MWD
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Executive Office

June 25, 2009 **Via Electronic & U.S. Mail**

Ms. Clare Laufenberg Gallardo
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814-5512

Renewable Energy Transmission Initiative (RETI) Phase 2A Draft Report

Dear Ms. Gallardo:

The Metropolitan Water District of Southern California (Metropolitan) is pleased to provide the following comments on the RETI Phase 2A Draft Report (Draft Report). On May 10, 2009, Metropolitan submitted initial comments expressing concern regarding RETI's potential impact to Metropolitan transmission facilities by email to RETI Stakeholder Steering Committee members Messrs. Richard Ferguson, David Olsen and Shashi Pandey. Since then, Metropolitan has been an active participant in meetings of the RETI Conceptual Planning Work Group (CPWG) and related activities, including providing comments regarding RETI to the California Energy Commission on May 22 in response to the May 4, 2009, Joint Integrated Energy Policy Report and Siting Committee workshop.

These Draft Report comments focus on potential transmission projects directly affecting Metropolitan's Colorado River Aqueduct Transmission System (CRATS). Metropolitan's concerns fundamentally arise from the purpose and unique nature of the CRATS, as explained immediately below.

Metropolitan's Electrical Transmission System

Metropolitan was created in 1928 for the purpose of transporting water from the Colorado River to the growing population in Southern California. In the 1930's, it constructed the CRA, starting near the newly completed Parker Dam, through remote areas of the Mojave Desert in Riverside and San Bernardino counties and terminating near the city of Riverside. Five large pumping plants, whose total electrical demand would be nearly 300 MW, were built along the CRA. Due to the remoteness of the area, there was no existing electrical infrastructure to transport and supply the large amount of power required by these pumps. Therefore, Metropolitan had to construct a 230 kV transmission system to bring power from the Hoover and Parker Dam power plants to its five pumping plants.

The sole use and purpose of the CRATS was to deliver power to its remote pumping loads. The CRA pumps are basically tied directly to the CRATS, using a main and transfer bus

configuration. There is no redundant transmission path to several of our pumping plants, which must operate in a synchronized fashion as there is no water storage facility along the CRA. The CRATS was designed essentially as a pumping load tie.

The CRATS currently lies within the California Independent System Operator (CAISO) Balancing Authority Area as a result of a 30-year, complex integration contract with Southern California Edison that expires in 2017, under which SCE had performed control area responsibilities for the CRATS. The CRATS is not part of the ISO Controlled Grid since Metropolitan, its owner, is not a CAISO Participating Transmission Owner.

The water that Metropolitan transports through the CRA is critical to the population and economy of Southern California. Metropolitan supplies one half of the total water used by the businesses, industries and 19 million residents of this region, and over 50 percent of that water comes from the CRA. To satisfy such water demands, the CRA must be operated on a near continuous basis. In some years, we have operated the CRA at maximum flow 24/7 for the entire year. In other years, the CRA has been shut down briefly to perform scheduled maintenance during the summer, when the water supply requirements were met by other resources. Such shutdowns require extensive advance coordination and planning with Metropolitan's 26 member agencies to ensure they can continue to provide water delivery to their wholesale and retail customers. Essentially, the CRA and its supporting transmission system operate on a schedule dictated by water supply requirements, not electrical considerations.

RETI's Proposed Changes to the CRATS

RETI proposes construction of the following Iron Mountain Collector lines: (1) Replacement of Metropolitan's existing 230 kV Iron Mountain – Camino transmission line with two new 500 kV double circuit lines connecting Iron Mountain to a new Southern California Edison Company (Edison) Junction 500 kV substation to access renewable generation within the Iron Mountain Competitive Renewable Energy Zone (CREZ); and (2) a new 500 kV single circuit line from SCE Junction – Camino to access the Needles CREZ. Metropolitan's 230 kV Iron Mountain and Camino substations would be modified as 500/230 kV.

The RETI Phase 2A Draft Report also proposed other modifications to Metropolitan's CRATS that Metropolitan is pleased to learn have since been withdrawn from further consideration by the RETI CPWG. Specifically, Metropolitan understands the two new 20 mile, 230 kV double circuit lines proposed from Metropolitan's Julian Hinds 230 kV substation to Desert Center will not appear in the final Phase 2A Report. In addition, reconstruction of Metropolitan's existing 230 kV line with double circuit towers from Julian Hinds to Eagle Mountain substations and addition of a new Hinds – Eagle Mountain line on the open side of the towers has also been withdrawn. Finally, the CPWG deleted two proposed 500 kV lines from Eagle Mountain to Devers substations (Green Energy Express), and modification of Eagle Mountain substation from 230 kV to 500/230 kV. Metropolitan greatly appreciates the CPWG's efforts to reduce RETI's

impact to Metropolitan's CRATS. For the reasons explained below, we urge further consideration of RETI's proposed changes to CRATS in the Iron Mountain CREZ.

