## **BEFORE THE**

## CONNECTICUT SITING COUNCIL

IN RE:	)
DOCKET 192B- CPV TOWANTIC, LLC	)
MOTION TO REOPEN AND MODIFY	)
THE JUNE 23, 1999 CERTIFICATE	)
OF ENVIRONMENTAL COMPATIBILITY	)
AND PUBLIC NEED BASED ON	)
CHANGED CONDITIONS PURSUANT TO	)
CONNECTICUT GENERAL STATUTES	) DOCKET NUMBER 192B
§4-181A (B) FOR THE CONSTRUCTION,	)
MAINTENANCE AND OPERATION OF A	)
785 mw DUAL-FUEL COMBINED CYCLE	)
ELECTRIC GENERATING FACILITY	)
LOCATED NORTH OF THE PROKOP	)
ROAD AND TOWANTIC HILL ROAD	)
INTERSECTION IN THE TOWN OF	)
OXFORD, CONNECTICUT	)

## JOINT COMMENT BY TOWN OF MIDDLEBURY AND RAYMOND PIETRORAZIO TO CONNECTICUT SITING COUNCIL DRAFT FINDINGS OF FACTS, APRIL 30, 2015

We herein provide our Comments to the above *DRAFT* Findings of Fact, as follows:

- 1. F of F #101- The finding is correct. However, it does not explain, as it should, that the change in stack height from 160 ft. to 150 ft. was made due to FAA concerns for aviation safety, as testified to by Mr. Fred Sellars in the Docket 192B hearings. Please rewrite #101 accordingly.
- 2. F of F #178- The finding is incorrect. The 160 ft. stack height was determined as defined; not the 150 ft. height. CPV witness Mr. Sellars testified that modeling of stack plumes for ambient air quality has nothing to do with stack visibility or aviation concerns. He also testified that the optimal stack height of 160 ft. was reduced to 150 ft. because of concerns for aviation. I, Raymond Pietrorazio (RP) did my best to draw from the Docket 192 record to make this very important point, including provision of the exhibit requested by the Council regarding the 20

ft. height difference comparison, which chart showed more than twice the deposition rate of pollutants with a 20 ft. less stack height for this very project (Docket 192). I was restricted by the Chairman from asking further questions on this all-important issue, which, in my opinion as a Connecticut licensed combustion expert, has impaired the process of fleshing out the very valuable information concerning pollutant deposition in the near area of the plant due to stack downwash and fumigating plumes which will be experienced, especially when the plant is operating at 50% rating or less. As previously stated, the increased stack diameter will not allow sufficient exit velocity, at lower operating rates, to obtain adequate dispersion of the stack effluent, which is some 147% larger. We suggest item #178 be rewritten to reflect the transcript testimony concisely, exhibits provided and line of questioning by RP, so that the record is crystal clear with respect to this stack design issue.

- 3. F of F #185- The finding is correct, but contributes little to the concerns discussed in the hearings. The prime consideration, to accurately reflect testimony, should be that the plumes are most dangerous to aviation when invisible, and the Finding of Fact most certainly should reflect this fact strongly, instead of not even mentioning it. Please rewrite #185 accordingly.
- 4. F of F #186- As supported by the FAA studies, both the SAIC and Mitre reports, stack plumes are not always the same. They differ constantly in height, width, turbulence and other ways. The studies point out the many factors that shape and identify plume characteristics, such as exit temperature (which varies), ambient temperature (which varies), wind intensity (which varies), wind direction (which varies nearly constantly), % of plant rating (which varies) and other causal factors. We believe #185 attempts to make an exhaust plume more definitive than what the studies and FAA documentation expresses, which is that these plumes vary widely, and their shape, characteristics and effects on aviation at any given time are quite uncertain and have wide latitudes. Please rewrite #186 accordingly.
- 5. F of F #190- We do not agree that "deposition rates would be lower than what was associated with the previously approved project". Due to the above mentioned stack configurations, we believe the deposition rates from the newer plant will far exceed what would have occurred with the previously approved project. Not only is it the stack configurations affecting increased deposition, but other factors as well, such as lower exit temperatures due to higher efficiency, causing less plume rise and poorer dispersion, especially at lower firing rates, and the increase in plant size burning more fuel. Please rewrite # 190 accordingly.

We very much appreciate the opportunity to express our position with respect to the Draft Finding of Facts for Docket 192B, and to suggest changes to more accurately sustain the record.

Thank you for your kind attention.

Respectfully,	
Town of Middlebury, Intervener	Raymond Pietrorazio, Intervener
Airport Representative	
May 7, 2015	