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UNITED STATES OF AMERICA
ATOMIC ENERGY COMMISSION

In the matter of)
TOLEDO EDISON CO. and)
CLEVELAND ELECTRIC ILLUMINATING CO.)
(Davis-Besse Nuclear Power Station)

Docket No. 50-346

THE COALITION FOR SAFE NUCLEAR POWER, on its own behalf and on behalf of its members, supporting individuals and organizations, others similarly situated, and the public, hereby lists its contentions with respect to the forthcoming Environmental Hearing on the Davis-Besse Nuclear Power Station.

The COALITION, its member individuals and organizations have by their past activities and conduct exhibited and now assert a special interest in the protection of the natural resources of the Lake Erie Area and in the conservational, recreational, economic, aesthetic and community impact of nuclear power plant development in the Lake Erie Area, and are first and foremost concerned that such nuclear power plants not be built or operated where to do so would be inimical to the health, safety and welfare of the public. We are concerned with the preservation of the ecology of Lake Erie, its marine and plant life, their aquatic habitat and supporting eco-systems, and in preserving the usefulness of the marine environment of Lake Erie for recreational and other beneficial purposes.

THE COALITION BELIEVES:

That the Atomic Energy Commission's nationwide objective of promoting nuclear plants has not, in the area of licensing of nuclear reactors, adequately discharged its obligations under the Atomic Energy Act and other federal legislation. The Commission has failed to be objective and failed to consider the possibility that its promotion objectives are inconsistent with its regulatory objectives. The Commission has not satisfied a legal accommodation of these inconsistencies regarding the Environmental Report issued for these proceedings.

The Atomic Energy Commission's obligation under the National Environmental Policy Act is not properly implemented by their Environmental Report on the Davis-Besse Nuclear Power Station.

GENERAL ENVIRONMENTAL EFFECTS DEFINITION:

Whenever the COALITION speaks of the environment or environmental effects, we mean any or all part of the environment -- air, land, water, man, animals, plants, fish, wildlife.

THE COALITION CONTENTS THAT:

(1) The Environmental Report prepared by the Atomic Energy Commission is totally inadequate, incomplete and not a true evaluation of possible environmental effects of the Davis-Besse Nuclear Power Station.

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(2) It is impossible to determine whether or not the highest and best accommodation between the proposed plant and man's environment has been made unless and until such time as the environmental effects of the proposed plant have been fully analyzed and evaluated.

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of the Environmental report are incorrect as they are based on inadequate information.

- (3) The land, air, water, people, animals, fish and wildlife, the total environment, can be much more seriously affected than has been assumed in the Environmental Report of the Atomic Energy Commission.
- (4) The total environmental impact of the proposed Davis-Besse Plant will be detrimental to its and the public's interest and to the Lake Erie Area, and not properly assessed in AEC Environmental Report.
- (5) There is very serious possibility that people will be killed, agricultural lands contaminated and unusable, the N.E. Ohio area will become a waste land which has to be evacuated, and Lake Erie, which is a water supply for over 11 million people will be contaminated and unusable.
- (6) There is presently insufficient knowledge or operating experience with pressurized water reactors of the size and type of the proposed Davis-Besse Plant to justify siting of such reactor at Oak Harbor, on Lake Erie, close to nearby population centers. Such siting represents a serious threat to the environment, to the people of this area, to Lake Erie, to the fish and wildlife, and to the public water supply of over 11 million people, and is a serious breach of the Atomic Energy Commission's own guidelines on the siting of large nuclear reactors (10CFR Part 1pp and TID 14844). As a result environmental damage has not been properly assessed in the AEC's Environmental Report.
- (7) The analysis by the Applicant and the Atomic Energy Commission Regulatory Staff of the Maximum Hypothetical Accident ("MHA") that can be assumed to occur for the Davis-Besse reactor is inadequate and insufficient, and therefore, the consequent potential damage to the environment is completely underestimated.
- (8) The MHA set forth in the Davis-Besse Preliminary Safety Analysis Report and Environmental Report assumes that the emergency core cooling system is of a size and capacity sufficient to prevent an uncontrolled meltdown of the majority of the nuclear fuel; the COALITION contends that there is no such reasonable assurance that the emergency core cooling system can function as quickly as necessary or with the reliability that is demanded if such meltdown is to be avoided. There would be serious damage to the environment in case of such an accident, and such accident and consequent environmental damage has not been properly assessed in the AEC Environmental Report.
- (9) The MHA set forth in the AEC Environmental Report does not even approach the true maximum hypothetical accident that can be assumed for one of these reactors; namely, a meltdown of the entire fuel core, with subsequent breaching of the containment due to the penetration of the melted fuel and subsequent interaction with groundwater, releasing radioactivity in quantities many orders of magnitude above the releases set forth in the Environmental Report. There has not been any consideration of the true environmental effects which would be caused by such an accident, and the AEC Environmental Report is incorrect and much more serious harm to the environment is possible than has been assumed.
- (10) The MHA set forth fails to consider the generation of large quantities of hydrogen gas within the containment after a loss-of-coolant accident, and means for avoidance of a subsequent explosion that would rupture the containment and release large quantities of radioactivity into the environment in an uncontrolled manner. There would be much more serious damage to the environment than has been considered in the AEC Environmental Report.

