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June 6, 2016

Mr. Samuel Unger, Executive Officer
Los Angeles Region
California Regional Water Quality Control Board
320 West Fourth Street, Suite 200
Los Angeles, CA 90013

Attention: Mr. David Hung
Ms. Cassandra Owens

Dear Mr. Unger:

Subject: Request for Compliance Schedule or TSO for Total Residual Chlorine
Harbor Generating Station (HGS), NPDES Permit CA0000361, CI-2020

The Los Angeles Department of Water and Power (LADWP) submits the framework for a request for a compliance schedule as discussed at the meeting with the Regional Water Quality Control Board staff and LADWP. As mentioned at the meeting, the HGS is a critical facility for LADWP's electrical grid system. The Once-Through Cooling (OTC) Unit 5 at HGS is not only a reliability must run (RMR) unit, but also imperative to meet the North American Electric Reliability Corporation (NERC) Reliability Standards. Therefore, this unit must be available for LADWP's electrical system at all times. Furthermore, LADWP is in the process of transforming its entire electrical system, which includes the complete elimination of OTC, and at the same time eliminating coal from its power portfolio and integrating more variable energy resources (VERs) such as solar and wind. This is a tremendous effort and makes the HGS Unit 5 even more valuable and critical to the balance and voltage support of LADWP's entire grid system.

LADWP is the largest municipality in the nation, and it owns its own generation, distribution, and transmission. The LADWP is not part of the California Independent System Operator (CAISO) grid system; LADWP operates a separate system and is solely responsible for balancing the electrical supply with the demand in its service area. The transmission system to deliver the required energy grid has been built out from its coastal generating stations. Due to the urbanization of surrounding areas, there is not space to add additional transmission to meet the demand in the Southern area near the coastal generating stations; rather, the coastal generating stations are critical to providing electricity to the surrounding areas. The physical location of LADWP's grid system, and in particular this southern area, makes it much like a cul de sac. A portion of the power in the Southern portion must come from the coastal generating stations. Unlike the CAISO plants, which depend upon a power market, LADWP's generating stations are governed by the City of Los Angeles City Charter, and must provide reliable and affordable electricity in an environmentally responsible manner 24/7 to the Citizens of Los Angeles. Therefore, HGS' ability to operate under the NPDES Permit is of absolute vital

importance due to the critical nature of this facility to LADWP's grid system and reliability. Loss of HGS's operations significantly threatens grid reliability in the Los Angeles Department of Water and Power electricity service area.

Therefore, a compliance schedule that follows the OTC Policy schedule is necessary. In addition, and as noted in our comment letter (dated June 6, 2016), a compliance schedule may be necessary for additional constituents, potentially including temperature and additional chemical constituents. Although the request below is written for chlorine, we anticipate that this request would be updated to include a request for additional constituents if and when it becomes apparent that a compliance schedule for those constituents is needed.

LADWP submits for your review and discussion the following framework. It is understood that further details will follow once we have met and discussed, and once we have received a response to our comment letter, in order to determine if a compliance schedule is needed for additional constituents.

Request for Compliance Schedule for Total Residual Chlorine

- Prior to 2001, the Harbor Generating Station (HGS) discharge was regulated as an ocean discharge. The discharge was not required to meet the Los Angeles Region Basin Plan (Basin Plan) water quality objective for total residual chlorine (TRC) of 0.1 mg/L (maximum daily concentration). Instead, a 301(g) variance for chlorine was granted, and the discharge was allowed a TRC effluent limitation of 0.377 mg/L (maximum daily concentration) (see Order 95-027 at p. 9).
- On July 18, 2001, the State Water Resources Control Board (State Board) re-designated the HGS discharge as a discharge to an "enclosed bay."
- In the HGS NPDES permit adopted in 2003 (Order R4-2003-0101)—the permit currently applicable to the facility—the 301(g) variance from Best Available Technology (BAT) requirements was carried forward and the TRC effluent limitation of 0.377 mg/L was maintained.
- During the current (2016) permit renewal process, the Tentative Permit for the HGS discharge proposes to eliminate the waiver of BAT requirements for TRC and to impose the Basin Plan objective of 0.1 mg/L as an effluent limitation. This proposed chlorine requirement amounts to a new or revised water quality objective for the HGS discharge.
- In 2008 the State Board established the "Policy for Compliance Schedules in National Pollutant Discharge Elimination System Permits" (Resolution 2008-0025), which states, "This Policy authorizes a Water Board to include a compliance schedule in a permit for an existing discharger to implement a new, revised, or newly interpreted water quality objective or criterion in a water quality standard that results in a permit limitation more stringent than the limitation previously imposed..." (p. 3).
- Recent monitoring data suggest that LADWP will not be able to consistently meet the new, proposed TRC effluent limitation given HGS's current mode of operation. For example, monitoring data for the period 2011-2015 indicate 27 events in which the maximum daily TRC concentration exceeded 0.1 mg/L.
- Recent monitoring data also demonstrates that beneficial uses are attained in receiving waters under the current discharge regime.

