

50-346

Honorable William B. Saxbe
United States Senate

Dear Senator Saxbe:

Thank you for your letter of August 25, 1970, transmitting a letter from Mr. & Mrs. Peter Lototzky of Port Clinton, Ohio, opposing the construction of the Davis-Besse Nuclear Power Station. I am enclosing staff comments in response to concerns expressed by Mr. & Mrs. Lototzky.

If I can provide any further information, please let me know.

Sincerely,

W. K. R. Soy

Harold L. Price
Director of Regulation

Enclosures:

1. Staff comments w/encls.
2. Ltr from Sen. Saxbe trans
ltr from Mr. & Mrs. Lototzky

DISTRIBUTION:

HLPrice
CLHenderson
PAMorris
HShapar
VWilson
JCook
JYore, ASLB
PDR (50-346)
Gertter (DR-2775)
OCR (2)
Docket Files

GRESS	OFFICE ▶	DR	DRL	OGC	DR	DR	OCR
T74, R2-4		<i>Wilson</i>	<i>M</i>	<i>W</i> <i>R</i>	<i>W</i>	<i>W</i>	<i>W</i>
dlp	SURNAME ▶	VWilson:dlp	PAMorris		CLHenderson	HLPrice	
	DATE ▶	9/10/70	9/11/70	9/15/70	9/22/70	9/23/70	9/25/70

8003050 **824** u

STAFF COMMENTS IN RESPONSE TO LETTER FROM
MR. AND MRS. PETER LOTOTZKY, PORT CLINTON, OHIO

The regulatory staff of the Atomic Energy Commission (AEC) is presently in the process of reviewing and evaluating the application of the Toledo Edison Company to construct and operate the Davis-Besse Nuclear Power Station. Before issuing any permit or license, the Commission must find that there is reasonable assurance that the facility can be constructed and operated without endangering the public health and safety.

Protection of the public health and safety has been and will continue to be the primary concern of the AEC's regulatory program. Our program for accomplishing this is described in the enclosed booklet, "Licensing of Power Reactors." The AEC has licensed the operation of 118 power, test, and research reactors since the beginning of civilian nuclear facility licensing in 1954. These facilities had compiled a total of 840 reactor-years of operation through December 31, 1969, without a radiation fatality or serious radiation exposure to operating personnel or the public. Within this total, 20 central station nuclear plants have been licensed for the generation of electricity, and accumulated about 96 reactor-years of operation through 1969 without an accident affecting public health and safety. It is important to note that no member of the general public has ever received a radiation exposure in excess of prescribed standards or an injury of any type as a result of a nuclear accident in an AEC-owned or licensed plant.

Also enclosed is a copy of a status report on the U. S. civilian nuclear power program as of June 30, 1970. We would call Mr. & Mrs. Lotozky's attention especially to plants planned, operable, and/or being built for the States of Arkansas and New York.

In regard to Mr. & Mrs. Lotozky's concern about the transportation of wastes, on page 337 of the enclosed Joint Committee on Atomic Energy print "Selected Materials on Environmental Effects of Producing Electric Power," Dr. Joseph A. Lieberman, former Assistant Director of Nuclear Safety, Division of Reactor Development and Technology discusses the management of radioactive wastes. In addition, enclosed is a copy of a speech by Dr. Clifford K. Beck, Deputy Director of Regulation, on the "Requirements for Transportation of Nuclear Fuels and Wastes."

Concern was expressed that a nuclear power plant can explode like an atomic bomb. It is impossible for a nuclear power plant to explode like an atomic bomb. Nothing even remotely resembling a bomb can be obtained with a reactor. The design and assembly of an atomic weapon, and the initiation of the chain reaction at the right instant is very complex and delicate. A nuclear weapon needs a high concentration (nearly 100%) of a readily fissionable isotope (Uranium 235 and Plutonium 239 are two examples) if the reaction is to

OFFICE ►

SURNAME ►

DATE ►

progress at the required rate. In a nuclear reactor there are many factors in effect simultaneously that prevent it from behaving like a bomb. Some of them are: (1) The fissionable material is diluted with other material and it is also usually in the form of oxide (UO₂ and PuO₂). The fuel in light water reactors has a fissile material concentration of about 3%. (2) Its shape is usually long slim tubes, which is a poor initial geometry for a weapon. (3) There is no mechanism for bringing it rapidly together.

The possibility of a major nuclear accident in operating a nuclear plant is extremely remote but it cannot be said to be zero. If such an accident, however unlikely, should occur, the offsite damage could exceed the amount of nuclear liability insurance available in the private insurance industry. In recognition of this contingency, the Congress enacted the Price-Anderson Act (Section 170 of the Atomic Energy Act of 1954, as amended) to assure that the public would not go uncompensated in the event of a major accident, no matter how unlikely the occurrence of that accident.

The Atomic Energy Act of 1954, as amended, requires nuclear power plant licensees to have and maintain financial protection to cover nuclear liability claims. Such financial protection is usually in the form of insurance. The amount of such private insurance available for nuclear power plants above 100 megawatts in electrical generating capacity is \$82 million.

Beyond this, the AEC provides additional indemnity up to \$478 million. Thus, a total of \$560 million is provided for public liability and property damage, for each nuclear power plant, in the very unlikely event a nuclear accident affecting the public should occur. None has occurred to date.

Since insurance coverage for damage to a home or damage of any kind outside the reactor facility itself caused by a nuclear accident is provided by the nuclear liability insurance, this type of coverage is excluded from conventional insurance policies, i.e., non-nuclear policies, to avoid duplication of insurance for the same property. If a nuclear accident should occur and any home owner suffered damage from it, his compensation would come from the nuclear liability insurance and if necessary government indemnity rather than his home owner policy.

Also enclosed is a copy of a speech by Commissioner James T. Ramey entitled "Nuclear Power: Benefits and Risks." Commissioner Ramey discusses the energy crises which should be of interest to Mr. & Mrs. Lototzky. In addition, on page 145 of the enclosed JCAE print is a report by the Energy Policy Staff, Office of Science and Technology, entitled "Considerations Affecting Steam Power Plant Site Selection," which discusses power needs.

Enclosures:

1. "Licensing of Power Reactors"
2. Reactor Status Report
3. JCAE Print
4. Dr. Beck's Speech
5. Commissioner Ramey's Speech

OFFICE					
SURNAME					
DATE					