Metropolitan's Specific Phase 2A Draft Report Comments

Apparent Underestimation of Iron Mountain CREZ & Collector Line Environmental Concerns

The Draft Report appears to have underestimated environmental concerns associated with development of the Iron Mountain CREZ and construction of the associated Iron Mountain Collector lines to deliver renewable energy to load centers. Notably, the Environmental Work Group (EWG) failed to include one of the primary (if not the major) environmental constraint in the immediate area, critical habitat for the desert tortoise in its Transmission Line Environmental Issues Checklist contained in Appendix D to the Draft Report. While the Iron Mountain CREZ lies outside of designated critical habitat for the desert tortoise, the Iron Mountain – SCE Junction and SCE Junction lines lie within a large swath of critical habitat. Such lines also lie within Desert Wildlife Management Areas, and U.S. Bureau of Land Management Areas of Critical Environmental Concern, as the EWG correctly noted. Even with the omission of critical habitat for the desert tortoise, the EWG concluded that the Iron Mountain Collector lines pose "High" Environmental Concern, as documented in Appendix D.

Metropolitan has difficulty reconciling the "High" Environmental Concern noted in Appendix D with Table 1-1 in the Draft Report, which identifies the Iron Mountain Collector lines as having the fifth lowest environmental score of 12 collector lines. Their environmental score of 131 is significantly lower than the median collector line score of 249. Metropolitan assumes the low environmental score for Iron Mountain Collector lines is in part attributable to the apparent intent to locate their construction on existing right-of-way. However, these lines will be constructed in very remote, pristine areas of the Mojave Desert, and significant adverse environmental impact could ensue from such activity.

The Iron Mountain CREZ and Collector lines are subject to additional development risk, for they are located well within the proposed Mojave Desert National Monument. If established, the Monument would appear to frustrate, if not prohibit, development of renewable generation in the Iron Mountain CREZ and possibly also the Needles CREZ. Furthermore, Executive Order S-14-08 which directs development of a Desert Renewable Energy Conservation Plan based upon a Natural Communities Conservation Plan by the end of 2010 is likely to affect development of renewable energy in the Iron Mountain CREZ. Finally, the U.S. Fish & Wildlife Service is in the process of revising its Desert Tortoise Recovery Plan, which may be completed in 2009.

All of the foregoing suggests that prospective renewable generation developers would be prudent to focus their project development efforts in areas that are not subject to the extensive environmental risk and uncertainty that is clearly associated with the Iron Mountain CREZ. Transmission plans should be appropriately focused on providing access to the CREZs that do not suffer from the same degree of project development impediments as the Iron Mountain

CREZ. This is especially true in light of the Draft Report's recognition that the total estimated renewable generation in identified CREZs is several multiples in excess of the amount of California's utilities need to procure to achieve compliance with a 33% renewable portfolio standard by 2020.

Need for Coordinated Transmission Planning Efforts

As a small electric utility, Metropolitan is especially sensitive to the multiplicity of concurrent transmission planning efforts currently going forward on a state and regional basis. RETI has done a good job thus far of coordinating its activities with affected parties. As the proposed conceptual transmission plan undergoes further revision, RETI will need to remain vigilant to ensure that all affected parties have an opportunity to provide comment, and that its plans appropriately reflect external developments such as the results of CAISO generator interconnection queue, local transmission plans and regional planning efforts such as the Western Electricity Coordinating Council's Transmission Expansion Planning Policy Committee and the Arizona Corporation Commission's Biennial Transmission Assessment.

Focus on core mission

Metropolitan supports all but one of the Draft Report's Policy Recommendations. The Draft Report's recommendation that multiple transmission charges be eliminated concerns transmission cost recovery. That issue is not germane to RETI's stated purpose, which is to (i) Help identify the transmission projects needed to accommodate these renewable energy goals; (ii) Facilitate transmission corridor designation; (iii) Facilitate transmission and generation siting permitting; and (iv) Support future energy policy. Realization of RETI's purpose is already challenging; it should seek to avoid issues extraneous to the achievement of its objectives.

Conclusion

As the electric grid has developed around the CRA, Metropolitan has had to increase the complexity and capability of the protection devices on the CRATS and at the pumping plants. With the higher capacity and voltage Iron Mountain Collector lines proposed to be interconnected to the CRATS and incorporated into it, Metropolitan is very concerned about its ability to protect the pumping plants from disruption and the potential incompatibilities of the power and water conveyance missions.

Metropolitan's core mission is the reliable supply of water to Southern California, and we remain concerned the transmission network changes to our system resulting from development of the Iron Mountain CREZ and Collector lines could impair that mission. Metropolitan looks forward to further participation in the RETI to ensure realization of its important goals is achieved in a manner that doesn't compromise Metropolitan's ability to reliably deliver water to 19 million Southern California residents.

Thank you for your consideration of these comments. Please contact me at me at (213) 217-7381 or jlambeck@mwdh2o.com or Ann Finley at (213) 217-7136 or afinley@mwdh2o.com should you have any questions concerning them.

Very truly yours,

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