From: Bob Poole [mailto:bpoole@wspa.org]
Sent: Sunday, May 30, 2010 8:14 AM

To: Steven Roeder

Cc: Arnaud Marjollet; Leonard Scandura; Tom Umenhofer

Subject: ::::WSPA BPS Comments

Hi Steve:

Please find below WSPA's comments on the SJVAPCD GHG BPS for Oilfield Steam Generators. We believe the edits and clarification of the proposed BPS language will enhance the final version of the BPS document.

## **WSPA Comments**

To allow for vertical or horizontal convection section design and to correctly characterize that convection surface area, WSPA requests that the Control Measure 1 Qualification be modified as follows:

"Convection section with at least 235 square feet of bare and/or equivalent extended surface area per MMBtu/hr of heat input..."

- In the BPS, it should be clear that thermal efficiency calculations are based upon "higher heating value (HHV)" and fuel measurements are on a "gross, dry basis" (consistent with utility recording protocol).
- The PG&E "electric power generation factor" on page 4 should be have a specific citation.
- On page 10, it should be noted that while SCR does reduce NOx emissions without the need for extensive FGR, it also results in higher resistance (delta-P) which offsets some of the energy efficiency gains attributed to the reduced FGR requirement.

Thank you for your consideration of these comments and we look forward to continued work with the District on BPS.

Bob

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## Notes from Steve Roeder:

- 1. Since the BPS equipment evaluated had fins in the convection section, it was determined that the District will accept a "convection section heat transfer surface area" of 235 square feet per MMBtu/hr, which can be either fins or bare tube surface area. The BPS requirement and discussion have been revised to reflect this.
- 2. the facts that the efficiency calculations are based on the higher heating value (hhv) of the natural gas have been added to the BPS assumption section, along with the fact that fuel measurements are based on the "gross dry basis", consistent with utility recording protocol.
- 3. The citation for the PG&E electric power generation factor for CO₂e has been added to the assumption section of the BPS document.
- 4. The fact that SCR adds resistance to the exhaust and offsets some of the energy efficiency gains attributed to the reduced FGR setting has been added to the discussion in the BPS document.