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November 8, 2018

Eileen Sobeck
Executive Director
State Water Resources Control Board
1001 I Street
Sacramento, CA 95814

RE: Grid Reliability Information Requests for the Huntington Beach Generating Station

Dear Ms. Sobeck,

This letter is in response to your September 12, 2018 correspondence requesting the latest information for the AES Huntington Beach generating station (AES-HB) Implementation Plan (IP). AES-HB and AES Southland Energy, LLC (AES) are subsidiaries of the AES Corporation.

As we have previously communicated, there are a number of significant assumptions that the State Water Resources Control Board must consider when implementing the statewide *Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling* (OTC Policy), while continuing to ensure grid reliability. Many of these assumptions are dependent upon information, conditions and decisions outside of the control of AES. As an independent generator providing contracted capacity to the local utility, Community Choice Aggregators (CCAs) or directly to the California Independent System Operator (CAISO), AES is not responsible for evaluating and maintaining grid reliability. However, AES and AES-HB are ready and prepared to respond to grid reliability needs as determined by the utility, local area balancing authority (CAISO), the California Public Utilities Commission (CPUC) and the Statewide Advisory Committee on Cooling Water Intake Structures (SACCWIS) should such a need arise. Without **first** obtaining specific direction or receiving a request to enter into contracts for AES-HB generating capacity, AES-HB will not be requesting any extension to the current OTC compliance dates.

In your letter, you have stated that AES-HB should allow adequate time for the State Water Board to process a request for an extension of the compliance dates set forth in the OTC Policy. As there are currently no conditions under the control of AES-HB which would necessitate such a request, AES-HB asserts it is the sole responsibility of the SACCWIS, under the authority of the State Water Board, to make an assessment of grid reliability and resiliency, and to recommend OTC compliance date extensions in a time frame that will allow adequate time for your own agency to act. Such a schedule must consider not only an amendment to the OTC Policy, but also adequate time for the state's Regional Water Quality Control Boards to amend or reissue the NPDES permits associated with the affected facilities. Since all of the AES facilities, including AES-HB, have a December 31, 2020 OTC compliance date, AES strongly urges the State Water Board and SACCWIS to make their grid reliability assessment and recommendation for OTC Policy amendments for the AES facilities in the next annual SACCWIS report to be published in the spring of 2019. AES believes there will not be adequate time to amend the OTC Policy, negotiate contracts with the grid operator and/or utility, issue new or amended NPDES permits and physically prepare the affected generating units for extended operating life without a decision from your agency in 2019.

Before addressing the State Water Resources Control Board's specific questions, AES provides the following general comments which may help to simplify the understanding of the IPs. AES currently intends to comply with the OTC Policy by utilizing Track 1 and shutting down and permanently retiring all generating units at AES Alamos, AES-HB and AES Redondo Beach, per the compliance dates included in the OTC Policy. AES does not plan to retrofit any of the existing units with alternate cooling technologies to comply with Track 1, or utilize any operational or technical measures to comply with Track 2. In the event additional new generating resources are needed in order to maintain a reliable supply of electricity, AES intends to provide these new resources through competitive solicitations issued by the utility(s) or CCAs and these resources would be constructed on one or more of the existing sites, would utilize air cooling technology, and would not be subject to the OTC Policy.

With respect to OTC generator retirement timing, a Resource Adequacy contract has been executed with Southern California Edison that extends the operation of AES-HB generating unit 1 through December 31, 2019 and AES-HB generating unit 2 through December 31, 2020. The Resource Adequacy contract for the AES-HB generating units received final approval from the California Public Utilities Commission on September 28, 2017. All AES-HB generating units will be permanently retired at the end of their respective contracts in compliance with the OTC Policy. AES-Alamos and AES-HB were awarded Power Purchase Agreements (PPA) for nominal 640 MW and 644 MW capacity combined-cycle gas turbines (CCGTs) with PPA Initial Delivery dates of June 1, 2020 and May 1, 2020, respectively, which will require the shutdown of one of the existing AES-HB units prior to the OTC Policy compliance date due to limited interconnection capacity at AES-HB and to satisfy South Coast Air Quality Management District rules for new emission sources.

Answers to your specific questions in your letter are provided below.

1. Has any of the information¹ above changed?

Yes. First fire of the 644 MW combined-cycle gas turbine replacement generation at AES-HB will occur October 1, 2019 as opposed to October 3, 2019 as indicated in your letter. In addition, AES Redondo Beach (AES-RB) unit 7 will be permanently retired to satisfy South Coast Air Quality Management District rules for new emission sources on September 30, 2019, as opposed to December 31, 2019 as indicated in your letter. All other information listed is correct. AES-HB generating unit 1 will be retired by December 31, 2019 and AES-HB generating unit 2 will be retired by December 31, 2020. AES-HB expects the new 644 MW CCGT to achieve commercial operation by April 1, 2020, well ahead of the guaranteed Initial Delivery Date of June 1, 2020 in the Power Purchase Agreement.

