Consumers Power Company

Midland Project: P.O. Box 1963, Midland, Michigan 48640 - Area Code 517 631-0951

December 7, 1978

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Mr. P. A. Martinez
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P.O. Box 1000
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MIDLAND PROJECT GWO 7020 - DECEMBER 3 & 4, 1978
NRC VISIT REGARDING DIESEL GENERATOR SETTLEMENT
File: B3.0.3 Serial: CSC-3663

While this is not a set of minutes or an open item action list, during the subject visit several issues or questions were raised or inferred as noted below:

1. New settlement readings taken after duct bank freeing would seem to indicate the building may be pivoting about a north-south axis located somewhere in the vicinity of the condensate pipes. This raised a question concerning the potential hard spot developed by the 20" condensate line encased in the 24" lines surrounded by concrete and possibly resting on well compacted sand. If this is the case, we should examine the Diesel Generator Building structure in the vicinity for cracks in the concrete and consider the possibility of cutting loose the condensate lines immediately adjacent to the Diesel Generator Building.

2. When Mr. Ferris discussed possible causes, he made the point that it may be impossible to state the exact cause and that the more immediate concern was the remedial action. Although we concur that remedial action is most important, it should be noted that Mr. Gallager took strong issue with this point in that I & E believed cause determination to be mandatory and relative "to preclude repetition," etc. This aspect should receive more attention.

3. During this discussion it was noted that instrumentation will show when surcharge may be removed. In response to the NRC question regarding same, it was also noted that most settlement should occur rapidly as the area is being preloaded and that total settlement could take weeks or months. Our final response will have to provide sufficient rationale for determination that required settlement has taken place and answer the question of how we arrived at what was required.

4. Bechtel agreed to provide R. Cook a list of the equipment (small hand equipment and vibratory rolling equipment) which Bechtel utilized for compacting the fill from EL 618' to EL 628' in the Diesel Generator Building.

5. During Mr. McConnell's discussion regarding Item V, Mr. Gallager questioned the possible interference by the 20" condensate line. Bechtel should in-

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vestigate and document the effects of additional outside pressure on the condensate lines resulting from the preload. Again Bechtel should consider cutting same at this point in time since it appears that it could be acting as a cantilever type restraint with the fixed end being the Turbine Building wall and/or the well compacted sands existing in that area. In a separate discussion, Mr. Don Miller noted that we have to consider the effect of rupture of the condensate line and subsequent flooding on a Class I structure during a tornado and/or an earthquake.

6. Mr. Gallager appeared to find Mr. Dahr's explanation connected with VII a. 1), table oversite, unacceptable or at least extremely difficult to accept. Bechtel should be prepared to completely satisfy the NRC concern in this area.

7. VII a. 7) Mr. Gallager appeared to find the ± 2% Industrial Standard discussion unacceptable. Bechtel should be prepared to completely satisfy the NRC concern in this area. We believe Mr. Gallager's question not only relates to the characteristics of the proctor curves in terms of optimum moisture content but additionally whether the material being placed relates to the selected proctor. To go a little further, he may be questioning the validity of your tests; i.e., was it really 80% or 95% compaction.

8. In my opinion, we should be prepared to fully address Mr. Heller's summary comments regarding the fact that the response to the Diesel Generator Settlement questions will have to improve or exceed the reviewer's expectations. Mr. Heller was discussing the fact that the construction permit was based on the original reviewer's examination of the program, and that licensing will now have to judge whether or not the modification program meets or exceeds the construction permit intentions and qualifications. This would seem to indicate that our responses are going to undergo an extremely critical review and that none of our answers will be acceptable unless they can withstand the most intense scrutiny. It would also appear that this will become part of the operating license hearings. In that respect, I cannot emphasize too strongly the need for absolute documented accuracy and the strongest argument in our responses.

As a separate issue we are also extremely interested in as early as possible resolution to the Turbine Building basement wall problem and preload relative of the area between the Turbine Building and the Diesel Generator Building.

I am submitting this list of items for your review and consideration as part of the overall development or resolution to the Diesel Generator Settlement problem. No response is required at this time.

T. C. Cooke
Project Superintendent

TCC/sd
cc: DBMiller
JLCorley
ABoos