



# BLACK & VEATCH

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Fort Pierce Utilities Authority  
Continuing Engineering Services

B&V Project 16589.070  
B&V Files 15.0200/32.0203  
Letter BV-FP-110  
January 8, 1991

Fort Pierce Utilities Authority  
206 South Sixth Street  
Fort Pierce, FL 34948

Subject: Conference Memorandum 036

Attention: Mr. Harry Schindehette  
Director of Utilities

Gentlemen:

In reviewing our records, it was determined that the conference memorandum documenting our meeting in the Department of Environmental Regulation's (DER) offices on Monday, November 19, 1990, in Tallahassee, Florida, was never distributed. We are enclosing it for your files.

If you have any comments, please contact Steve Day at (913) 339-2880, John Cochran at (913) 339-2190 or me at (913) 339-7199.

Very truly yours,

BLACK & VEATCH

J. B. Miller, Jr.

Its  
Enclosure

cc: Mr. Harry Lamb, w/enclosure  
Mr. Barry Andrews, w/enclosure  
Mr. Mike Harley, w/enclosure  
Mr. Cleve Holladay, w/enclosure  
Ms. J. Morrison, w/enclosure

BLACK & VEATCH

CONFERENCE MEMORANDUM 036

Fort Pierce Utilities Authority  
Continuing Engineering Services  
PSD Application for H.D. King Unit 9

B&V Project 16589.070  
B&V Files 15.0200/32.0203  
December 27, 1990

Meeting held on Monday, November 19, 1990, at 2:00 p.m., in Department of Environmental Regulation (DER) offices in Tallahassee, Florida.

Recorded by: Jack Miller

Attending: Fort Pierce

Harry Schindehette  
Harry Lamb

Black & Veatch

Jack B. Miller  
Steve Day  
John Cochran



DER

Barry Andrews  
Mike Harley  
Cleve Holladay

The purpose of the meeting was to review the responses that FPUA has submitted in response to DER's comments of September 28, 1990 regarding the PSD application for H.D. King Unit 9.

The highlights of the conversation are as follows.

1. Black & Veatch recapped the current situation regarding the burning of oil under emergency conditions in Units 6, 7, and 8. It was noted that FPUA is willing to accept the condition that no oil will be burned in Units 6, 7, and 8 unless it is needed as a last resort to meet its customers load i.e. under a true emergency condition. It was pointed out that temporary relief had been sought through the West Palm Beach office as an interim measure until the constraints set forth in the Unit 9 permit are done away with through the current PSD application process. The West Palm Beach office has refused to allow the burning of oil in Unit 6, 7, and 8 in any circumstances.
2. DER suggested that it should be possible to get a consent order enacted that would allow temporary relief until the Unit 9 permit has been revised. DER suggested that FPUA estimate the emissions that will exist from Units 6, 7, and 8 while burning oil and that the information be included in the consent order. DER suggested that FPUA approach Stephanie Brooks of DER's West Palm Beach office for the purpose of obtaining a consent order to allow the burning of oil in Units 6, 7, and 8 under emergency conditions.

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3. FPUA stated that they did not recall receiving a letter from DER in response to a letter requesting that the Unit 9 permit be modified to express the hourly constraints on Units 6, 7, and 8 in terms of total Btu's of fuel input. DER indicated that they would check their files to see if it had been mailed out and would send a copy to FPUA. (Note: Permit modification dated November 9, 1990 was received by B&V on December 3, 1990.)
4. FPUA asked if the PSD application for Unit 9 is now considered complete. DER indicated that it is not complete as there are still some items of information that had been requested but not yet received.
5. DER indicated that they want air modeling to be performed to considering SO<sub>2</sub> and NO<sub>x</sub> emissions when burning oil to demonstrate that there are no violations of the Ambient Air Quality Standards (AAQS). They recognize that oil would only be burned under emergency conditions; however, they still want the modeling to be done. They also recognize that the incremental emissions are likely to be less than significant.
6. DER requested that sample calculations be provided as to how the emission factors from AP42 were applied.
7. DER requested that FPUA provide them with documentation from the turbine manufacturer (General Electric) as to the emissions declarations for the frame 5 combustion turbine.
8. Regarding stack parameters, DER requested that FPUA provide them with the tested results for stack parameters at the tested conditions.
9. DER requested that cost computations for Selective Catalytic Reduction (SCR) Systems be based on 80 percent NO<sub>x</sub> reduction from the 42 PPM level. That would result in a level of 8.4 PPM versus the 9.0 PPM used in the initial calculations.
10. DER also indicated that they believe that the increment of reduction (NO<sub>x</sub> reduction using SCR) should be 84 PPM to 8.4 PPM instead of 42<sup>x</sup> PPM to 8.4 PPM. They indicate that their position is supported by the fact that the existing permit currently allows 84 PPM. Black & Veatch pointed out that this strategy would be inconsistent for a "Top-Down" BACT analysis. The unit is currently capable of 42 PPM using steam injection without any

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additional modifications. Therefore the incremental reduction of NO<sub>x</sub> attributable to SCR should have a starting point of 42 PPM.

11. There was some discussion regarding escalation rates, the need for an additional one-half person for SCR, the impact of burning oil on catalyst life etc.
12. DER asked for an explanation as to why oil burning is detrimental to catalyst performance. Black & Veatch indicated that it is primarily due to the trace metals and other contaminants that occur in flue gas from oil combustion.
13. The DER indicated that their letter formally addressing the most recent responses of FPUA will be issued in a day or two.
14. Mike Harley of DER indicated that he expected to be out of the office from December 7 through January 2. FPUA indicated that they are most anxious to get the completeness issue resolved before his departure.
15. The DER indicated that they planned to follow-up the comments with a formal request for additional information. (Note: This letter was issued by the DER on November 21, 1990 and answered by FPUA on December 5, 1990.)
16. There were no further comments and the meeting was adjourned at approximately 3:30 p.m.

cae

cc: Mr. Harry Schindehette  
Mr. Harry Lamb  
Mr. Barry Andrews  
Mr. Mike Haley  
Mr. Cleve Holladay  
Mr. Don Knighton  
Mr. Jack Miller  
Mr. John Cochran