



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

AUG 27 1980

Ms. Diane Hebert  
2505 E. Sugnet  
Midland, Michigan 48640

Dear Ms. Hebert:

Your letter of May 7, 1980 to President Carter has been referred to me for reply. Your letter asks several questions regarding the safety, cost, and need of the Midland Nuclear Power Plant being constructed by Consumers Power Company (the applicant) in Midland, Michigan.

SAFETY

Your concerns regarding safety include several questions about the quality of workmanship by Bechtel personnel. You note that quality control problems exist at the plant, and that the diesel generator building has experienced abnormal settlement. Assurance of quality is a significant part of the review performed by the NRC for the applications by utilities for construction permits and operating licenses and throughout subsequent plant operation. A description of our quality assurance responsibilities is provided in Enclosure 1. To further supplement this information for Midland, I would add that specialists from the regional offices of our Office of Inspection and Enforcement perform scheduled and unannounced field inspections which are directed to implementation aspects of the program. Also, a resident inspector from that office is assigned to the Midland plant site on a full time basis. As you have noted, and as should be expected from an effective quality assurance program, the Midland plant quality assurance program being carried out by the utility and its contractor, Bechtel, has caught numerous deficiencies during the construction process and has assured that appropriate dispositions and remedial actions were implemented. Of course, since plant construction and our review for operating licenses have not been completed several deficiencies may have been identified by the quality assurance program but not yet closed out. The significant point is that the deficiencies are detected, are receiving appropriate corrective attention in a timely manner, and will be resolved before licensing and operation of the plant. The settlement of the diesel generator building to which you refer is one example of a deficiency that has been detected but that is not yet closed out. The deficiency was first detected by Bechtel quality assurance personnel in July 1978 when measurements of foundation settlement indicated that settlement rates in excess of earlier projections were occurring. Extensive investigations by the applicant and Bechtel have been and are being conducted and are being reported to the NRC staff for review and evaluation. Some remedial actions to improve the foundation support of the diesel generator building have already been completed while other corrective measures for this and other

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affected structures at the site have been proposed. On December 6, 1979 we issued an NRC order which would modify the construction permits by prohibiting certain soil construction activities pending (1) the submission of an amendment to Consumers Power Company application seeking approval of certain remedial actions and (2) issuance of amendments to the construction permits authorizing those remedial actions. The applicant requested a hearing on that order and a notice of opportunity for participation in the hearing was published in the Federal Register and in several newspapers in the Midland area. Although the evidentiary hearing date has not been set at this time, a prehearing conference has been scheduled for September 10, 1979. Enclosed for your information is a copy of the Order and Notice of Prehearing Conference.

You note that the nuclear plant is located one mile from downtown Midland and ask if a law has been passed that would preclude construction of nuclear power plants this close to a populated area. No such law exists which would preclude construction for facilities like the Midland Plant which filed an application for construction permit before October 1, 1979. On June 30, 1980 the Congress enacted Public Law 96-295 which authorized appropriations to the Nuclear Regulatory Commission for fiscal year 1980. Section 108 of that appropriations Bill directed the Commission to develop and promulgate regulations establishing demographic requirements for nuclear power plants. The Bill states that these regulations are to specify demographic criteria for facility siting, including maximum population density and population distribution for zones surrounding the nuclear facility without regard to any design, engineering, or other differences among such facilities. The regulations are also to take into account the feasibility of all actions outside the facility which may be necessary to protect public health and safety in the event of any accidental release of radioactive material from the facility which may endanger public health and safety. However, the Bill states that the regulations are not intended to apply to any facility for which an application for a construction permit was filed on or before October 1, 1979. The application for construction permits for Midland Plant Units 1 and 2 was filed January 13, 1969 and construction permits were issued December 15, 1972 and amended May 23, 1973. Nevertheless, the question arises as to whether additional safety features and changed operating procedures should be required for plants licensed on sites that do not meet the new criteria. The question of licensed reactors and reactors under construction in areas of high population density is being considered in a series of proceedings ordered on May 30, 1980 concerning Indian Point Station. The Commission has directed the staff to review existing sites in order to examine whether additional modifications in operating procedures, design, or equipment might be necessary. For plants such as the Midland Plant Units 1 and 2 that already have construction permits, this review would be in the form of a report submitted to the Commission for its consideration in making case-by-case decisions. This matter is further discussed in the enclosed advanced notice of rulemaking regarding "Modification of the Policy and Regulatory Practice Governing the Siting of Nuclear Power Reactors", and the enclosed related report NUREG-0625, "Report on the Siting Policy Task Force". You will note from these two documents that one