- To meet the proposed TRC effluent limitation, LADWP needs to implement new or modified control measures, and these measures cannot be designed, installed, and put into operation within 30 calendar days.
- LADWP submitted an Implementation Plan in response to the State's once-through cooling (OTC) policy on April 10, 2010; the SWRCB prepared and adopted an Amendment to the Policy on July 19, 2011, which was approved by the Office of Administrative Law on March 12, 2012. This amendment detailed LADWP's dates for complying with the OTC policy, specifying compliance dates for each of LADWP's three coastal generating stations. The compliance date for HGS Unit 5 is December 31, 2029.
- If the Regional Board imposes the chlorine requirements proposed in the Tentative Permit without schedule relief, LADWP will have to cease operations at HGS. In order to avoid this threat to the reliability of the power grid in Los Angeles, the HGS NPDES permit should be crafted to accommodate continued operation of HGS while LADWP implements the planned repowering projects and moves away from OTC. As detailed above, LADWP believes that the requirements for granting a compliance schedule have been met, and that a compliance schedule would be consistent with the OTC Implementation Plan approved by the SWRCB.
- Therefore, LADWP requests that the HGS discharge be granted a 10-year compliance schedule to meet the new TRC requirement as part of the terms of its new NPDES permit. This is as short possible due to grid reliability and the need to be able to operate with OTC until 2029.

Alternative Request for TSO for Total Residual Chlorine

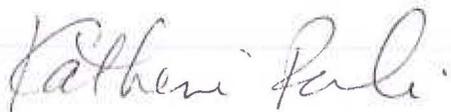
- If the Regional Board does not grant a compliance schedule within the permit as outlined above, LADWP requests a Time Schedule Order (TSO) for a five-year period to provide time to evaluate and implement options for complying with the new effluent limitation for TRC.
- California Water Code 13300 states, "Whenever a regional board finds that a discharge of waste is taking place or threatening to take place that violates or will violate requirements prescribed by the regional board, or the state board, ...the board may require the discharger to submit for approval of the board, with such modifications as it may deem necessary, a detailed time schedule of specific actions the discharger shall take in order to correct or prevent a violation of requirements."
- The TSO is being requested for the same reasons that a compliance schedule has been requested above: (1) the proposed TRC limitation amounts to a new effluent limitation for the HGS discharge; (2) the proposed TRC limitation is more stringent than the limitation in the existing permit; (3) recent monitoring data demonstrate that the HGS discharge would be unable to meet the new TRC requirement under the current operating regime; (4) to meet the new TRC requirement, the Discharger would need to implement new or modified control measures which cannot be implemented within 30 days; (5) recent monitoring data show that beneficial uses are currently attained in the HGS receiving water under the existing discharge regime; and (6) imposition of the proposed TRC limitation without schedule relief would threaten power grid reliability and run counter to the State Board's approved long-term schedule for eliminating OTC at HGS.

- During the five-year TSO period, the Discharger will achieve compliance with the proposed TRC effluent limitation (the Basin Plan objective) according to the following milestones:
 - Milestone 1 (2017): Research options for compliance with new TRC effluent limitations.
 - Milestone 2 (2018): Evaluate the feasibility of compliance options.
 - Milestone 3 (2019): If necessary, implement a pilot program to test the most feasible compliance options.
 - Milestone 4 (2020): Develop a report describing the findings of the research and evaluation, and (if necessary) pilot program.
 - Milestone 5 (2021): Implement the preferred alternative and come into compliance with the proposed final effluent limitation for TRC.
- During the five-year period of the TSO, the Discharger proposes an interim TRC effluent limitation of 0.377 mg/L (maximum daily concentration), consistent with the effluent limitation in the existing NPDES permit. Proposed interim limits for temperature would be 94 degrees Fahrenheit for regular operations and 135 and 140 degrees Fahrenheit for gate adjustments and heat treatments.

In closing, LADWP appreciates the Regional Board staff spent with LADWP to discuss LADWP's comments and concerns on the proposed tentative draft NPDES Permit. LADWP looks forward to continue working with the Regional Board staff on the HGS tentative draft NPDES permit.

If you have any questions or require additional information, please contact Mr. Maher (Matt) Qassis of my staff at (213) 367-2976.

Sincerely,



Katherine Rubin
Manager of Wastewater Quality and Compliance

MQ:

Enclosures

c/enc: Ms. Deborah Smith, Assistant Executive Office, LARWQCB

Ms. Rosario Aston, LARWQCB

Mr. Maher Qassis, LADWP