

Submitted by staff
at 3/11/2013 committee
meeting.
Item 5

WATER SUPPLY PLANNING COMMITTEE

ITEM: DISCUSSION ITEMS

5. PROGRESS REPORT ON INVESTIGATION INTO DESALINATION CONTINGENCY PROJECT

Meeting Date:	March 11, 2013	Budgeted:	Yes
From:	David J. Stoldt General Manager	Program/ Line Item No.:	1-8-1, 1-5-1 adjusted
Prepared By:	David J. Stoldt	Cost Estimate:	Not to Exceed \$500,000 per year / 2 years

General Counsel Approval: N/A
Committee Recommendation:
CEQA Compliance: N/A

SUMMARY: At its December 10, 2012 meeting the Board approved a plan that includes the following:

- Develop a Request for Qualifications (RFQ) to be distributed to any and all potential ocean desalination project developers to utilize water sources that are not within the Salinas Valley Groundwater Basin. Such an RFQ would define specific project parameters that the District would determine represents the best qualified viable project for which a detailed description could be developed for environmental review.
- The District would partner with the developer to fund CEQA and NEPA review processes in an amount not to exceed \$500,000 per year; the expenditure would be made over two fiscal years. The District could undertake this effort as the sole Lead Agency for CEQA, or could act as co-Lead Agency for CEQA with a locally relevant agency.
- The RFQ should provide that the District hold the option, upon certification of the EIR/EIS, for one year to become the owner of the project or, in the alternative, to negotiate with a third-party for ownership, and enter into the design and permitting phase. However, as a condition to a partnership with a developer, the District should retain the option to terminate at any time, if the CPUC issues a CPCN to Cal-Am for another project designed to timely meet the potable water needs of the Peninsula.
- Engage County representatives and Mayors of the six jurisdictions to discuss the merits of this parallel plan as a safety "backstop" to the Cal-Am application and seek their support.

The RFQ was distributed January 25, 2013 to the Peoples Moss Landing proponents, DeepWater Desal, Marina Coast Water District, JDL Development, one of the Banks holding a mortgage on the Moss Landing Commercial Park, and to an advisor to one of the banks. A third-party developer originally interested in the RFQ declined. A copy was also forwarded to California American Water.

Responses from Peoples Moss Landing and DeepWater Desal were received February 15, 2013. The statements of qualifications were reviewed by the District Engineer and the General Manager, in conjunction with review of the SPI consultants report(s) executed for the Monterey Peninsula Regional Water Authority. Follow-up questions were asked and the proponents filed additional information. Staff visited the sites. The District Engineer and General Manager used an objective scoring system attached

hereto as Exhibit 5-A to evaluate the statements. The results of the evaluation indicate that both projects have great uncertainty, but the DeepWater Desal project can move more quickly and may offer advantages.

RECOMMENDATION: The Water Supply Planning Committee should decide if it shall recommend that the Board consider further negotiations with DeepWater Desal to establish a cost-sharing relationship for the environmental and permitting work necessary to advance that project as an alternative to the Cal-Am proposal.

BACKGROUND:

Cal-Am (Cal-Am) proposes that its Monterey Peninsula Water Supply Project will consist of slant intake wells, brackish water pipelines, the desalination plant, product water pipelines, brine disposal facilities, and related appurtenant facilities. Depending on the availability of water from the Groundwater Replenishment Project, the desalination plant is proposed to be sized at either 9.6 mgd or 6.4 mgd located just to the northwest of the Monterey Peninsula Water Pollution Control Agency (MRWPCA) wastewater treatment plant. The Project as proposed is to be owned and operated solely by Cal-Am.

Salinas Valley agricultural water users claim that they are at risk of slant wells within the boundaries of the Salinas Valley Groundwater Basin (SVGB) and that Cal-Am's plan will cause a protracted water rights dispute and possibly trigger an adjudication of the water basin. The Farm Bureau has stated it does "not support any water project that places a straw in the Salinas Valley aquifer."

Claims that have been raised in opposition to Cal-Am's plan include (i) whether the project would cause harm to others' groundwater rights and should be addressed through an independent hydrological assessment as soon as possible, (ii) that the SVGB is in overdraft – even though that fact has not been judicially determined – thus it appears there is no surplus water for the project to appropriate, (iii) by leaving the groundwater component in the Salinas Valley, Cal-Am may avoid violation of the Monterey County Water Resource Agency (MCWRA) Agency Act ban on export of groundwater – however, this does not mean that Cal-Am is not appropriating groundwater at the expense of other groundwater users who may be injured by any additional pumping.

