

August 5, 2004

Attention: Board of Directors

Approve a series of actions to further the planning and implementation of the Regional Seawater Desalination Project at the Encina Power Station (Action)

Purpose

The purpose of this report is to seek direction from the Board regarding the continued development of a regional seawater desalination project at the Encina Power Station.

Staff recommendation

Approve the following actions related to the planning and implementation of a regional seawater desalination project at the Encina Power Station in Carlsbad:

- 1) Direct staff to negotiate an Inter-Agency Agreement with the City of Carlsbad, Carlsbad Municipal Water District, Carlsbad Housing and Redevelopment Agency (Carlsbad Agencies), regarding coordination and mitigation for a regional seawater desalination facility.
- 2) Authorize staff to complete the Environmental Impact Report (EIR) for the Regional Seawater Desalination Project at the Encina Power Station and to seek access to the site.
- 3) Direct staff to enter into discussions with Cabrillo Power, as the site host and owner of the Encina Power Station, to understand the status of their interests, goals and objectives relative to a municipal water supply project on their property, the status of their business relationship with Poseidon Resources of Stamford, Connecticut, and areas of joint cooperation.
- 4) Direct staff to begin discussions with the Carlsbad Agencies, Poseidon and Cabrillo on the potential structuring of a public-private partnership for a regional seawater desalination project at the Encina Power Station

Alternatives

1. Authorize access to the project site to complete the Draft EIR. Direct Staff to continue planning and environmental studies.

Other Recommendations

The Board Ad-hoc Committee on Seawater Desalination voted unanimously to support the staff recommendation on August 4, 2004.

Fiscal impact

Funds to complete the project EIR are available in the approved FY 05 CIP Budget.

Background

The Water Authority's Capital Improvement Program calls for the implementation of 50 million gallons per day (mgd) of seawater desalination capacity by 2010 and an additional 30 mgd of seawater desalination capacity by 2015 to meet regional water supply needs. The supply alternative to seawater desalination is the construction of Pipeline 6. Pipeline 6 would increase the capacity of the Authority's imported water delivery system and increase reliance on supplies from Northern California to meet future water needs in San Diego County. Metropolitan Water District has told the Water Authority that it will require a nine-year lead-time to bring Pipeline 6 on-line. If no decision is made to build a desalination facility by 2006 or successful project implementation is deemed infeasible, the Water Authority would need to notify Metropolitan to proceed on its portion of Pipeline 6 in order to have that project on-line by 2015. In order to monitor progress toward a determination as to whether seawater desalination can be implemented, the MARIRC recommended the development of milestones by the end of 2004.

Previous Board action: In April 2003 the Board of Directors directed staff to prepare an Environmental Impact Report (EIR) as lead agency under the California Environmental Quality Act (CEQA) for a regional seawater desalination project at the Encina Power Station in Carlsbad. In October 2003 the Board authorized staff to amend a consultant contract with RBF Consultants to develop independent data and information necessary to complete environmental studies associated with the Encina EIR. In January 2004, the Board directed staff to suspend negotiations with Poseidon.

Discussion

Recent Activities

At the July meeting of the Planning & Environmental Committee, Director Bud Lewis, Mayor of Carlsbad, asked the Board to consider the importance of seawater desalination to regional water supply reliability and urged the Water Authority to engage in joint discussions with Carlsbad and Poseidon, as the leaseholder on the site, on regional involvement in a seawater desalination project at the Encina Power Station. Director Lewis also indicated to the Board that Cabrillo Power, the owner of the Encina Power Station had told him that upon advance notice they would provide the Water Authority with access to the site to conduct our environmental studies. Completion of an EIR and compliance with CEQA are required for the Board to make any decisions related to project procurement or implementation. Staff is recommending that the Board authorize staff to complete the EIR and seek access to the site. If authorized by the Board staff's first step would be to contact Cabrillo directly and work with them to conduct the studies in the most expeditious and least intrusive manner.

Regional Project

Staff believes that successful implementation of seawater desalination at Encina requires a thorough discussion and understanding of the needs of all the various stakeholders involved in the project. As the host Community for the project and a potential direct financial participant, Carlsbad is a unique stakeholder in the development of seawater desalination at Encina. In recognition of this the Board had previously authorized staff to work with Carlsbad on developing an agreement that addressed both their land use needs as well as their desire to consider participating in a seawater desalination project located in their Community as a local supply.