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- (11) The evaluation of accidents and consequences is completely understated and inadequate in the AEC Environmental Report. The assessment of environmental effects is therefore not correct.
- (12) A Class 9 Accident is possible, and the consequences of such an accident has not been considered in the AEC Environmental Report. The assessment of environmental effects is, therefore, completely inadequate and incorrect.
- (13) There has been no consideration of an accident, which is entirely possible, which could contaminate Lake Erie as a public water supply. The AEC Environmental Report is therefore inadequate and incorrect in its evaluation of environmental effects.
- (14) The components and engineering of safeguards of the Davis-Besse Plant will be exposed to radiation that will lead to deterioration of these components, and there is no assurance that the integrity of these components or their systems will be maintained over the expected life of the proposed plant. There is no assurance that there are adequate procedures for inspection and replacement of these critical components. This could lead to the release of additional quantities of radioactivity into the environment, which has not been considered in the AEC Environmental Report.
- (15) The quality control and quality assurance procedures and programs are inadequate to assure that the Davis-Besse Plant will be built in conformance with design. Therefore, it is questionable that the plant can meet the criteria that was assumed in preparing the Environmental Report. Environmental effects have not been properly assessed in view of this, and consequences could be more serious than was assumed in the AEC Environmental Report.
- (16) Emergency Plans and procedures have not been adequately developed or conceived with respect to an accident which would require immediate evacuation in the vicinity of the plant, the schools in the area, and possibly the cities of Port Clinton, Sandusky, Toledo, Lorain, Greater Cleveland, or Detroit, Michigan. The possible environmental effects and harm to the public would be much greater than has been anticipated in the Environmental Report.
- (17) The schools listed in the AEC Environmental Report is incomplete and therefore any assumption of possible environmental harm is incorrect.
- (18) There has been no consideration of the fact that it could be impossible to evacuate people, as evidenced by the November, 1972, storm in that area, and consequent damage to the public would be much greater than postulated in the AEC Environmental Report.
- (19) The Applicant has not made adequate provisions for either facilities or personnel to treat radiation injuries or radiation-chemical injuries which would result from a maximum hypothetical accident or any other lesser accident, and therefore the harm to the public would be much greater than has been postulated in the AEC Environmental Report.
- (20) The occurrence of an accident or the discharge of radioactive effluents and heat into Lake Erie, nearby streams, underground water table, and the atmosphere, during the operation of the facility, in normal or abnormal operation, would endanger the health, safety, lives and property of the public who reside, work, visit or engage in recreational activities in the vicinity of, or area affected by the facility, and this has not been adequately considered or properly assessed in the AEC Environmental Report.

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(21) The meteorological data for the Davis-Besse Plant is completely inadequate in that the use of Toledo Airport data is too far away from the site to be reliable in view of the severe storms that occur on the lake front, and the Toledo Airport is approximately 25 miles inland. The assumptions of possible environmental effects in the AEC Environmental Report are, therefore, incorrect and inadequate and not a true measure of possible environmental effects.

(22) The AEC Environmental Report has not properly evaluated possible effects from storm damage in the Environmental Report, and therefore, the assessment is inadequate and incorrect.

(23) The consequence of inversions and fogging would be the spreading out, over a large area, of any radioactive gases released from the Davis-Besse facility, under normal and abnormal operation, and that this has not been properly assessed, particularly in view of the fact that the meteorological data is inadequate and incorrect for the site.

(24) No consideration has been given to the high level of Lake Erie at this time (the highest in history) and stated possibility that there will be higher lake levels in the future. The Environmental Report has not taken into consideration the possibility of flooding of the Davis-Besse site due to high lake levels, and the consequent environmental damage.