Hence, the risk of litigation over Salinas Valley Groundwater rights is very high.

Final Commission action on a Proposed Decision is scheduled for January 2014. It is unclear if a decision can be rendered without resolution of the water rights issues discussed above, but we can assume that, just as in the case of the Regional Project previously, the Commission is able to issue a Certificate of Public Convenience and Necessity (CPCN) to Cal-Am before any data is obtained from the test wells, and without resolution of the water rights issues.

However, completion and operation of test wells may be a critical path to forestall litigation over SVGB water rights. One of the proposed methods to address the concerns of the agricultural interests is to develop the supply source from the shallow Sand Dunes Aquifer. The Growers have indicated that such a solution would be satisfactory. Cal-Am has indicated that it will gather the necessary data on the shallow aquifer from its test well.

However, construction of a test slant well is time constrained, as well. Cal-Am recently reported that it did not secure permits necessary to begin construction of the test well in the current November to February 2012-13 Snowy Plover season and will have to wait until 2013-14. This places data-gathering over a year away.

Further, according to Coastal Commission sources, gathering data from the test well may take as many as two years. Hence, data to support a shallow Sand Dune Aquifer approach will not become available until early 2015, and possibly as late as the beginning of 2016.

Therefore, a single linear path that relies on test well data to resolve potential litigation creates significant risk that the Cal-Am project proposal to use slant wells may not work or become significantly delayed. Indeed, even if data are available, it may not yield a solution that will avoid litigation. It may be in the Monterey Peninsula community's interest to develop a parallel process to advance or qualify an alternative project as a safety contingency. The District could continue to support steady advancement of the Cal-Am application at the CPUC, while at the same time work to advance environmental review and permitting of an alternative water source. This alternative project would be a back-stop to Cal-Am's proposal.

The recent draft report "Evaluation of Seawater Desalination Projects" performed by Separation Processes Incorporated (SPI) indicates proposed projects utilizing open water intakes and located at Moss Landing could provide water of equal quality to Cal-Am's proposal, at that these alternatives may be realized at comparable or lower costs. To determine if an open water intake alternative can be approved, it is necessary to undertake the CEQA/NEPA environmental review, as well as begin the permitting process with the Coastal Commission. The District could seek to partner with one of the project proponents, or develop an alternative with a new/undetermined partner.

