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Statement of Richard B. Bell, PE Principal Engineer, Municipal Water District of Orange County

before

California Ocean Protection Council August 22, 2011

Re: Sec 9

- We support the CalDesal position
- We are involved in two ocean desalination projects:
 - South Orange Coastal Project
 - Poseidon Huntington Beach Project
- We have been investigating the feasibility of using Slant Well Intakes for the South Orange Coastal Project working with 5 participating agencies.
- We have also been working with Poseidon and 22 retail water agencies on their Huntington Beach Project. The agencies are supportive of Poseidon's August 5, 2011 statement.
- We have been investigating the feasibility of using alternative intakes for the South Orange Coastal Project.
 - We constructed a Test Slant Well in Spring 2006. An 18-month extending pumping and pilot test is ongoing. Use of a slant wellfield in this location has been determined to be feasible.
 - Slant well beach intakes are an environmental friendly and costeffective technology however favorable geology is required to use this technology
 - Yield is limited by the permeability of the offshore hydrogeology
- Selection of the best technology is dependent on site specific factors.
- The area's need for additional supplies drives location and size
- Slant wells are a feasible alternative to be considered, but they cannot be used at every location. Other alternatives, such as the use of screened intakes may also have minimal adverse environmental impacts on the marine environment.