

DOCKETED

Docket Number:	97-AFC-01C
Project Title:	High Desert Power Plant (COMPLIANCE)
TN #:	206300
Document Title:	ROC between CEC staff and City of Victorville and VVWRA treatment plant representatives
Description:	Report of Conversation for a phone conference between CEC staff Abdel-Karim Abulaban and Sean McGlade from city of Victorville and Logan Olds from VVWRA plant regarding issues with delivery of recycled water to the High Desert Power Project
Filer:	AbdelKarim Abulaban
Organization:	California Energy Commission
Submitter Role:	Commission Staff
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Siting and Environmental Protection Division

FILE: (97-AFC-1C)

		PROJECT TITLE: High Desert Power Project	
<input checked="" type="checkbox"/> Telephone		<input type="checkbox"/> Meeting Location:	
NAME:	Abdel-Karim Abulaban	DATE:	1/29/2015
TIME:		TIME:	10:00 a.m.
WITH:	City of Victorville and VVWRA plant representatives		
SUBJECT:	Issues with recycled water delivery to HDPP		

Energy Commission staff, Paul Marshall and Karim Abulaban, held a phone conference with Sean McGlade, Director of Public Works and Water, city of Victorville (CVV), and Logan Olds, General Manager, VVWRA treatment plant. The purpose of the conference was to discuss issues raised by the owner of High Desert Power Project (HDPP or Project) regarding delivery of recycled water to the project.

DISCUSSIONS:

Staff wanted to discuss the reasons why VVWRA was unable to deliver recycled water in the quantity and quality needed for HDPP as was stated by HDPP representatives on multiple occasions, as well as learn about plans the city had in place to improve the situation and reliability of recycled water delivery to the Project. Also discussed in the conference were historic interruptions in recycled water delivery and plans to manage interruptions. Staff learned the following from the CVV and VVWRA plant representatives:

- A pump test was planned to be performed to determine maximum pumping capacity of existing pumps at the VVWRA plant.
- Staff discussed with CVV the feasibility that HDPP sends its backwash water to the city's industrial wastewater treatment plant (IWWTP) to treat it and blend it with its effluent to reduce dissolved solid concentrations in the blend so that it meets HDPP requirements. Sean indicated that such an alternative would be costly for HDPP since the backwash water is relatively cleaner than the wastewater treated at IWWTP and since HDPP would have to buy treatment capacity to treat up to 0.5 million gallons per day of backwash water from HDPP. Sean suggested that HDPP contract a treatment company to install filtration equipment so that the backwash water could be treated and used onsite instead of sending it to IWWTP.
- CVV had recently adopted a pretreatment ordinance for the Dr. Pepper juice plant to obtain a permit to discharge wastewater with lower total dissolved solids (TDS) concentration. Implementation of pretreatment by the Dr. Pepper plant was expected to result in reduced TDS levels in the effluent from IWWTP. This would in turn result in TDS concentrations that would be within contractual limits specified by HDPP and thus the IWWTP effluent could be sent directly to HDPP for use.
- Sean also told staff that TDS concentrations in IWWTP effluent were around 420 mg/l.
- Sean told staff that all indicators pointed in the direction that population growth was coming back to the area, which means flow to the IWWTP is expected to increase. For example, Sean said that 10,000 lots had been entitled for development. Sean further told staff that most of the development would be in the area that drains to the IWWTP.



- Sean told staff that the city has an incentive to do all the necessary improvements to ensure reliable supply of recycled water to HDPP because they would be a regular customer for purchase of recycled water. The biggest hurdle facing the city is that fluctuations in wastewater quality from the Dr. Pepper plant are out of the CVV control.
- Logan told staff that he had prepared recycled water availability projections which showed that sufficient amounts of recycled water would be available for HDPP use.
- Interruptions in delivery of recycled water from the VVWRA plant to HDPP could occur and are caused by outages due to one of three reasons:
 - o Equipment failure
 - o Toxic loads that have to be redirected away from plant so that the biomedica at the plant are not harmed, or
 - o Routine maintenance shutdowns.
- The VVWRA plant has developed a robust asset accounting system so that they minimize frequency of unpredicted equipment failure and unplanned outages are minimized.
- It typically takes 1, 2, or 3 days to repair equipment. However, it may occasionally take longer, but outages have to be dealt with in 7 days because that's the capacity of percolation ponds used to store incoming wastewater in case of a shutdown. Logan also stated that the VVWRA plant is obligated to send flow to the Mojave River within 10 days of an interruption because they cannot keep flow out of the river for more than 10 days.
- Logan could not comment on frequency of interruptions because there are factors that are out of VVWRA plant's control that can cause an outage, such as toxic loads.
- Logan informed staff that there is a storage tank with a capacity of 460,000 gallons onsite that can be used to store recycled water for HDPP use to cover the power project needs during outages.
- Logan stated that he supports the idea of adding storage capacity at the HDPP site to store water to meet peak demands and also to function as equalization storage to manage fluctuations of water consumption at the power plant.
- On the issue of reduction in effluent from the VVWRA plant after construction of two sub-regional treatment plants, Logan stated that they expect to see some reduction, but flows are expected to rebound shortly after because of the project population increase in the region.

CC:	Signed:
	Name: Abdel-Karim Abulaban