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Water Purchase Agreement Signed

For The Carlsbad Seawater Desalination Project

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(The San Diego County Water Authority Board of Directors signed a 30-year water purchase agreement with Poseidon Resources Corp. on Nov. 29. The decision is supported by local, state and federal elected officials, the regional Chamber of Commerce, the San Diego County Taxpayers Association, labor and agricultural interests. What follows in an analysis of the terms of the off-take contract by one of the authority's advisors.)

After perhaps the longest gestation period in non-recourse financing project development history, the San Diego County Water Authority (SDCWA) and Poseidon Resources Corp have reached agreement on the terms of a Water Purchase Agreement (WPA) for the product water to be produced from the Poseidon Resources' Carlsbad Seawater Desalination Project ("Project"). The Project consists of a 50-mgd (or 56,000 acre-feet per year (AF/Year) reverse osmosis seawater desalination plant and a 10-mile conveyance pipeline to deliver the product water to SDCWA's treated water distribution system. In addition, SDCWA will need to make $80 million of improvements to its distribution and treatment facilities to effectively handle the delivered product water. The November 29 approval of the WPA started the clock on a financial close.

The latest installment of the negotiations began in July 2010 with the approval by SDCWA's Board of a term sheet establishing a framework for the transaction. Over more than two years, each of the parties to the transaction had to come to mutual understanding and then agreement upon a litany of terms and conditions necessary to create a WPA that meets all the needs of a public water supply agency, provides a financing plan that conforms to market standards for financial security, and equitably allocates contracting and completion risk for the desalination plant and the pipeline.

The complexity of the transaction required to harmonize the interests of a non-profit public water supply agency and a private infrastructure development company was by no means a small undertaking, and the transaction's precedents and value proposition will be closely viewed for its value as a water industry precedent.

The transaction involves Poseidon d/b/a Poseidon Resources (Channelside) LP, bearing the contracting and completion risk for the plant and the conveyance pipeline, and assuming the long-term operations and maintenance responsibility for the plant under the WPA. Subordinate to Poseidon, the Engineering Procurement Construction (EPC) Contractor, a joint venture of Kiewit Infrastructure West LLC and J.F. Shea Construction, Inc., and their Process Services Contractor, IDE Americas, Inc., absorbs that contracting and completion risk for the plant and the conveyance pipeline. Additionally, the Operations and Maintenance (O&M) contractor, also IDE Americas, Inc., agrees to bear the day-to-day operations and maintenance responsibility and risks, to manage capital improvement projects, and to provide all needed equipment repair and replacement necessary for the project to meet all the WPA performance requirements and standards.

The financing for the project will total $903 million and will combine $513 million in Private Activity Bonds, plus $164 million in private equity capital for the Poseidon-owned plant, and $226 million in tax-exempt Governmental Purpose Bonds issued by the California Pollution Control Financing Authority for the Conveyance Pipeline, which SDCWA will own and operate. SDCWA will be obligated to pay the pipeline debt service. However Poseidon will be obligated to pay to SDCWA "Contracted Shortfall Payments" in the event of its under-production of product water. If Poseidon were to produce no product water, their Contracted Shortfall Payments would equal all the SDCWA's debt service payments due for the pipeline.

This configuration of bonds and equity provides a lower cost of capital for the pipeline due to the lower interest rate available on the tax-exempt governmental purpose bonds to be used vs. the private tax-exempt PABs that were originally proposed and would otherwise have been used by Poseidon for financing the entire project (plant & pipeline).

The configuration still obligates Poseidon to make up any shortfall in pipeline debt-service payments associated with its failure to complete the plant or to deliver sufficient product water, effectively mitigating any perceived "Pipeline-to-Nowhere" risk.

