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May 6, 2016

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

**RE: AES Redondo Beach, LLC, NPDES Renewal and Request for Time Schedule Order**

Dear Mr. Unger:

On behalf of AES Redondo Beach, LLC (hereafter "AES Redondo Beach"), we write to thank your staff for taking the time to meet with us to discuss our concerns with the proposed NPDES permit renewal for our facility and the proposed Time Schedule Order ("TSO"), but also to formally request that additional items be included in the TSO for the Redondo Beach Generating Station as discussed.

AES Redondo Beach discharges once-through cooling, process wastewater, and storm water runoff under the requirements of NPDES permit number 00-085, issued by the Regional Water Quality Control Board, Los Angeles Region ("Regional Board") on June 29, 2000.<sup>1</sup> The Regional Board is currently conducting a review supporting a renewal of this permit and is proposing new standards for numerous constituents based on the Regional Board's revised interpretation of where the discharge occurs.<sup>2</sup> Based on the analysis of historic discharge monitoring data, summarized in the proposed order, the future discharges from AES Redondo Beach will be unable to comply with all of the new effluent limits, receiving water limits and water quality objectives within the proposed NPDES renewal permit. Regional Board staff have already proposed the use of a TSO to address some of these changes, but after a thorough review of the monitoring data, AES Redondo Beach requests that additional items be included in the TSO so that it has the necessary time to achieve compliance with the proposed permit renewal. These additional items include: (1) relief from receiving water limit for temperature at Discharge 002; (2) relief from pH discharge limit at Discharge 002; (2) relief from pH limit for low volume waste until July 1, 2017; (3) relief from discharge limits for mercury and zinc<sup>3</sup>; and (4) relief from discharge limits for PCBs at Discharge 001.

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<sup>1</sup> The permit expired in 2005 and, even though AES Redondo Beach submitted a timely request for renewal, the permit has been on administrative extension since that time.

<sup>2</sup> This revised interpretation by Regional Board staff is only now affecting AES Redondo Beach since this is the first NPDES renewal to incorporate this new interpretation. AES Redondo Beach does not believe it to be a correct interpretation.

<sup>3</sup> Proposed TSO already addressed the effluent limitations for copper and nickel.

In 2010, the State Water Resources Control Board (SWRCB) adopted a Statewide Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling ("OTC Policy"). The OTC Policy establishes technology-based standards to implement the federal Clean Water Act section 316(b) and otherwise address cooling water intake structures. The OTC Policy requires compliance under two scenarios and establishes dates to achieve compliance. AES Redondo Beach informed the SWRCB that it intended to achieve compliance through Track 1 of the OTC Policy, which requires at least a 93% reduction in intake flow rate and a through-screen velocity not to exceed 0.5 foot per second. AES Redondo Beach will achieve compliance by eliminating OTC and retiring the existing generating units.

Since AES Redondo Beach intends to fully comply with the effluent limitations of the proposed NPDES permit renewal through compliance with the OTC Policy by elimination of the discharges, AES Redondo Beach requests that the time schedule order of the NPDES reflect the compliance dates of the OTC Policy as to any new or revised effluent limit, receiving water limit or water quality objective. This time schedule order would extend until the date that AES Redondo Beach is required to comply with the OTC Policy. Utilizing the compliance dates of the OTC Policy for purposes of the time schedule order in the NPDES permit renewal should allow the complete elimination of cooling water and low-volume discharges by December 31, 2020.<sup>4</sup> Attachment A to this letter provides the anticipated compliance dates for each of the significant milestones to achieve compliance with the OTC Policy.

AES Redondo Beach and its predecessors have been producing energy at this site since 1948; however, the addition of Units 7 and 8, including the development of Discharge Point 002 occurred in the 1960s. Since the 1960s the infrastructure necessary to operate the facility, primarily the cooling water intakes and discharge locations, has remained unchanged. The change in discharge and receiving water standards proposed for AES Redondo Beach in the renewal NPDES permit results from the installation of a breakwater to create a harbor that would be sheltered from the waves. The artificial wall still allows overtopping during large wave events and is constructed of rock that allows water to flow through the wall. Furthermore, the artificial wall that created the harbor was built around the existing intake pipe when it was completed in 1966, almost twenty years after AES Redondo Beach began producing power. This designation as an enclosed bay subjects the discharges from AES Redondo Beach to different water quality criteria (e.g. pH) which requires that AES Redondo Beach request a TSO for pH discharges between 6.5 and 9.0 at Discharge 002 because it cannot comply with the limit of 8.5.

Another consequence of designation of King Harbor as an enclosed bay is that the Regional Board initially concluded that this designation may not allow for intake credits for discharges to Discharge 001, its ocean discharge point. However, Regional Board staff now believe this designation should not prevent the utilization of intake credits for Discharge 001 because both the intake water and receiving water are the same source of water, being ocean water and meets the criteria outlined in the SIP. If the Regional Board grants intake credits as outlined in the SIP, AES Redondo Beach may not need to utilize a TSO to comply with several constituents, including PCBs.

Although AES Redondo Beach believes that intake credits would solve many of its concerns with effluent limits, the variability of concentration for certain constituents is so great that intake credits alone would not suffice, requiring the issuance of a TSO to prevent false positives. The attached chart for the

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<sup>4</sup> This is the Final Compliance Date as identified in the OTC Policy but the OTC Policy does allow for a suspension of that date if deemed necessary by the California Independent System Operators to maintain the reliability of the electric system. See OTC Policy section 2.B(2). AES Redondo Beach seeks compliance dates consistent with this provision.

constituents copper, mercury, nickel, and zinc demonstrate the variability of intake and discharge water, which requires that a TSO be issued that would allow time to achieve compliance.