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of the several goals of the change in NRC reactor siting policy and criteria is "to take into consideration in siting the risk associated with accidents beyond the design basis (Class 9) by establishing population density and distribution criteria". Regarding this goal, I am enclosing a statement of interim policy entitled "Nuclear Power Plant Accident Considerations Under the National Environmental Policy Act of 1969" which became effective July 13, 1980. Pursuant to this interim policy, our draft environmental statement for Midland Plant Units 1 and 2, when issued sometime in 1981, will include consideration of Class 9 accidents. You will also note that these matters are of significance to emergency preparedness. The NRC has an active program for upgrading emergency preparedness around all nuclear power plants. On December 7, 1979 President Carter transferred responsibility to the Federal Emergency Management Agency (FEMA) to head up all offsite emergency plans in all states with operating reactors, including Michigan. The NRC works closely with FEMA in this regard. Upon completion of its review for the Midland site, FEMA will present its findings on the adequacy of offsite emergency plans to NRC, and the NRC will then make the final licensing decision.

You also express concern that products produced by the Dow Chemical Company using steam from the nuclear plant might become contaminated with radioactivity. The review of the Midland application for construction permits by our predecessor agency, the Atomic Energy Commission, and that of the Advisory Committee on Reactor Safeguards, included review of the Midland plant design provisions to monitor for and preclude radioactivity in the steam furnished to Dow. The AEC review concluded that these provisions provide adequate assurance that leakage of radioactivity into this steam will be extremely low and that radioactivity in this steam will be essentially at acceptable natural background levels. The ACRS stated that "the proposed system of reboilers will provide substantial additional assurance that leakage of primary system radioactivity into the export (or process) steam can be maintained at an extremely low and insignificant level and that the export steam can be maintained essentially at natural background levels". A copy of the ACRS letter is enclosed. A detailed description of the process steam evaporator system designed to provide physical separation between the secondary system steam of the nuclear plant and the tertiary steam for export to Dow is given in Section 10.4.10 of the Midland FSAR. The process steam radiation monitoring program described in FSAR Section 11.6 provides for continuous online measurements and periodic laboratory sampling of radioactivity levels, which permits timely corrective action to prevent introduction of radioactivity from the power plant into the process steam. Our review of these detailed systems and programs for the operating license application is presently nearing completion and has revealed no significant cause of concern.

#### Costs and Need

Your letter cites a statement by Mr. Stephen Howell of Consumers Power Company in the Flint Journal on March 7, 1980 that the cost of the Midland project

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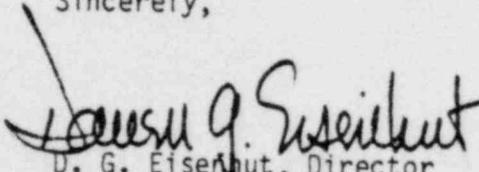
could go as high as six or even ten billion dollars. We are aware that for the last few months the applicant has been reviewing projected increases in plant costs due in part from NRC requirements flowing from the lessons learned from the accident at Three Mile Island, Unit 2, from other recent regulatory requirements, from increased interest rates and other causes. More recent projections provided us by the applicant on June 13, 1980 indicate that the completed plant will cost about 3.1 billion dollars.

As noted in the Wall Street Journal on March 7, 1980, the applicant has recently concluded that completion of the two-unit plant will provide the lowest cost electric power and most assured source of additional generating capacity of the alternatives available. The Board of Directors of Consumers Power Company has announced its intention to continue the project as planned. Dow is continuing to study alternatives to buying steam from the nuclear plant and to date has not announced any change in its plans.

