Paula David - Palomar Chiller Amendment - Visual Plumes

From:

"Will Walters"

To:

"Will Walters", "David Flores"

Date:

10/18/2007 3:40 PM

Subject: Palomar Chiller Amendment - Visual Plumes

CC:

"Dale Edwards", "Paula David"

DOCKET

OCT 1 8 2007

RECD.

Dave,

I downloaded and reviewed the amendment request with respect to visual plume formation.

The HRSG plumes would not be substantially impacted, and may even decrease slightly assuming unchanged exhaust temperatures. The plume frequency for the HRSGs will remain well below the CEC staff identified frequency thresholds that would have the potential to cause significant impacts.

For the cooling tower, there would be an increase in cooling load from the chiller use, but generally that increase would occur when the chiller would be operating during warm ambient conditions, which is when plumes from this plume abated tower would not be expected to occur. Additionally, the amendment notes that the use of the chiller will reduce the use of the duct burners, which would have the potential to reduce cooling tower load more than the chiller would increase cooling tower load. The original plume analysis indicated plume formation frequencies for the plume abated cooling tower to be well below frequency thresholds that would have the potential to cause significant impacts. The increase in cooling load appears to be 5% or less, and such a small increase during warmer ambient conditions (even without the consideration of the potentially larger cooling load reduction due to reduced duct burner use) should not substantially increase plume formation to levels that would exceed the CEC staff identified plume frequency thresholds that would require additional visual impact analysis.

Therefore, the addition of the chiller would not impact the visual plume significance determination for this project.

Will Walters, Aspen Environmental Group