Commonwealth Edison
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1) Project Mgr.
2) Docket file for Prairie Island

February 2, 1979

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Denton:

I am responding to the question posed by Commissioner Bradford as to why Commonwealth Edison chose a custom rather than a standardized design for Carroll County Station's NSSS and balance of plant. In the case of the NSSS, we chose the Westinghouse 412 plant which is for a nominal 1200 MWe turbine and does not currently have a PDA. An alternative would have been the Westinghouse 414 plant which has a PDA but is for a 1300 MWe turbine. Reliability is a prime goal for Edison and we are concerned over potential startup problems with the 1300 MWe turbine-generators. Although several 1300 MWe units are on order, none will have had substantial operation before the Carroll County units will be committed to design and manufacturer. On this basis, we did not chose the standardized 414 plant.

Westinghouse also has a PDA for their RESAR 3S plant, which is a nominal 1200 MWe plant and is the same size as the Carroll County plant. We decided against the RESAR 3S plant because it did not have the integrated reactor protection system which we feel will substantially improve the reliability of the plant. Additionally, we have incorporated an advanced control system and new optimized 17x17 fuel which are not a part of the RESAR 3S plant. Edison and Westinghouse believe from a licensing standpoint that there are only small differences between the 412 plant that we bought and the 414 plant which has a PDA. Westinghouse is committed to applying for a PDA, and we believe it will be granted prior to the time needed for referencing on Carroll County. Therefore, we did not consider that we were buying a custom NSSS design but in fact would have a standardized design by the time it was needed.

After the award of the NSSS, Edison and Westinghouse decided to seek a FDA-2 instead of a PDA for the 412 plant. Westinghouse felt they had sufficient final design information and this would be a great opportunity to make one-stop licensing a reality. After discussions with the staff, we have concluded that a FDA-2 could not be reviewed and granted in time for referencing at the Carroll County construction permit stage. Therefore, Westinghouse will continue their pursuit for a PDA. It is our hope that after the PDA is obtained for the 412 plant, that the staff will continue the review for a FDA.

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In the case of balance of plant, we did not choose a standardized design because of our desire to make Carroll County an extension of our Byron and Braidwood design. The Byron and Braidwood design incorporates Edison's experience in construction, operation, and maintenance which has an impact over the life of the plant. Additionally, by using the same architect-engineer, we are able to capitalize on standard specifications and design concepts. It would be difficult to incorporate this feedback if we were to incorporate a standardized design in which we are not familiar. With our experience on the licensing of Byron and Braidwood, we have great confidence that the licensing requirements are understood and can be met.

Commonwealth Edison supports standardization in the licensing process and feels that our plans for the Carroll County project incorporate standardization as much as practicable.

Very truly yours,

C. Reed

Cordell Reed
Assistant Vice President