002	Analyte	Copper		Mercury		Nickel		Zinc	
Units		ug/L		ug/L		ug/L		ug/L	
Proposed Monthly Avg		2.1		0.051		5.6		30	
Proposed Daily Max		5.8		0.1		15		92	
Date	Sample Point	Intake	002	Intake	002	Intake	002	Intake	002
11/2/2015		3.86	3.185	ND (<0.2)	ND (<0.2)	2.9	0.637 J	ND (<5)	ND(<5)
5/12/2015		2.28	9.75	ND (<0.2)	ND (<0.2)	1.16	8.86	49	4.66 J
11/5/2014		0.378 J	2.475	ND (<0.2)	ND (<0.2)	0.343 J	2.69	ND (<5)	18.4
5/2/2014		7.13	4.225	ND (<0.2)	ND (<0.2)	6.98	26.5	ND (<5)	15.15
11/11/2013		0.575 J	1.38	ND (<0.2)	ND (<0.2)	0.901 J	3.975	9.1	7.62
5/3/2013		7.69	5.08	ND (<0.2)	ND (<0.2)	1.96	26.9	ND (<5)	7.99
11/2/2012		6.51	3.42	0.176 J	0.0591 J	0.257 J	1.69	9.47	7.96
5/2/2012		0.637 J	0.686 J	ND (<0.2)	ND (<0.2)	ND (<1)	0.340 J	ND (<5)	ND(<5)

The Regional Board has proposed a TSO to comply with the temperature effluent limits included in the new draft permit, but AES Redondo Beach requests a TSO to similarly comply with the receiving water temperature limit for Discharge 002.

Finally, the proposed Order prescribes a new instantaneous minimum and maximum effluent limitation for pH of 6.0 and 9.0, respectively, for low volume wastes. The existing Order does not have pH limits for low volume wastes. The new Order is intended to be implemented in August 2016 and the new pH limitation will require a costly investment to implement engineering controls in order to manage the retention basin pH levels between 6 and 9. Historical data shows that the pH is always near or slightly above the upper threshold of this limit. As the below data shows, during the last three years there were 16 instances where the pH was above 9, the upper threshold of the new limitation. AES currently cannot comply with the new pH limitation requirement and engineering controls cannot be designed, installed, and put into place by 1 August 2016. AES Redondo Beach believes that it can develop a solution to ensure long-term compliance with this pH requirement and requests a compliance date of July 1, 2017 to implement this change.

Date	Min	Max	Date	Min	Max
Aug-14	8.83	9.3	Mar-16	8.34	8.35
Jul-14	8.46	9.02	Feb-16	8.18	8.5
Jun-14	8.03	8.73	Jan-16	7.64	8.93
May-14	8.56	9.36	Dec-15	8.81	8.83
Apr-14	8.63	8.64	Nov-15	8.5	8.48
Mar-14	7.98	9.09	Oct-15	8.92	8.96
Feb-14	7.74	8.56	Sep-15	8.95	9.56
Jan-14	8.61	8.79	Aug-15	9.1	9.11

Dec-13	8.14	8.93		Jul-15	8.88	8.89
Nov-13	8.08	8.43		Jun-15	9.11	9.12
Oct-13	8.14	8.62		May-15	8.98	8.99
Sep-13	8.56	9.2		Apr-15	8.87	8.88
Aug-13	8.38	9.15		Mar-15	8.02	8.1
Jul-13	8.59	8.62		Feb-15	8.89	8.9
Jun-13	7.97	8.66		Jan-15	8.34	8.41
May-13	8.65	8.85		Dec-14	7.6	7.83
Apr-13	8.45	9.62		Nov-14	8.08	8.43
Mar-13	8.24	9.03		Oct-14	8.94	9.17
Feb-13	8.68	8.94		Sep-14	8.58	9.11
Jan-13	7.92	9.29				

We appreciate the efforts of your staff in processing this permit renewal and look forward to working with them to achieve this goal.

Sincerely,

Stephen O'Kane  
 Manager, Sustainability and Regulatory Compliance  
 AES Redondo Beach, LLC

- cc: Weikko Wirta; AES Southland, LLC  
 Jose Perez, AES Redondo Beach, LLC  
 Coury McKinlay; AES Southland, LLC  
 David Heger; AES US Services, LLC  
 Sam Unger; Los Angeles RWQCB  
 Cassandra Owens; Los Angeles RWQCB  
 Christopher Sanders; Ellison, Schneider & Harris, LLP

Attachment A

<u>Primary Milestone</u>	<u>Compliance Date</u> <sup>5</sup>
Eliminate Discharge of Metal Cleaning Wastes Complete determination of the economic practicality of continued operation of Units 5-8	Completed  May 31, 2018
Eliminate the discharge of OTC water from Units 6 and 8 by permanently shutting down the units	  December 31, 2019
Eliminate the discharge of OTC water from Units 5 and 7 by permanently shutting down the units	  December 31, 2020

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<sup>5</sup> These dates must recognize the possibility of suspension, pursuant to the OTC Policy, the possibility for delay due to, among other reasons, acquisition of the necessary approvals.