Cabrillo, as owner of the power station and site host, is an important project participant and a long term partner. Locating a seawater desalination project at Encina entails coordinating water supply production and distribution with the operation of the power plant. There is a need to cooperate during preparation of the EIR as well as establish a business relationship for a potential Power Purchase Agreement. The interests of Poseidon as the leaseholder and as a project proponent must also be considered. An important part of determining project feasibility is discussing the business concerns of all the entities, public and private that are involved in successfully implementing seawater desalination at Encina. The Water Authority must also broaden those discussions to include the regulatory agencies, such as the Coastal Commission, as well as community and regional interest groups that will all have a stake in the success of the project.

Local Project

Negotiations between Carlsbad and Poseidon for a local privately owned project are nearing conclusion. The other member agencies identified by Poseidon in their public EIR scoping meetings as potential customers of a privately owned merchant plant have had only limited discussion with Poseidon about a local supply project, focused primarily on conveyance pipeline routes to be analyzed in the Carlsbad EIR. The Draft EIR for a local project is being processed by Carlsbad in their capacity as a land use jurisdiction and will be completed in late 2004.

According to Carlsbad staff the project under discussion between Poseidon and Carlsbad would serve only Carlsbad's local needs up to 25 mgd and would not meet the regional need for 50 mgd by 2010 and 80 mgd by 2015. A base loaded 25 mgd project would require Poseidon obtaining commitments from additional customers to purchase unused capacity during Carlsbad's low demand winter months. Staff from the other member agencies that have had discussions with Poseidon over a local privately owned project expressed concerns that the price of water will exceed the cost of water from the Water Authority and the need to incorporate public ownership into the proposed local supply project. There are no actions of any kind planned by the city councils or the boards of these agencies regarding the local supply project.

Water Supply Reliability Risks

The successful implementation of a privately owned desalination plant selling directly to member agencies and meeting 50 mgd of the 80 mgd regional need for seawater desalination when needed is extremely uncertain and speculative at this time. Staff believes its probability of success would not be sufficient to relieve the Water Authority of its obligation to continue planning for a regional project or defer action on completion of its own independent EIR. In the event the region were to rely solely on a privately owned project meeting the need for additional supplies and that project was later determined to be infeasible, experienced delays in financing or permitting, or provided less than the anticipated quantities of water needed, the Water Authority would have to supplement with regional supplies. Those supplies would be either through regional desalination at Encina or another location, such as the San Onofre Nuclear Generating Station and/or a location in South County. If a regional project could not be brought on line when needed, the Board would have the option of considering accelerating the construction of Pipeline 6.

Based on the conditional nature of the local project being discussed between Carlsbad and Poseidon and the lack of substantive interest or discussions by other member agencies with Poseidon over a private project, the risk to the Water Authority of relying solely on implementation of a local project to meet the regional need for new supplies would be great. The requirement of SB221 and SB 610, the growth and water legislation, to provide substantive evidence and document progress towards meeting supply goals would place land use jurisdictions considering development approvals in the position of evaluating the likelihood of a private desalination project providing the supplies being planned for regionally. The risk to Carlsbad of project failure would be much less as it would rely on the Water Authority, as the regional supplier of water to its member agencies, to secure replacement supplies. Staff believes that regional involvement in seawater desalination to achieve the economies of scale necessary to make it cost effective and provide access to the amount of treated water demand needed to support the project in the quantities being planned for is integral to its feasibility.

Conclusion

Given Directors Lewis's request at the July Board meeting and the need to determine the feasibility of a regional project at Encina, staff believes it is appropriate to enter discussions with all the stakeholders related to a project at that location. The potential structure of a public-private partnership between the Water Authority and Carlsbad as public agencies, Poseidon as the leaseholder and Cabrillo as the owner of the site is an important element of those discussions but one that must be in the best interests of the region's ratepayers and incorporate the fundamental guiding principles previously articulated by the Board. These include: long term public ownership; open and fair competition; a fair, reasonable and transparent cost; and contractual guarantees of construction quality and operational

reliability. Issues such as the exchange of information and the assertion of confidentiality privileges and applying the lessons of the Tampa experience to a public –private partnership must be addressed to successfully determine an appropriate structure. Staff will work closely with the Board Ad-hoc Committee on Seawater Desalination to further develop business principles and will report back to the Board on the progress of all the various stakeholder discussions.

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