Siting, Transmission, and Environmental Protection Division

FILE: 08-AFC-4

PROJECT TITLE: Orange Grove Project

☒ Telephone		☐ Meeting Location: Telephone			
NAME:	Felica Miller, Jared Babula	**DATE:**	Oct. 8, 2008	**TIME:**	Early PM
WITH:	Joe Stenger, TRC, and Mike Jones, J Power				
SUBJECT:	Two telephone conversations pursuant to Water Staff request re 100% reclaimed water use impacts to project engineering and analysis.				

COMMENTS:

On October 8, 2008, water staff indicated to the Project Manager and Staff Counsel that water staff is now recommending that the applicant use 100% reclaimed water for the Orange Grove project and they request additional information regarding what re-engineering would be required to accomplish this proposed new requirement.

As a result of this meeting Felicia Miller and Jared Babula contacted Joe Stenger of TRC, applicant's consultant Project Manager, and Felicia Miller had an additional conversation with Joe Stenger and with Mike Jones of J Power, the project owner, regarding this new requirement. In both conversations staff asked for details addressing effects on the project engineering,and related project elements if the project were required to utilize only reclaimed water.

Stenger and Jones said that the use of 100% reclaimed water was considered for the project, however because the 21 acre-feet per year (AFY) of fresh water was considered minimal, and is being used primarily for NOx control and for power augmentation. Do to water quality and treatment concerns the applicant opted to use both fresh and reclaimed water for the project. Mr. Stenger and Mr. Jones stated that using only reclaimed water created additional significant impacts on the project design, water treatment equipment requirements, and had impacts to other areas such as air quality, public health, and traffic and transportation.

Among the more obvious are:

- increased water truck traffic through the town of Fallbrook doubling the one-way truck trips from 1 trip/hr to 2 trips/hr. Since the fresh water is transported down the I-15 to the project site, that route takes half the water trucks off of the Mission Road route through Fallbrook with numerous intersections, stop signs and lights, and reducing public safety issues such as pedestrians at cross walks, vehicle traffic at stop signs and traffic lights, and numerous residences and businesses along this proposed route.
- additional air and potential public health impact could result as the round trip from the fresh water hydrant proposed for project supply is 18 miles distant versus the 3.4 miles for reclaimed water. Additional stops and starts and slower speeds result from a through-town route (stop signs, traffic lights).

The project is could utilize reclaimed water, but only for a limited time. Their proposal addressed a contingency plan should brief interruptions of fresh water occur. However, the project is not engineered to use reclaimed water for a lengthy period. In order to use only reclaimed water for the project, the project would be required to be reengineered. According to Mr. Jones use of 100% reclaimed water would require J Power's engineering staff to reconfigure and add features including:

- a multimedia/carbon filtration system installed to remove the remainder of solids and any "bugs",
- onsite, larger demineralization system - upgraded from the trailer demin system
- a larger, more sophisticated reverse osmosis system,
- downstream polishers for additional demineralization prior to use,
- additional operational costs, as a water quality technician would need to be onsite to monitor the water treatment system,
- additional equipment costs,
- additional engineering costs associated with revamping the system from fresh water to reclaimed water,

According to Mr. Jones and Mr. Stenger the applicant would need to install a complete water treatment system capable of processing the required acre/feet of water necessary to run this peaker plant.

Additionally, the applicant and staff would need to reanalyze impacts to air quality, public health, transportation, hazardous waste, and engineering, since both the applicant and Energy Commission staff for these areas are basing their analyses on the AFC, which reflected use of fresh and reclaimed water.

cc: Cheryl Closson, Paul Marshall, Steve Baker,	**Signed: R. Worl for F. Miller** Robert C. Worl
	Name: Felicia Miller, Project Manager