Date of Hearing: May 11, 2022

ASSEMBLY COMMITTEE ON APPROPRIATIONS

Chris Holden, Chair

AB 2140 (Muratsuchi) – As Amended May 2, 2022

Policy Committee: Natural Resources Vote: 7 - 3

Utilities and Energy 8 - 3

Urgency: No State Mandated Local Program: No Reimbursable: No

SUMMARY:

This bill prohibits the State Water Resources Control Board (State Water Board) from granting an operator of a power plant any extension of time to comply with the once-through cooling (OTC) policy if both the Statewide Advisory Committee on Cooling Water Intake Structures (SACCWIS) determines that the extension is not necessary to ensure electricity reliability, and if the city or county that has jurisdiction over the site of the power plant formally adopts a resolution objecting to the extension.

FISCAL EFFECT:

- 1) Ongoing annual cost of approximately \$225,000 to the State Water Board for the additional workload associated with updating the state's OTC policy to reflect the requirements of the bill, and for increased communication and coordination with relevant state and federal agencies.
- 2) Minor and absorbable costs to the California Energy Commission, Public Utilities Commission, Air Resources Board, State Lands Commission, and California Coastal Commission for their continued participation in the SACCWIS.

COMMENTS:

1) **Purpose.** According to the author:

The OTC compliance deadline has been in place for as many years, and the plants had been scheduled to shut down by the end of this past year. I remain concerned about this latest extended deadline as it will increase the public health and environmental impacts associated with the operation of the largest stationary source of pollution in this densely populated part of the state. I too am concerned about grid reliability, but those concerns ought to be met with new renewable energy and storage procurement and not with a polluting fossil fuel plant that harms our communities. AB 2140 ensures that the Water Board does not grant an operator of a power plant any further extension to comply with the OTC policy if the city the power plant is located in, formally adopts a resolution objecting to any further extension.

2) Background.

- a) Once-Through Cooling. Technologies at steam turbine power plants that rely on open seawater intakes to cool the turbine by pumping seawater and then discharging the water back into the ocean after only one cycle of cooling are known as once-through cooling (OTC). As noted in the Assembly Utilities and Energy Committee analysis of this bill, OTC, which became widely used in the 1950s, has detrimental effects on marine life and larger organisms alike and contributes to the decline of fisheries and the degradation of marine habitats near power plants using OTC.
- b) California's OTC Policy. California is phasing out the use of OTC technology at coastal power plants that use marine water for cooling. The federal Clean Water Act requires the U.S. Environmental Protection Agency (US EPA) to ensure that the location, design, construction and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impacts. While states have enforced this requirement on a case-by-case basis since 1972, California developed a clearer, more prescriptive rule. In 2010, the State Water Board adopted a regulatory policy to phase out the use of OTC, which included grid reliability recommendations and a joint implementation proposal developed by the state's energy agencies. The OTC Policy requires power plants that are not in compliance to make mitigation payments annually based on their annual intake volume of water until they come into compliance. Since then, the use of OTC has been phased out at 10 power plants representing 10,400 megawatts (MW) of capacity. The retirement of OTC power plants with 6,300 MW of capacity is expected by 2020, and the remaining 3,800 MW are expected to retire by 2029. To ensure grid reliability, final compliance dates were negotiated with each of the operating plants.
- c) Redondo Beach Power Plant. In September 2020, the State Water Board amended the OTC policy as a result of the August 2020 blackouts that raised concerns about systemwide grid reliability. The amendments included changes to the compliance dates for four power plants that were scheduled to comply with the OTC Policy by December 31, 2020. This included a one-year extension for compliance for the Redondo Beach power plant, located in the author's district, to December 31, 2021. On October 19, 2021, the State Water Board amended the OTC policy under Resolution No. 2021-0048 to extend the compliance date for Redondo Beach Generating Station Units 5, 6 and 8 to December 31, 2023, to further address statewide grid reliability concerns.
- d) Reliability. As the state works to aggressively advance its clean energy goals, it continues to adjust its forecasting and procurement modeling to respond to reliability challenges arising from intensifying wildfires, stunted renewable energy deployment as a result of the pandemic, supply chain shortages, extreme heat events and other factors. The state's energy agencies must take into account system, local and flexible reliability to ensure that resources are sited in certain load pockets where supply is needed due to insufficient transmission to serve the entire load, and to ensure enough resources that can ramp up or down on short notice to meet variations in load and intermittent energy production.
- e) Statewide Advisory Committee on Cooling Water Intake Structures (SACCWIS). The SACCWIS includes representatives from the State Water Board, the state's energy

agencies and others. SACCWIS advises the State Water Board on the OTC Policy to ensure that policy plans and schedules are realistic and will not cause disruption to the state's electrical power supply. In a March 2022 report, SACCWIS stated that it does not currently recommend any changes to the compliance schedules in the OTC Policy for associated generating facilities, with the potential exception of the Scattergood plant in the Los Angeles basin.

f) Shifting Authority. This bill prohibits the State Water Board from granting an operator of a power plant an extension of time to comply with the OTC policy if SACCWIS determines that the extension is not necessary to ensure statewide electricity reliability, and if the local city or county where the powerplant resides also formally adopts a resolution objecting to the extension. As noted by the Assembly Utilities and Energy Committee analysis of the bill, it is highly unusual to strip regulatory decisionmaking authority from a state agency and grant it to a local government and a convened body that is not authorized in statute.

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