(25) In view of the prevailing littoral drift, the proposed project will cause serious erosion of the Lake Erie shoreline and damage to shorefront property owned by Petitioner's members and other members of the public, and this has not been properly assessed in the AEC Environmental Report.

(26) With respect to radiation, there is no threshold dose, and in the AEC Environmental Report -

(a) There has been no consideration of the fact that Radiation Standards allow the AEC to determine whether to permit the plant to operate at a high radiation emission level, and that the public may be exposed to amounts of radiation considerably in excess of low proposed standards.

(b) Does not consider the amount of radiation doses which the public may receive from sources other than a particular licensee of the Commission.

(c) Does not adequately take into account accumulation of emissions of radioactivity which may be present.

(d) Does not provide for differences in toleration of radiation in different human beings in given differing locations.

(e) Does not adequately provide for a tracing of emissions of radioactivity through all pathways by which such radioactivity may be transmitted to the population in a given area, as well as which may be transmitted to each pathway in the ecosystem in a given geographical area.

(f) There is not adequate evaluation of the factor of reconcentration of radionuclides, nor measures to abate such reconcentration.

(g) Does not adequately consider illnesses or injuries, which will occur from radioactive effluents reaching man and comingling in whole or in part with chemical effluents, and that the synergistic effect of radiation is not adequately considered.

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(m) There is not a proper assessment of effects of radon gases on the population.

(i) The radio-sensitivity of fish and wildlife organisms is poorly understood and there is a lack of knowledge as to the effect of the process whereby radioisotopes of many elements become concentrated and stored by organisms that substitute these for chemically similar elements for their normal metabolic activities, and that transfers of radionuclides from one organism to another through the food chain may result in radiation hazards to fish and wildlife and the food and organisms on which they depend. The AEC Environmental Report has not made an adequate assessment of this radiation problem.

(j) Any radiation emitted will cause an increase in cancer, leukemia, birth defects, infant deaths, and genetically related and metabolic diseases and this has not been properly assessed in the AEC Environmental Report.

(k) There has not been a proper evaluation of the effects of Tritium or possibilities of tritium buildup in Lake Erie. The AEC Environmental Report is therefore inadequate and assumptions of environmental effects are not correct.

(l) The AEC Environmental Report has not properly evaluated the threat of radioactivity to the agricultural and farming lands and farm animals and products. The assumptions of possible environmental effects are therefore incorrect and inadequate.

(m) No assessment has been made of the impact on Lake Erie of all the other reactors on the other Great Lakes which will drain into Lake Erie, and what the radioactive buildup may be in Lake Erie of radioactive wastes draining from Lakes Michigan, Superior and Huron, as well as all the rivers which drain into these lakes. The AEC Environmental Report is therefore inadequate in this respect.

(n) No evaluation has been made of the environmental effects of the other nuclear reactors planned or projected for Lake Erie along with the Davis-Besse Nuclear Power Plant. The total effect of all reactors on the Lake has not been considered in the AEC Environmental Report, and therefore the report is inadequate and incorrect.

(o) No consideration has been given to the fact that operating experiences at nuclear plants show that radioactive releases go up with aging of the reactor. The evaluation, therefore, of radioactivity on the environment is completely inadequate and incorrect.

(p) No consideration has been given to the effects of heat and radiation on metals and concrete and the effects that this may have on normal and abnormal releases of radioactivity from the plant. The AEC Environmental report is therefore inadequate, in this respect.

(q) Applicants radiation monitoring system is inadequate and therefore environmental effects from the plant will not be able to be properly assessed.

(r) The Davis-Besse Nuclear Power Station will expose workers to levels of

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risks of the workers. This has not been properly evaluated in the AEC Environmental Report, and the report is therefore inadequate, and incorrect.

(28) In the AEC Environmental Report, with respect to the requirements of the National Environmental Report -

(a) There has not been a proper assessment of alternative sites, as required, for the Davis-Besse Plant, including underground siting.

(b) All alternatives to the construction of this nuclear power plant have not been properly evaluated.

(c) No consideration has been given in the Environmental Report, even assuming need for electricity as to whether the land and other resources to be eliminated by virtue of the proposed construction should be used for a higher and better use or purpose.

(d) The Toledo Edison Company and Cleveland Electric Illuminating Co., applicants, are stimulating the growth of electric power usage by their excessive advertising and other programs and policies, which are contrary to needs of the NEPA.

(e) The relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity has not been properly evaluated in the AEC's Environmental Report.

(f) The cost-benefit analysis has not been properly evaluated in the AEC Environmental Report, as all the costs of nuclear power have not been considered.