2. Is AES-SL on track to complete construction of the new AEC facility to meet its commercial operation date or PPA date for the new facility?

Yes. Construction of the new 644 MW combined-cycle gas turbine (CCGT) commenced on June 3, 2017 and is currently on schedule.

¹ State Water Resources Control Board, September 12, 2018 letter to Jennifer Didlo

3. Are there any contingencies that would prevent AES-SL from meeting its OTC Policy compliance date?

An unforeseen delay in construction or commissioning of the new 644 MW CCGT replacement generation at AES-HB could prevent AES from meeting its OTC Policy compliance dates. The retirement of AES-HB and AES-RB units and subsequent compliance with the OTC Policy deadlines for the facility are contingent upon compliance with the CPUC's General Order 167, Appendix E which requires AES-AL to notify the CPUC in writing at least 90 days prior to a change in the long-term status of a generating unit (Operating Standard 23), and to maintain said generating unit in readiness for service until after the CPUC and the Control Area Operator affirmatively declare that the generating unit is unneeded (Operating Standard 24). The shutdown of existing AES-HB and AES-RB OTC generating units and start-up of new generating units planned for AES-AL is dependent on compliance with General Order 167 and the requirements of the South Coast Air Quality Management District Rule 1304a(2). Should an unforeseen event cause the delay of construction or commissioning, it is unlikely the CPUC and CAISO would declare the existing OTC generating units unneeded.

4. In the event of an OTC Policy compliance date extension, are there electrical configurations, permit constraints, or any other reasons that would make some units preferred for extension over others?

Yes, only AES-HB unit 2 would be available for a potential OTC Policy compliance date extension. AES-HB unit 1 will be permanently retired by December 31, 2019 to meet the requirements of the South Coast Air Quality Management District Rule 1304a(2) for permitting new generation and to provide enough interconnection capacity at the facility to connect the new 640 MW CCGT unit.

5. Please identify any period that may experience a disruption in service between the shutdown of the existing Huntington Beach Units and commercial operation date of the new Huntington Beach Energy Project facility.

Available generating capacity at AES-HB will be limited to 225 MW from existing OTC generating Unit 2 from January 1, 2020 until the new CCGT facility has completed commissioning and testing activities, is ready for commercial operations and has been declared available to the market by the CAISO. AES-HB expects the new CCGT to be ready for commercial operation by April 1, 2020.

6. Is there any other information that the State Water Board should be made aware?

It is AES-HB's current assumption that Unit 1 will be shut down and permanently retired when its contract terms end on December 31, 2019. This unit will be shut down to enable the new CCGT at AES-HB to be placed in service. Further, it is AES-HB's current assumption that Unit 2 will be shut down and permanently retired when its respective contract term end on December 31, 2020. If there is a possibility that AES-HB Unit 2 will be needed beyond its current December 31, 2020 OTC Policy compliance date, AES-HB needs to know this well in advance. There must be sufficient time to negotiate a contract and secure a revenue stream so that the necessary staffing retention program can be implemented and the unit is maintained at a level that supports continued reliable operations beyond December 31, 2020. Without this financial certainty, it will be virtually impossible to retain the necessary expertise to continue operating the units and certain maintenance will be deferred or not performed based on the expectation that the units will be retiring December 31, 2020.

AES continues to take every possible action to move the development process for new generating units at AES-HB forward and maintain our commitments to provide safe, reliable power and generating capacity while progressing as quickly as possible to comply with the OTC Policy. AES has participated in the CPUC's Long Term Procurement Planning process, timely filed and received all applicable permits for replacement generating capacity, reduced OTC flows significantly, responded to the contracting opportunities presented by the local utility, and invested hundreds of millions of dollars in new construction at our sites. However, the electricity planning, contracting and development process in California is extremely lengthy and considerable uncertainty still exists in California's plans for maintaining electrical reliability in southern California beyond the current OTC compliance dates. Unless the current State and Regional Water Board regulatory and permitting issues are addressed and a suitable contracting mechanism developed for the continued operation of AES generating units within a reasonable time frame, then none of the existing AES units will be available as a potential electrical resource beyond December 31, 2020. As we have offered multiple times to the State Water Board, AES wishes to extend an invitation to your organization to meet with the SACCWIS and explain in detail the constraints AES and California is facing to maintain electrical reliability under the current regulatory structure, from an actual owner and operator of the generating resources. We hope to hear from you and your organization soon so you may understand the constraints and schedules we've described above in more detail.

If you have questions regarding this submittal, please contact Stephen O'Kane, AES Southland Energy, LLC at (562) 493-7840.

Sincerely,



Ken Zagzebski
President
AES Southland Energy, LLC