Archived: Thursday, May 31, 2012 3:59:39 PM
From: Larry Baronowsky
Sent: Wednesday, November 30, 2011 3:56:06 PM
To: Eric M. Robeson
Cc: Bob Berry; Jim Garrett; Ron Gregory; Wayne O'Bryan
Subject: FW: S&L Report Review
Response requested: No
Importance: Normal

Eric,

Upon reviewing the S&L report I have a few comments.

Precipitator Upgrades

I do not believe that ESP upgrades will work at Coleman or HMP&L. The precipitators on these units are quite small compared to Green and Wilson having only three collecting fields compared to seven or more for the other units. The physical sizes of the precipitator boxes are quite small, and the gas velocity through the collecting fields is more than double what is recommended for effective particle collection. Without increasing the physical size of the boxes enough to reduce the gas velocity to allow sufficient time for particle charging I don't believe PM collection will improve. If we use ACI at Coleman for Mercury control I know that it takes significantly longer to charge the carbon particles than to charge fly ash for collection. We learned that while experimenting with burning pet coke in the HMP&L units. I don't know what the resistivity is for hydrated lime if we choose it for SO3 control at HMP&L, but if it is greater than fly ash, I expect that it will pass through the precipitator to the WFGD.

Reid/HMP&L Fly Ash Collection

Just a reminder that the fly ash transport system from the dry ash collectors to the HMP&L storage silo is also pressure pneumatic. I did not notice that mentioned in table 2-8.

Sebree Intake Structure 316(b) Compliance

If the Reid 1 Unit is retired the Circulating Water Pumps at the intake structure could be downsized for make up to the HMP&L cooling towers, HMP&L units sluice water make up, and to supply HWU's South Water Treatment facility. As stated in the paragraph following Table 4.4 on page 4-13, a study would need to be conducted to determine the

pump size required, and if the reduced requirement would bring the overall intake flow velocity below the 0.5 fps limit.

Reid/HMP&L Waste Water Streams

The entire Reid/HMP&L plant foot print drains to a sump adjacent to the HMP&L fly ash silo and is pumped to the ash pond for disposal. As mentioned in the last paragraph on page 4-14 a waste water treatment facility would need to be added or the site sump redirected to the Green Station waste water treatment facility before the existing ash pond could be closed.