EXHIBITS

EXHIBIT 5-A: Evaluation Matrices of District Engineer and General Manager

EXHIBIT 5-A

Evaluation Matrices of District Engineer and General Manager

Proposal Review Scoring Sheet for Alternative Desalination Facility

Reviewer: Larry Hampson
Date: March 9, 2013

Review categories and scoring criteria				Category score	Deep Water Desal	People's Moss Landing	Notes
Organization Information and Financial Strength				12	11%		
a.	type of organization (e.g. corporation, partnership, including joint venture teams and subcontractors) and how long it has been in existence.	max score		3	2	1	PML and DWD are LLC. Internet search on Moss Landing Commercial Park shows that the California "Agent for Service of Process in case of a lawsuit" resigned on 10/5/10. There has been no replacement. Part of DWD D-B team are partners in LLC w/ Dennis Ing as Agent for Service.
b.	capital structure - financial resources organization intends to dedicate to the project in the next 18 months			3	3	1	PML: \$500K for EIR + \$200K design; DWD: \$5 million (+ or -) for legal, permits, tech studies, prelim design.
c.	cost sharing partnership with the District.			3	3	2	PML: defer acquisition costs. DWD: will retain ownership of intake pipeline to data center, lease SWRO building. JPA owns pipelines to and from SWRO facility to outfall at MLPP, raging waters (note: three pipelines required in Dolan Road).
d.	audited financial statements provided for the past two years, including annual reports, income statements, balance sheets, and statements of changes			3	0	1	PML - unaudited balance sheet; buildings and real estate valued at \$278 million; \$32.3 million in mortgage payable over one year.
Team ability and strengths				10	9%		
a.	proposal identifies key team members, contractors, sub-contractors, and their qualifications and experience	max score		5	4	2	DWD has relevant experience in design of SWRO plant; CEQA/NEPA and permitting expertise not demonstrated. DWD has retained Tenerra for WQ sampling. PML has relevant experience in membrane technology and concentrate disposal (Mickey). No PML SWRO design experience demonstrated either in proposal or on Mickey Associates website.
b.	proof provided of contracts with the contractors, sub-contractors, and third-party participants			5	2	1	No contracts provided; proposals provided by PML with some preliminary consultant work. DWD has partnership that includes design team, political representation, technical studies consultant, financial expertise. DWD did not provide copies of third party agreements.
Source Water Intake Strategy				16	14%		
a.	feed water source and physical infrastructure identified for delivering it to the treatment facility	max score		4	1	2	PML intake in Moss Landing harbor may require significant pre-treatment for variable WQ (SPI report); possible to modify PML outfall to be both intake and outfall, but costs unknown; existing intake lines are in place under Highway 1. DWD relying on construction of new 48-inch intake along fuel oil line easement/Highway 1/Dolan Road and extracting heat from data centers or MLPP to heat feed water.
b.	potential water rights or environmental litigation risks identified or statement provided why there is limited or no litigation risk with respect to water rights or environmental concerns			4	2	1	Both PML and DWD rely on open sea water intakes, so water rights should not be an issue. Neither identify potential mitigation requirement for I&E impacts. PML submitted preliminary CEQA checklist. 2011 appraisal report of PML property by Landmark Realty states that the replacement cost of facilities makes the "extraordinary assumption that decontamination for [sic] the ground [sic] water is on-going through natural processes..." No groundwater monitoring data provided.
c.	Long-term (50 or more years) security and right to this water source demonstrated. Legal agreements in place (and provided) or expected to be in place demonstrating this			4	N/A	N/A	Intake/outfall may be subject to continuing jurisdiction of RWQCB.
d.	Studies/data to support permit applications			4	2	1	PML provided analysis of air emissions for construction. DWD stated that there is an ongoing source water study.
Outfall Strategy				10	9%		
a.	physical infrastructure identified or in place	max score		5	1	2	PML intake and outfall in disrepair; SPI report shows R&R costs estimated at \$3 million for both, but PML Feb. 15, 2013 submittal shows \$1 million w/o any substantiation; JAWSE report describes minor repairs and potential for 24-inch steel pipe insert; PML shows an additional 36-inch outfall from the harbor - drawings show an abandoned 36-inch wood stave pipe with 10-ft. concrete plug along alignment of 51-inch pipe outfall until ocean. 51-inch outfall departs former 36-inch alignment in ocean and ends at -49 MLLW approx. 800 feet offshore; two 8-inch MLML pipes inside PML discharge line. DWD proposes use of MLPP outfall or new outfall along abandoned fuel oil pipeline esmt.
b.	legal agreements in place or expected to be in place related to the outfall			5	1	2	PML has existing outfall. DWD negotiating with State Lands for easement for new intake that could be used for outfall if MLPP outfall not available. Use of Dynegy MLPP outfall by DWD uncertain and may require indemnification.
Water Treatment Facility				8	7%		