One of the major challenges to overcome in a non-recourse financed water supply project is matching the production-related revenues (water sales) with the shape of the water agency's long-term demand profile and supply constraints. To overcome these issues, the deal had to be structured around a "Maximum Annual Supply Commitment" of 56,000 acre-feet per year that Poseidon can be asked to produce, and a 48,000 acre-feet per year "Minimum Annual Demand Commitment" that SDCWA would agree to "Take-or-Pay."

This creates a range of possible product water costs in any year because the annual fixed costs all need to be amortized over any given year's agreed-upon Minimum Annual Demand Commitment. This allows SDCWA to shape its demand curve for annual and seasonal projected demand in wet weather years and to maximize water purchases during dry years, while avoiding having to pay for product water it cannot use.

This pricing structure also provides an incentive for SDCWA to purchase additional product water in amounts between the 48,000 acre-foot minimum and the 56,000 acre-foot maximum commitment, because the price for the additional product water is only included in the variable charges listed in the p. 9 chart as items 6 through 8. Consequently, the actual unit cost of product water in any year would be reduced if additional water is purchased.

The deal with Poseidon was developed to yield a target internal rate of return overall of 9.38%-9.45%, depending on the actual bond interest rate at closing. Poseidon's return on its investment may be higher or lower based on its ability to manage the completion risk, to ensure that the plant performs efficiently and to meet SDCWA's production demands and water quality standards. SDCWA estimates that, if it meets all performance standards, Poseidon could achieve an equity return of up to 13%.

SDCWA's Board has steadfastly supported seawater desalination, known as the "supply from the west," as its policy to improve SDCWA's system reliability. The approval of the water purchase agreement by SDCWA's Board will be largely dependent upon the specific rate impact from the project and consideration of proposed changes to SDCWA's rate structure design to assure economic sustainability, should the project be implemented. Currently, the project is projected to increase rates for an average household by $5 to $7 per month.

Carlsbad Desal Financing Closed (12/12)

In late December, Poseidon Resources (Channelside) LP closed a $922-million debt-equity financing and secured all funding needed to build its Carlsbad, Calif., desalination project.

The sale of tax-exempt private bonds caps a decade-long development effort by Poseidon's investors to start construction of the largest seawater-desalination plant in the Western Hemisphere. The new plant is projected to increase rates for an average household by $5-7 per month.

Private equity investor Stonepeak Infrastructure Partners provided the remainder of the project capital, $188 million. The deal negotiated by the San Diego County Water Authority (SDCWA) with Poseidon was developed to yield a target internal rate of return overall of 9.38%-9.45%, depending on the actual bond interest rate at closing.

Stonepeak's return will depend on Poseidon's ability to manage the completion risk, to ensure that the plant performs efficiently, and to meet SDCWA's production demands and water quality standards. SDCWA estimates that if Poseidon meets all performance standards for the water production system, it could achieve an equity return of up to 13%.

The 50-Mw reverse osmosis seawater treatment plant will be co-located at the site of the Encina power station on the California coast, north of San Diego.

The project is designed to provide San Diego County with a locally-controlled, drought-proof supply of high-quality water that meets or exceeds all state and federal drinking water standards.

A joint venture between subsidiaries of Kiewit Corp. and J.F. Shea Construction Inc. will provide engineering, procurement and construction (EPC) services for the desalination plant and a 10-mile pipeline under a fixed-price contract. Their subcontractor, IDE Americas Inc., will design the reverse osmosis plant and handle O&M under a 30-year contract.

Signing of the EPC and O&M contracts coincided with the close of the sale of $734 million in tax-exempt bonds issued by the California Pollution Control Financing Authority on behalf of Poseidon and SDCWA, with underwriting led by JP Morgan.

About $560 million of the debt is Private Activity Bonds (PAB) for building the desalt plant. The balance, $174 million in Governmental Purpose Bonds, will pay for construction of the conveyance pipeline, which SDCWA will own and operate.

The financial close followed the signing of a 30-year water purchase contract by SDCWA on Nov. 29, almost 30 months after the regional wholesaler's board approved a term sheet for the agreement.