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Sacramento, CA 95814-5512

To Whom It May Concern:

Subject: Docket No. 11-IEP-1D – Reliability Comments on the January 2011 Draft Work Plan, entitled *Assessment of Electrical System Reliability Needs in the South Coast Air Basin and Recommendations on Meeting Those Needs*

The Los Angeles Department of Water and Power (LADWP) appreciates the opportunity to provide the following comments regarding California Energy Commission's January 2011 draft work plan, entitled *Assessment of Electrical System Reliability Needs in the South Coast Air Basin and Recommendations on Meeting Those Needs.* LADWP is committed to working in partnership with the state and other stakeholders to achieve the goals of Assembly Bill (AB) 1318, which required the State Air Resources Board on or before July 1, 2010, in consultation with the Public Utilities Commission, the State Energy Commission, the State Water Resources Control Board, and the California Independent System Operator (CAISO), to prepare and submit a report with recommendations to the Governor and the Legislature.

Background

LADWP serves over 4 million people, and is the nation's largest municipal utility. As a "vertically integrated" utility, LADWP both owns and operates its generation, transmission, and distribution systems with an installed generation capacity of 7,336 megawatts (MW) and has a service territory that covers 469 square miles with annual sales exceeding 26 million MW hours. LADWP experienced an all-time peak demand of 6,142 MW on September 27, 2010. The LADWP transmission system consists of a network totaling more than 3,600 miles which are utilized to transport power from the Pacific Northwest, Utah, Arizona, Nevada, and within California.

LADWP continues to make portfolio-wide emission reductions on behalf of its customers and service community and has been able to dramatically increase its renewable energy mix. In 2003, renewable energy accounted for 3 percent of the LADWP energy delivered to its customers. Since then, LADWP has been able to increase the amount

of renewable energy delivered to 20 percent in 2010. In alignment with its objectives to transition from coal and avoid the construction of new power plants in the South Coast Air Basin, LADWP is expanding energy conservation and efficiency, investing in renewable energy resources and transmission, replacing and upgrading its in-basin natural gas generation, and using smart grid technology and dynamic scheduling.

Repowerings

LADWP operates four (4) in-basin natural gas-fired power plants, including Harbor, Haynes, Scattergood and Valley Generating Stations (pg. 27 of the work plan lists each generating station capacity). LADWP has been committed to addressing its aging generation and transmission resources through the process of "repowering", older, less efficient units and replacing them with new, state-of-the-art equipment that conserves fuel, reduces green house gas (GHG) and nitric oxide (NOx) emissions. These projects are part of a massive modernization process that LADWP has been undertaking at all in-basin power plants over the past decade. As a result of these sizeable investments, LADWP has reduced NOx emissions by over 90 percent in the Los Angeles Basin. As part of this modernization, LADWP plans to undertake two (2) repowerings per decade, which will eliminate the need to construct additional new generating stations within the South Coast Air Basin, as well as preclude the need to procure emission reduction credits. This course of action is contingent upon LADWP's continued access to the South Coast Air Quality Management District Rule 1304 exemption, which provides off-set emissions on a MW per MW basis.

The modernization projects have the added benefit of reducing the amount of ocean water used to cool the power plants. With each repowering, LADWP will replace ocean cooling with dry cooling. LADWP has already decreased the number of generating units that utilize ocean water cooling from 14 to 9.

Comments on the Work Plan

1. Electrical Reliability:

   Reliable electric power has been a cornerstone of LADWP since it began offering municipal electricity in 1917. Historically, LADWP's Power System reliability has consistently placed in the top quartile of the electric utility industry, and it is LADWP's goal to continue this quality of service. Power System staff has reviewed the overall system and has determined that in the near-term LADWP has sufficient capacity with no immediate need to add incremental new electrical generating stations in the South Coast Air Basin. LADWP does, however, need

to maintain the existing level of capacity within the Basin. As a balancing authority, LADWP is responsible for ensuring reliability for the area under its jurisdiction based on standards set by the North American Electric Reliability Corporation (NERC). As such, LADWP will continue to conduct all necessary reliability studies so that all ongoing and new initiatives (renewable energy, GHG reduction, and energy efficiency) are successfully modeled and implemented without compromising system reliability.

2. Once-Through-Cooling (OTC):

A. OTC Plants

LADWP owns three coastal generation stations that utilize OTC, including Harbor, Haynes, and Scattergood, generating a total of 2,672 MW. The coastal power plants are critical to LADWP's in-basin generation. The location and continued operation of these plants is critical not only because of the energy they supply, but also for the stability and balance they provide to LADWP's transmission grid. Additionally, an in-basin supply of power ensures that LADWP can produce and deliver electricity in the event of emergencies or natural disasters, such as earthquakes or wildfires. To meet energy demand and comply with mandated reliability requirements, LADWP cannot relinquish any of the power currently provided by its coastal plants. As LADWP repowers existing plants and replaces ocean cooling with dry cooling, it needs to do so in a manner that enables existing in-basin generation to continue operating for reliability purposes. As more renewables are integrated into LADWP's power system, these coastal plants become even more critical due to the variability of the power provided by these renewable sources.

B. Policy and Planning

The State Water Resources Control Board (SWRCB) adopted its Statewide 316 b Policy (Policy) on May 4, 2010. The Policy requires those coastal plants that use OTC to reduce marine life impacts. The Policy became effective October 1, 2010.

On page 21 of the draft work plan it states that the SWRCB, in consultation with energy agencies, has delayed the compliance dates in the recently adopted statewide OTC Policy for OTC plants in the Los Angeles Basin to allow time for replacement infrastructure to be developed and brought on line.

