

Department of Energy Washington, D.C. 20461

Mr. Wm. H. Regan, Jr. Acting Assistant Director for Environmental Projects and Technology Division of Site Safety and Environmental Analysis U. S. Nuclear Regulatory Commission Washington, D. C. 20555

Dear Mr. Regan:

Thank you for your letter dated December 28, 1979, asking the Department of Energy, Office of Utility Systems, to address the reliability issues associated with the Carroll County nuclear generating facility. The following questions can be used to evaluate the bulk power transmission facilities and supplement Chapter 9 of the Carroll County Environmental Review:

- Develop a bulk power transmission plan for (1) delivery of 2200MW from two nuclear generating units meeting the Commonwealth Edison and MAIN regional planning, loading and stability criteria for each of the following possible sites:
 - (a) Carroll County site
 - (b) Braidwood site
 - (c) LaSalle site

 - (d) Bryon site(e) Bigsville site
 - (f) Concord site
 - (g) Southeastern site (near Hutsonville)

This plan should include all facilities required to integrate the station output into the regional power network. Identify any existing facilities which must be improved due to the development of a nuclear generating station at that location.

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- (2) Discuss the transmission plan for each of the above sites with details of all the known constraints associated with each site.
- (3) Provide a single line diagram with circuit breaker arrangement for each of the possible sites.
- (4) Provide a system single line of the currently planned 1988 transmission system. This diagram should include the bulk power transmission facilities in the region served by the Commonwealth Edison, the Interstate Power Company and the Iowa-Illinois Gas and Electric Company.
- (5) Describe the impact, if any, that each of the proposed sites would have or could be expected to have on the present ownership agreement for the Carroll County station.
- (6) Provide an estimate of the transmission and substation facility costs associated with each site. The transmission costs should be separated by line and by general supporting structure design type. Land and site development costs should be listed separately.
- (7) Provide any other pertinent data.

If there are any problems as to the scope of these questions, you can contact me at 254-8247.

Sincerely, James M. Brown, Jr. Chief, System Reliability and Emetgency Response Branch Division of Power Supply and Relibility Economic Regulatory Administration

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