(29) Population growth in this area has not been properly assessed inasmuch as the placing of this plant in this largely agricultural area will probably stimulate the growth of industry and population. The environmental effects assumed in the AEC Environmental Report are incorrect.

(30) The total effect of all effluents (radioactive, heat, chemicals, dissolved solids and suspended solids, and B.O.D.) to Lake Erie as a result of all operations of the Davis-Besse Plant (either alone or in combination with other pollutants) will add to the pollution of Lake Erie, endanger fish, wildlife, swimming grounds, aquatic biota, their habitat and supporting eco-system, recreational aspects or water supplies, and will be in violation of the Non-degradation clause of the Water Quality Standards of Ohio as approved by the Environmental Protection Agency. These effects have not been properly assessed in the Environmental Report.

(31) The cooling water intake poses a potential hazard to fish resources and in particular to significant numbers of fish and small aquatic crustaceans, which are basic food items. Fish eggs, larvae and other plankton are killed in their passage through the plant. Such destruction cuts down the food supply for larger fish. This is not adequately assessed in the Environmental Report.

(32) The effects of the cooling tower and its discharges upon the environment have not been properly assessed in the AEC Environmental Report.

(33) There has been no evaluation of the effect of using Plutonium as a fuel in the Davis-Besse Reactor instead of Uranium. It would appear that the AEC might be

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considering the use of Plutonium in reactors. The AEC Environmental Report is inadequate and incorrect in assessment of environmental effects as they have not considered this possibility.

(33) The environmental effects of the entire fuel cycle have not been included in the environmental report. There should have been consideration of the effects of uranium mining, uranium milling, UF₆ Production, isotopic enrichment, fuel fabrication, fuel reprocessing, waste management, and transportation, as well as high level waste storage for "perpetuity". The AEC Environmental Report is therefore incomplete and inadequate and not in the least a true evaluation of the environmental effects.

(34) The transportation of radioactive wastes and spent fuel from the proposed Davis-Besse plant to their reprocessing or ultimate burial ground would probably necessitate passing through the highly congested transportation network and population centers and would present a hazard to public health and safety; and in the transportation of such wastes by water, any accident would be catastrophic to the waters of Lake Erie and to the people of the Lake's bordering territories, the States of Ohio, New York, Pennsylvania and Michigan and the Dominion of Canada. Since there has been no location of where and how the wastes will be shipped, there cannot be a proper evaluation of the environmental effects or risks of such shipments. The AEC Environmental Report is therefore inadequate.

(35) In the AEC Environmental Report, there is no evaluation of the possible environmental effect of the fuel densification problem, although the AEC has notified the Applicant there would probably be such problems. The AEC Environmental Report is therefore inadequate in this respect.

(36) In the AEC Environmental Report, there has been no evaluation of environmental harm which could be caused by terrorists or saboteurs at the Davis-Besse Nuclear Plants. The environmental assessment is therefore incomplete and inadequate in assumptions of environmental effects.

Respectfully submitted,

COALITION FOR SAFE NUCLEAR POWER
by Evelyn Stebbins, Chairman

January 2, 1973

I, Evelyn Stebbins, being first duly deposed and sworn, depose and say that I have read the above and it is true to the best of my knowledge.

Evelyn Stebbins
Evelyn Stebbins

SWN:K TO BEFORE ME and subscribed in my presence this 16th
day of April, 1973.

Helen D. McCue

HELEN D. McCUE

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UNITED STATES OF AMERICA
ATOMIC ENERGY COMMISSION

50-346

BEFORE THE COMMISSION

In the Matter of

THE FOLYDO EDISON COMPANY and the
CLEVELAND ELECTRIC ILLUMINATING CO.
(Davis-Besse Nuclear Power Station)

DOCKET NO. 50-346

CERTIFICATE OF SERVICE

I hereby certify that copies of the Coalition for Safe Nuclear Power's Amended Petition to Intervene, Letter of February 2, 1973 to Office of Secretary of the Commission, U.S. Atomic Energy Commission, and List of Contentions of February 2, 1973, were served on the following by deposit in the United States mail, first class or air mail, this 16th day of April, 1973:

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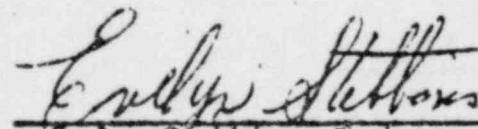
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U.S. Atomic Energy Commission
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Atomic Safety and Licensing Board Panel
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Evelyn Stebbins, Chairman
Coalition for Safe Nuclear Power