The dates in the Policy adopted on May 4, 2010, have not been extended to allow replacement time for the infrastructure. The Policy has dates which are not feasible and have a significant impact to LADWP's system reliability. An Amendment was proposed in December that would have allowed for the approval of a schedule beyond 2020. The Amendment was tabled until July 2011. In the meantime, by April 1, 2011, each utility must submit to the SWRCB an implementation plan that describes the utility's compliance path and schedule. If the implementation plan proposes a schedule beyond that stipulated in the Policy, it must be reviewed and approved by the Statewide Advisory Committee on Cooling Water Intake Structures (SACCWIS) and SWRCB. As mentioned in the draft work plan, the adopted dates in the OTC Policy can be changed. With regard to LADWP's situation, those dates must be changed to continue providing reliable service to our 1.4 million customers.

C. System Studies

On page 24 of the draft work plan, it mentions that the CAISO performed a transmission analysis in February 2008 to determine reliability impacts to both local and zonal areas for the CAISO grid system due to the absence of the non-nuclear OTC plants. It is important to note here that LADWP is not a part of the CAISO system and therefore these assessments do not represent LADWP's grid system.

On page 26, it mentions that there are no LADWP studies that compare to CAISO studies and that LADWP is required per the OTC Policy to provide annually a grid reliability study to the SWRCB beginning December 31, 2010. LADWP is currently in compliance with the OTC Policy and did submit its grid reliability study to the SWRCB as required. LADWP used CAISO's grid study submittal as its template. LADWP is in the process of developing its implementation plan, due April 1, per the Policy, to the SWRCB, that will specify a compliance schedule that provides environmental protection, certainty for its grid system reliability and stability, and a financially sustainable path forward. As a municipal utility, LADWP is mandated by its City Charter to provide reliable power and affordable rates to its customers, and therefore must continually balance reliability, costs, and environmental protection. LADWP is uniquely positioned because it remains vertically integrated. More specifically, our generation design directly relates to our transmission system reliability design and impacts our effectiveness as an independent system operator.

On page 27, the draft work plan discusses the CAISO's OTC Load and Resource (L&R) analysis tool for power system modeling. LADWP has reviewed CAISO's OTC L&R analysis tool and recommends that CAISO further the statewide power system modeling through the joint effort currently underway with the California Transmission Planning Group (CTPG). CTPG is a joint effort of California municipal utilities, investor-owned utilities, and CAISO, and CTPG is studying the impacts of OTC during the 2011 calendar year.

3. Emissions Reduction Credits:

At the present time, SCAQMD Rule 1304 exemptions are the primary source of air credits for the repowering of existing steam boiler power plants. Rule 1304 provides for a MW for MW offset for qualifying replacement generating plants. LADWP has relied on this exemption in the past and will continue to do so in the future. Consequently, offsets and their availability is not anticipated to have a significant impact on LADWP operations in the near-term, as long as the 1304 exemption is preserved for repowerings on a MW by MW basis. LADWP makes this comment with the assumption that the readoption of SCAQMD Rule 1315 will be State Implementation Plan (SIP)-approved prior to the SB 827 sunset provision of May 1, 2012, thus preventing another permit moratorium.

4. Public process and publications:

In response to the comment on pg. 18 of the (title) Plan that states that there is "much less public information about LADWP," we would like to provide information on our current Integrated Resources Plan (IRP) process, which is available at www.LAPowerPlan.org. The 2010 Power System IRP provides a 20-year framework to ensure that current and future energy needs of the City of Los Angeles are met, regulatory requirements are satisfied, and environmental policy goals are achieved. The 2010 Power System IRP lays out alternative strategies for increasing renewable energy and reducing greenhouse gas emissions, while maintaining power reliability, complying with new state and federal regulations, and minimizing the financial impact on our customers. The 2010 Power System IRP identifies options for a mix of electric resources based on comprehensive research and analysis and is guided by the following principles: reliability of the Power System, regulatory compliance, environmental stewardship, including pursuing renewable energy resources, and maintaining low and stable rates.

To ensure the 2010 Power System IRP accurately reflects the electricity needs of the City of Los Angeles and its diverse customers and stakeholders, LADWP obtained public input on the Draft 2010 Power IRP strategies during several workshops in late summer/fall 2010 and also through our website. The first workshop was held on August 12, 2010, with additional workshops conducted in September 2010. The website also hosted a short survey during the public workshop series to allow more community members to provide input. All public input received during the workshops and via the website were considered prior to completion of the final 2010 Power System IRP to help develop LADWP's long-term energy strategy. In summary, LADWP has an extensive public process, which is both robust and transparent in nature when it comes to resource planning, and LADWP will continue this practice in the future.

5. Purchase of Combined Heat and Power (CHP):

CHP systems, also known as thermal cogeneration, capture and utilize excess heat generated during the production of electric power. Currently, CHP installed in the LADWP Power System consists primarily of cogeneration projects of industrial and commercial customers. The CHP nameplate capacity operating in LADWP's service area is approximately 265 MW. Current barriers to CHP may be attributed to natural gas price volatility and the diminishing industrial customer base. LADWP is developing CHP target goals to incorporate CHP generation in its future resource mix and is currently considering development of several self-owned CHP projects. To encourage customer-developed CHP, LADWP is currently offering a Standard Energy Credit to its customers for excess energy they sell to LADWP.

LADWP staff is available to meet and further discuss these issues. If you have any questions or require additional information, please contact Mr. Bruce M. Moore, Environmental Affairs, at (213) 367-3772.

Sincerely,

John R. Dennis
Director, Power System Planning and Development

BMM/JRD:lr/ps
c: Mr. Bruce M. Moore Ms. Cindy Montañez