Your letter raises several points as to the need for the Midland nuclear plant and states that Consumers Power Company has never been able to show the need for it in Michigan. Our review of plant need is addressed in Section 4.5 of the enclosed copy of NUREG-0275, "Final Supplement to the Final Environment Statement Related to Construction of Midland Plant, Units 1 and 2". This study concluded that the energy and peak load projections made by Consumers Power Company and the Michigan Electric Coordinated System were reasonable, and the applicant had appropriately planned the system capacity expansion via the Midland plant to meet its projected need. Energy conservation was also considered in that study and was determined not to be a viable alternative to constructing the Midland Plant.

I trust this letter is responsive to your concerns. A copy of all correspondence associated with our licensing review of the Midland plant, as well as the Safety Analysis Report with amendments, the Environmental Report with amendments, hearing records and other documents, are available for examination at the Grace Dow Memorial Library, 1710 West St. Andrews Road, Midland, Michigan.

Sincerely,

  
D. G. Eisenhut, Director  
Division of Licensing

Enclosures:  
See next page

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Enclosures:

1. Quality Assurance
2. Order and Notice of Perhearing Conference
3. ACRS letter, 9/23/70
4. NUREG-0275
5. Modification of the Policy and Regulatory Practice Governing the Siting of Nuclear Power Reactors.
6. NUREG-0625
7. Nuclear Power Plant Accident Consideration Under the National Environmental Policy Act of 1969, Interim Policy Statement, dated June 9, 1980

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NRC  
Dear President Carter,

I'm writing to ask your help regarding the construction of the Midland nuclear power plant.

For the past seven months I have read everything possible on nuclear power. I had hoped to assure myself of its safety and need. I live only three miles from the Midland plant, and have recently decided that if it goes on line, I will have to move.

I have two children to consider, and will not live this close to a nuclear power plant.

I've talked to enough of the workers from the plant to know how it is being constructed. Bechtel is the contractor, and was sued for negligence and shoddy workmanship by Consumers Power Co. at their Palisades nuclear plant in South Haven, Mi.

11. Stephen Howell, of Consumers Power Co. recently told the Flint Journal (3-7-80) that the cost for the Midland project could go as high as "\$6 or even \$10 billion dollars" and we could see a "30-70" increase in our utility bills.

Do you realize what that could mean to Michigan's economy?

All the while we sit here with a great excess of electrical energy. Mr Gordon Heins, <sup>(Consumers Power)</sup> in 1977 stated that we had 37% excess electrical energy in Michigan.

Next year we have an 800 mw coal-fired plant coming on line (Campbell)

Dow Chemical is sitting right next to the nuclear power plant. In the event of an accidental release of radiation (not uncommon) Dow's steam tubes could

become contaminated. Dow produces finished products. Would you be interested in purchasing something from them under those circumstances? I know I wouldn't. aspirins, etc.

Dow Chemical Co. tried to get out of their contract with Consumers Power Co. in 1976, and were threatened with a \$600 million dollar lawsuit.

Electric demand in Michigan was projected at 870 per year (1970). Our actual consumption (1979) was 270.

Consumers Power Company is asking for a rate increase as a result of our warm winter and conservation efforts. Is this fair? What incentive is there for people to conserve under those circumstances?

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I believe a law has been passed that will no longer allow the construction of nuclear power plants this close to a populated area. Midland's nuclear power plant is 1 mile from downtown.

Are we to be excluded from this safety measure?

Can you do something about this?

I'm still a believer in democracy, and have been using the system that's available to me - writing letters. So far I'm a little discouraged with the results. Perhaps, money and power speak louder than the average citizen.

The Public Service Commission in Michigan has been unresponsive to the citizens. We also have 800 mw of existing hydroelectric power sitting idle in Michigan.

We don't need the Midland Nuclear power plant! Consumers Power Company has never been able to show the need for it in Michigan

There is much more to be considered that I couldn't begin to cover in one letter.

A sinking diesel generator building at the plant has caused construction to be delayed. This was Consumers Power Co's mistake, not a result of any new regulation. There are dozens of quality control and personnel problems at this plant. We as ratepayers will pay for these mistakes.

Should this burden be placed on the ratepayer?

I'd appreciate it if you'd take a very close look at this facility. I will be happy to supply you with more specific information.

Sincerely  
DIANE Hébert  
2505 E. Sugnet  
Midland, MI