



690 North Studebaker Road
Long Beach, CA 90803
tel/ 562 493 7891
fax 562 493 7320

January 17, 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 November 20, 2017 correspondence requesting the latest information for the AES Huntington Beach Generating Station (AES-HB) Implementation Plan (IP).

As we have previously communicated, there are a number of significant assumptions that AES Southland (AES-SL) must consider in developing and executing our IP for AES-HB as well as our two other once-through-cooled (OTC) generating stations located in the Los Angeles basin local reliability area – AES Redondo Beach (AES-RB) and AES Alamitos (AES-AL). Many of these assumptions are dependent upon conditions and decisions outside of the control of AES-SL. As an independent generator providing contracted capacity to the local utility, AES-SL is not responsible for evaluating and maintaining grid reliability. However, AES-SL is ready and prepared to respond to grid reliability needs as determined by the utility, local area balancing authority (CAISO) and the California Public Utilities Commission (CPUC) should such a need arise. Without *first* obtaining specific direction or receiving a request to enter into contracts for AES-SL generating capacity, AES-SL will not be requesting any extension to the current OTC compliance dates. Should AES-SL resources be required to maintain grid reliability in the future, it is highly possible that a request for an extension of an OTC compliance date will be made with less than one year notice before the current AES-SL OTC compliance dates are reached. This would require the State Water Board to act much quicker than has been assumed in your letter, if electrical reliability is to be maintained. AES-SL strongly suggests the State Water Board develop criteria for approval of OTC compliance date extensions and amendments to the OTC policy immediately, such that decisions on individual generating unit OTC compliance dates can be made judiciously and quickly without jeopardizing electrical reliability.

Given the uncertainty of the assumptions and the challenges associated with trying to predict the future, the AES-SL IPs and any updates to the IPs represent our best intentions at this time, but they are subject to change and cannot be construed as definitive, final plans. Future market developments, the physical state of the electricity transmission and distribution grid and decisions by other state agencies will influence the ultimate actions of AES-SL and their timing.

Before addressing the State Water Resources Control Board's specific questions, AES-SL provides the following general comments which may help to simplify understanding the IPs. AES-SL currently intends to comply with the Statewide Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling (OTC Policy) by utilizing Track 1 and shutting down and permanently retiring all generating units at AES-HB, AES-RB and AES-AL that utilize OTC, per the compliance dates included in the OTC Policy. AES-SL does not currently 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-SL intends to provide these new resources through competitive solicitations issued by the utility(s) 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 (SCE) that would extend the operation of AES-HB generating units 1 and 2 through December 31, 2019 and December 31, 2020 respectively. 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-AL 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 existing AES-RB unit and one AES-HB unit prior to the OTC Policy compliance date 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. AES-HB Unit 1 will be shut down and permanently retired on December 31, 2019. AES-RB Unit 7 will be retired on, or before, September 30, 2019. First fire and testing of the 644 MW combined-cycle gas turbine (CCGT) is scheduled for October 3, 2019.

2. Is AES-SL on track to complete construction of the new Huntington Beach Energy Project to meet its commercial operation date or Power Purchase Agreement date for the new facility?

Yes. Construction of the new 644 MW combined-cycle gas turbine (CCGT) commenced on June 1, 2017 and is currently on schedule.

3. Are there any contingencies that would prevent AES-SL from meeting its OTC Policy compliance date of December 31, 2020? If yes, please explain.

The retirement of AES-HB units and subsequent compliance with the OTC Policy deadlines for the station are contingent upon compliance with the California Public Utility Commission's (CPUC) General Order 167, Appendix E which requires AES-HB 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

¹ State Water Resources Control Board, November 20, 2017 letter to Jennifer Didlo

affirmatively declare that the generating unit is unneeded (Operating Standard 24). The shutdown of AES-HB generating units and subsequent start-up of new generating units planned for AES-HB is dependent on compliance with General Order 167 and the requirements of the SCAQMD Rule 1304a(2).

- 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 over others? If yes, please explain.**

As noted above, as currently planned, the only existing AES-HB generating unit that could be available to continue operating beyond the current OTC Policy compliance is Unit 2. Unit 1 will be retired on December 31, 2019 to enable the start-up of a new 644 MW CCGT at AES-HB.

- 5. Please identify any period with a disruption in service between the shutdown of the existing Huntington Beach units and the commercial operation date of the new Huntington Beach Energy Project facility?**

AES-HB Unit 1 will shut down on December 31, 2019 and Redondo Beach Unit 7 will be shut down on September 30, 2019. The new 644 MW CCGT will reach commercial operation on March 1, 2020 with a PPA Initial Delivery date of May 1, 2020. Consequently, there will be a disruption in total available capacity at AES-HB between January 1, 2020 until at least March 1, 2020. The disruption in service could extend to May 1, 2020, should there be delays in construction or commissioning of the new unit.

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

It is AES-HB's current assumption that generating Units 1, 2 will be shut down and permanently retired when their respective contract terms end on December 31, 2019 and December 31, 2020. The synchronous condensers units 3 and 4 will be shut down and retired when the CAISO determines that these transmission system resources are no longer needed. Units 1, 3 and 4 will be shut down to enable the new CCGT at AES-HB to be placed in service. If there is a possibility that 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 can be 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 unit will be retiring December 31, 2020.

One option for addressing this uncertainty could be to enter into a contingent option contract for the unit with SCE or CAISO if there is an expectation that additional generation might be needed beyond the current compliance date. The contract could include an effectiveness provision that was directly tied to a decision by the Water Board to extend the compliance date for electricity reliability purposes. It also could include a termination right and associated payment to AES-AL in the event a unit or units were not ultimately needed during the option period. This would not only prevent a last minute fire drill if additional generation is ultimately needed beyond the current compliance date, but it would also provide the certainty needed to address employee retention and ensure the necessary maintenance was performed to allow continued operation.

AES-SL continues to take every possible action to move the development process for new generating units at AES-HB and AES-AL forward and maintain our commitments to provide reliable power and generating capacity while progressing as quickly as possible to comply with the OTC Policy. AES-SL has participated in the CPUC's Long Term Procurement Planning process, filed applicable permits, 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-HB generating units within a reasonable time frame, then none of the existing AES-HB 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-SL wishes to extend an invitation to your organization to meet with the SACCWIS and explain in detail the constraints 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 can 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, LLC at (562) 493-7840.

Sincerely

Jennifer Didlo
President
AES-Southland