a.	preliminary design of the pre-treatment, treatment, and storage facilities completed, firm identified, contract in place, diagrams/drawings provided	4					1	PML and DWD provided description of facilities for SPI report, although SPI indicated PML was not very robust.
b.	plant configuration and performance schema identified; process flow diagram included	4					1	PML provided a proposal by Desal America describing facilities for a 9 mgd SWRO system on existing PML site (no diagrams or concept layout). DWD provided schematic, but no overall concept layout of intake, pipelines, SWRO facilities, delivery pipeline.
Site Control		8		7%				
a.	Site described, ownership identified, legal agreements for use provided	8					4	PML describes site, owns site, agreements in place for intake and outfall; however, are there hazardous wastes on site and has the owner made full disclosure about existing facilities? DWD described application to State Lands for offshore easement and agreement with Dynegy (not publicly available), but no other site-related agreements were furnished.
Permitting		12		11%			3	
a.	required permits identified	3					3	PML and DWD described comparable set of permit requirements.
b.	firm identified for environmental studies, evidence of contract provided	3					2	PML identified consultant for environmental study (SMB Environmental, Inc.). DWD will enter into agreement for State Lands to be CEQA lead and has asked MPWMD to fund EIR. PML did not outline plans for completing necessary studies for intake, membrane design, discharge. DWD described intake studies only.
c.	strategy provided for obtaining permits	3					1	PML and DWD both rely on a simplified approach to obtaining intake and discharge permits - neither build in a time buffer for unexpected requirements.
e.	status or contract for lead CEQA/NEPA agencies	3					2	No lead identified for PML. State Lands to be CEQA lead for DWD. DWD in discussions with MBNMS for NEPA lead? (need to verify)
Energy		9		8%				
a.	energy procurement strategy identified	3					3	Main power source from grid. PML has back-up generators, but it's not clear they are functional. DWD signed agreement with Salinas to form utility for power purchase.
b.	costs identified	3					2	Both PML and DWD costs are shown in SPI report. PML has lowered cost for buying site. DWD has altered its proposed intake and site facilities locations several times, so it is difficult.
c.	contracts in place or described	3					2	PML claims "over the fence" power cost from Dynegy at \$0.08/kw-hr, but no agreement provided. DWD will enter into agreement with Salinas to form utility to buy power.
Third Parties		6		5%				
a.	third party construction agreements required for building, agreements in place or expected to be	3					2	PML not reliant on 3rd party agreements; DWD is reliant on third parties for site control, power, intake, outfall.
c.	project depends on CEC licensing at MLPP, risk to source water, outfall, site control described	3					1	For PML, no risks associated with dependency on MLPP. For DWD, some risk associated with use of MLPP outfall.
Business Terms		6		5%				
a.	legal structure and business terms described for short-term (environmental studies, permits)	2					1	PML proposes \$700 K contribution for EIR and design. DWD proposes about \$5 million contribution for studies, design, permit acquisition. Neither provided documentation of revenue or statements to show how contributions would be funded.
b.	legal structure and business terms described for design-build and O&M	2					2	PML to be D-B contractor w/MPWMD purchasing property for \$15 million? DWD proposes either D-B as developer or with JPA w/ competitive bid process for engineering and construction.
c.	earnings method and rate of return described	2					1	PML to be bought out. DWD to retain ownership of intake pipeline and facilities property.
Litigation History		6		4%				
a.	No litigation within past five years	5					5	PML did not disclose any litigation; a search on the Internet shows that Nader Agha was involved in more than 15 civil lawsuits between 1998 and 2010. DWD did not disclose any litigation.
Costs		4		4%				
a.	proposal provides costs for environmental review and permitting	2					2	PML shows \$500K for EIR and \$200K for design, no costs for permitting. DWD shows \$1.6 million for legal/EIR/permits, \$1.5 million for studies and preliminary design.
b.	proposal provides costs for D-B, O&M	2					2	PML and DWD estimates are included in the SPI report, but do not include costs for intake
Schedule		8		7%				
a.	Does the proposal provide a plausible work schedule for environmental review and perm	4					1	see SPI final report - both proposals too optimistic
b.	Does the proposal provide a plausible work schedule for D-B, initial start-up	4					1	see SPI final report - both proposals too optimistic
Total		114		100%			68	43

Notes

1. SPI Report = Evaluation of Seawater Desalination Projects, Final Report, Prepared for Monterey Peninsula Regional Water Authority, January 17, 2013
2. Evaluation based on proposals submitted on February 15, 2013 by Moss Landing Commercial Business Park, LLC and DeepWater Desal, LLC, Monterey Peninsula Water Management District records, and Internet research as noted.

