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STATE WATER RESOURCES CONTROL BOARD BOARD MEETING SESSION – DIVISION OF WATER QUALITY NOVEMBER 17, 2010

ITEM

SUBJECT

CONSIDERATION OF ADOPTION OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR WASTE DISCHARGE REQUIREMENTS FOR DYNEGY SOUTH BAY, LLC'S SOUTH BAY POWER PLANT (SOUTH BAY PERMIT)

DISCUSSION

The proposed South Bay Permit is prepared in response to an application for renewal of Order No. R9-2004-0154 submitted by Dynegy on June 14, 2010.

Applicability: The proposed South Bay Permit covers discharge of heated once-through cooling water from Units 1 and 2 of the South Bay Power Plant (SBPP) to the San Diego Bay. SBPP operates intermittently per California Independent System Operator's (California Independent System Operator) direction based on selected circumstances, namely to (1) meet local reliability needs; (2) prevent overloads or to manage congestion on non-competitive paths; (3) provide reserves if and only if such reserves are not provided through the ISO markets; and (4) conduct certain tests needed to keep the unit in operation.

Effluent Limitations: Water Quality Objectives applicable to South San Diego Bay are set forth by the State Thermal Plan and Water Quality Control Plan for the San Diego Basin (Basin Plan). Water Quality Criteria and Standards applicable to the South San Diego Bay are set forth in the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California*. Cooling water discharge must meet temperature, pH, acute toxicity, total residual chlorine, and total recoverable copper criterion must be met. In addition, cooling water discharge must also comply with the Statewide Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling. All waste, containment, and disposal facilities shall be protected against erosion, overland runoff, and other impacts as a result of and 100-year peak stream flows, as defined by the San Diego County flood control agency. The SBPP discharge of elevated temperature wastes to San Diego Bay shall comply with limitations necessary to assure protection of beneficial uses as per the Thermal Plan.

Receiving Water Limitations: The SBPP discharge to San Diego Bay shall not by itself or jointly with any other discharge(s) cause non-attainment to water quality objectives for physical, chemical, and biological characteristics. Total residual chlorine limitation in the receiving water and discharge channel shall be determined using a linear regression equation.

Monitoring and Reporting Program: A monitoring and reporting program is required for each discharge of heated cooling water from the SBPP to determine compliance with permit requirements. Monitoring is required to be performed at locations designated by the permit for cooling water intake, cooling water effluent, and receiving water. A chlorination log shall be maintained for each unit of the SBPP and a copy shall be submitted monthly. In addition, Sediment Quality objectives are required by this permit.

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Toxicity Testing Requirements: Toxicity testing shall be conducted to determine whether heated cooling water discharge is contributing toxicity to the receiving water including the discharge channel. SBPP is required to perform the toxicity testing in conjunction with the receiving water monitoring and at testing frequency specified in the proposed South Bay Permit.

POLICY ISSUE

Should the State Water Board adopt the proposed South Bay Permit?

FISCAL IMPACT

State Water Board staff work associated with or resulting from this action will be addressed with existing and future budgeted resources.

REGIONAL BOARD IMPACT

Yes. The San Diego Regional Water Board has responsibilities to implement and enforce the proposed South Bay Permit.

STAFF RECOMMENDATION

The State Water Board should adopt the proposed South Bay Permit.

State Water Board action on this item will assist the Water Boards in reaching Goal 6 of the Strategic Plan Update: 2008-2012 to enhance consistency across the Water Boards, on an ongoing basis, to ensure our processes are effective, efficient, and predictable, and to promote fair and equitable application of laws, regulations, policies, and procedures. In particular, approval of this item will assist in fulfilling Objective 6.2 to target consistency improvements in program delivery identified through past input, and solicit input to identify consistency issues as they arise.