company, and Southern California Edison.

III. Electricity Update

1. We recommend that CEC produce a methodology for local forecasting of energy efficiency in this IEPR Update that allows for the best estimates of local energy efficiency to be included in the 2015 California Energy Demand and subsequent resource planning efforts.

NRDC strongly supports the improvement of process alignment among the state's energy planning efforts. Toward that end, we recommend that the CEC specifically include as a goal of this IEPR Update to improve the methodology of local energy efficiency forecasting. In the 2013 IEPR, this Commission agreed that local energy efficiency forecasts should be addressed soon:

"While the agencies agree, in principle, that the same combination should be applied to all planning uses, the State's ability to assign geographic specificity to the demand forecast, procurement authorizations, and transmission additions is still evolving. Challenges include the local nature of reliability needs, the difficulty and uncertainty of forecasting load and additional achievable energy efficiency at specific locations, and the difficulty estimating daily load-shape impacts. Thus, it is prudent at this time to use a combination of the mid base case forecast and the low mid additional achievable energy efficiency scenario for local studies in these planning processes. *In future planning cycles, the agencies will collaborate to make improvements in the baseline*

demand forecast and additional achievable energy efficiency forecasts for use in local studies."

As acknowledged by this Commission, the CEC was unable to incorporate into local forecasts the full amount of energy efficiency that is reasonably expected to occur. This was due to unfinished work on the local forecasting methodology in the 2013 IEPR.

Those improvements to local forecasting would fit well within this IEPR Update timeline. The 2014 IEPR Update is not planning to update actual efficiency forecasts, so the CEC can allot time this year to focus on improving the methodology of forecasting efficiency. Delaying these improvements until the 2015 IEPR would be unreasonable because that proceeding will be focused on the actual forecasts, which would be too late for altering the methodology. Consequently, this IEPR Update is the most reasonable time period in which to accomplish the CEC's commitment of improving the local EE forecasting process. Therefore, we recommend that the CEC use the 2014 IEPR Update to produce a methodology for local energy efficiency forecasting that allows resource planners in other agencies to rely on the full amount of energy savings that are reasonably likely to occur.

2. We recommend that the IEPR Update explore actions that state regulatory agencies should take to reduce the cost of renewable energy penetration.

The investigation initiated in the 2013 IEPR in regional coordination and the recent E3 study completed for the state's largest investor-owned and public utilities illustrate the need for regional coordination to reduce the cost of meeting the state renewable energy penetration goal.² Specifically, the 2013 IEPR report states,

"California needs to plan, permit and build appropriate transmission infrastructure to support the 33 percent by 2002 Renewables Portfolio Standard (RPS) while delivering reliable electricity service... California needs to continue coordinating with the rest of the Western Interconnection in transmission planning activities to ensure that state policy objectives are considered appropriately in those activities, including the potential for higher levels of renewables in the future"

In light of this finding, the 2014 IEPR Update should initiate a discussion of steps the state agencies (e.g. CAISO, CEC and CPUC) can take to facilitate lower cost renewable integration and more efficient use of the electrical grid across the Western Interconnection.

¹ CEC, 2013 Integrated Energy Policy Report, CEC-100-2013-001-CMF, pp. 13-14 (January 2014).

² In addition to the E3 study, the CEC should consider coordination measures detailed in the following reports: (1)

Schwartz, Lisa, Porter, Kevin, Mudd, Christina, Fink, Sari, Rogers, Jennifer, Bird, Lori, Hogan, Mike, Lamont, Dave and Kirby, Brendan (June 2012). "Meeting Renewable Energy Targets in the West at Least Cost: The Integration Challenge," WGA, http://www.westgov.org/initiatives/rtep: (2) National Renewable Energy Laboratory, 2012. "Renewable Electricity Futures Study." Hand, M.M.; Baldwin, S.; DeMeo, E.; Reilly, J.M.; Mai, T.; Arent, D.; Porro, G.; Meshek M.; Sandor, D. eds. 4 vols. NREL/ TP-6A20-52409. Golden, CO: National Renewable Energy Laboratory. http://www.nrel.gove/analysis/re-futures/; (3) Linvill, Carl, John Candelaria, and Ashley Spalding, 2011. *Western Grid 2050: *Contrasting Futures, Contrasting Fortunes.* Western Grid Group. http://www.cleanenergyvision.org/wp-content/up-loads/2011/08/WG2050-final-rev082211.pdf; (4) Carl Zichella, Coordination is California's Least Cost Path to a Clean Energy Future, (January 16, 2014), SwitchBoard, NRDC Staff Blog,

http://switchboard.nrdc.org/blogs/czichella/coordination is californias le.html

³ CEC, 2013 Integrated Energy Policy Report, CEC-100-2013-001-CMF, p. 113 (January 2014).

3. We recommend the 2014 IEPR Update prioritize improvement projects that have broad-based system benefits.

As we recommended in the last IEPR and have commented to the CAISO conceptual statewide plan, NRDC believes that the 2014 IEPR Update should explore and encourage the CAISO and CPUC to prioritize transmission infrastructure improvements that have <u>multiple</u> benefits to the system. Improvements should aim to achieve a variety of goals, such as: facilitating renewable integration, enhancing access to electricity storage, enabling the development of renewable energy in the Central Valley on retired agricultural lands, and facilitating regional coordination in grid planning and operations to reduce energy and integration costs for California's consumers as the grid relies more intensely on variable renewable energy. This multipronged approach can either supplement or supplant prioritization efforts built mainly on a discounted core of projects. Other planning regions (such as MISO) have implemented this method of prioritization, which has led to broad system benefits, including supporting wind integration and enhancing system reliability in the region's footprint.⁴

IV. Transmission Update

1. We recommend that the CEC update the 2013 IEPR Section "Trends in Western Interconnections" in the Transmission chapter to account for the recent work on the water-energy nexus, which has important implications for the electricity system given the current drought.

California is in the midst of a severe drought and an extended period of below normal precipitation. The Department of Water Resources is examining the water-energy nexus in California and exploring methodologies for calculating the energy intensity of different regional water supplies. The Update should examine initial steps to explore this issue further as the generation mix for the state may be significantly to severely altered as a result of water constraints. CEC staff should coordinate with DWR staff and the Scenario Planning Steering Committee of WECC to explore both California-specific and WECC-wide implications of water resource shortages on the electricity system.

V. Conclusion

NRDC appreciates the opportunity to comment on the 2014 IEPR Update scope and recommends that the Commission draft the scope with the inclusion of the aforementioned recommendations. We look forward to continuing working with the CEC in the following months on the 2014 IEPR Update.

⁴See "MVPs Create Jobs, Benefits for States," MISO, 2012, https://www.misoenergy.org/Library/Repository/Communication%20Material/One-Pagers/MVP%20Benefits%20-%20Total%20Footprint.pdf.