Proposal Review Scoring Sheet Alternative Desalination Facility

Reviewer: D. Stoldt

Date: March 9, 2012

Review categories and scoring criteria		Category score	Deep Water Desal	People's Moss Landing	Notes
Organization Information and Financial Strength		12	11%		
a.	max score type of organization (e.g. corporation, partnership, including joint venture teams and subcontractors) and how long it has been in existence.	3	2	1	PML ownership has longer history, but hasn't accomplished much; DWD is closely held. Neither has significant revenue capability.
b.	capital structure - financial resources organization intends to dedicate to the project in the next 18 months	3	2	1	DWD appears to have stronger access to capital; Due diligence reveals much uncertainty about future ownership and financing of Moss Landing Commercial Park.
c.	cost sharing partnership with the District.	3	3	1	DWD appears to commit approximately \$4 million; PML \$700,000;
d.	audited financial statements provided for the past two years, including annual reports, income statements, balance sheets, and statements of changes	3	1	1	DWD no financial statements; PML provided unaudited; Significant debt load for Moss Landing Commercial Park
Team ability and strengths		10	9%		
a.	max score proposal identifies key team members, contractors, sub-contractors, and their qualifications and experience	5	4	3	PML "team" appears disjointed. Not all members represented are actually part of team (i.e. Chapin); DWD project management team has industry reputation.
b.	proof provided of contracts with the contractors, sub-contractors, and third-party participants	5	3	2	DWD relies on contractual relationships, not all of which have been executed or demonstrated. This is an area of further due diligence. Due diligence to date reveals contract under development for energy, exclusivity agreement with Dynegy, but have not seen commitment of intake easement/lease or use of outfall. DWD does have CEQA lead agency on board; PML did not demonstrate any contractual relationships.
Source Water Intake Strategy		18	14%		
a.	max score feed water source and physical infrastructure identified for delivering it to the treatment facility	4	3	2	DWD needs contract for easement; PML may have initially misrepresented source as "sub-surface intakes" - later clarified, but much confusion. Due diligence reveals concerns wrt physical condition of existing intake options for PML.
b.	potential water rights or environmental litigation risks identified or statement provided why there is limited or no litigation risk with respect to water rights or environmental concerns	4	2	2	Big area of uncertainty; Opposition not yet identified.
c.	Long-term (50 or more years) security and right to this water source demonstrated. Legal agreements in place (and provided) or expected to be in place demonstrating this	4	3	3	Both intake strategies appear to meet long term secure source.
d.	Studies/data to support permit applications	4	3	0	DWD has significant headstart in data collection for siting intake structure.
Outfall Strategy		10	9%		
a.	max score physical infrastructure identified or in place	5	2	3	PML existing outfall appears to be in more significant disrepair than represented. Concern over accommodation for MBARI 8" diameter pipes.
b.	legal agreements in place or expected to be in place related to the outfall	5	2	3	DWD will rely on legal contract, of which no evidence at this time.
Water Treatment Facility		8	7%		
a.	max score preliminary design of the pre-treatment, treatment, and storage facilities completed, firm identified, contract in place, diagrams/drawings provided	4	2	2	We have relied on additional information from the SPI reports.
b.	plant configuration and performance schema identified; process flow diagram included	4	3	2	
Site Control		8	7%		
a.	max score Site described, ownership identified, legal agreements for use provided	8	4	6	DWD has moved preferred site 3 times in 3 months - concern; PML have described site as both a 20-acre (p 5) and as a 25-acre (p 8), but no specific parcel identified. Existing buildings may provide benefit, but overall purchase price appears too high. Concerns over actual environmental condition of site - not addressed.
Permitting		12	11%		
a.	max score required permits identified	3	3	2	PML appears to misunderstand need for NEPA review and may have understated work to be done for NPDES discharge permit. Also mention of need for a CPUC CPON appears erroneous.
b.	firm identified for environmental studies, evidence of contract provided	3	1	1	

c.	strategy provided for obtaining permits	3		2	1	DWD has demonstrated better grasp of permit requirements
e.	status or contract for lead CEQA/NEPA agencies	3		2	1	DWD has head start with State Lands Commission.
Energy		max score	8%			
a.	energy procurement strategy identified	3		2	1	DWD pursuing innovative energy plan with Salinas; PML mistakenly identifies NRG as new owner of the plant; Also, our due diligence suggests an "over the fence" agreement is not
b.	costs identified	3		2	2	
c.	contracts in place or described	3		1	1	
Third Parties		max score	6%			
a.	third party construction agreements required for building, agreements in place or	3		1	1	
c.	project depends on CEC licensing at MLPP, risk to source water, outfall, site control	3		2	2	DWD strategy at MLPP appears to survive relicensing risk and/or one-through-cooling
Business Terms		max score	6%			
a.	legal structure and business terms described for short-term (environmental studies,	2		2	2	Costs enumerated for both projects;
b.	legal structure and business terms described for design-build and O&M	2		1	1	no detail.
c.	earnings method and rate of return described	2		1	2	Not much detailed description of DWD recovery of return; PML purchase price appears too
Litigation History		max score	4%			
a.	No litigation within past five years	5		3	1	PML response appears to conflict with 7/8/12 Pine Cone article
Costs		max score	4%			
a.	proposal provides costs for environmental review and permitting	4		2	1	
b.	proposal provides costs for D-B, O&M	2		1	1	Reviewer will rely more on SPI consulting reports
Schedule		max score	7%			
a.	Does the proposal provide a plausible work schedule for environmental review and perm	4		2	1	Concern that PML has not identified timeline for data collection for intakes
b.	Does the proposal provide a plausible work schedule for D-B, initial start-up	4		1	1	Not requested; Not created.
Total		114	100%	68	54	