

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

TOLEDO EDISON COMPANY AND  
THE CLEVELAND ELECTRIC ILLUMINATING  
COMPANY

DAVIS-BESSE NUCLEAR POWER STATION,  
UNIT NO. 1

DOCKET NO. 50-346

COMPLAINT  
AND  
MEMORANDUM OF  
PARTICULARS

1. Complainant Toledo Coalition for Safe Energy (TCSE) is a nonprofit corporation under the laws of Ohio, and is a coalition of customers of Toledo Edison Company (TECo) with the common aims of pursuing safely-produced, equitably-priced energy, utilizing all legal devices of civil redress and action. Most of the membership of TCSE lives within a twenty-five (25) mile radius of Davis-Besse Nuclear Power Station, Unit No. 1 (Davis-Besse), and stand to suffer irreparable personal injury, damage and loss in the event of a serious accident at Davis-Besse. 7907130521

2. The Davis-Besse Nuclear Power Station is, from a generic design standpoint, closely related to the Babcock & Wilcox nuclear reactor Three Mile Island II, near Harrisburg, Pennsylvania (TMI). In fact, because of defective design and personnel procedures which gave rise to the serious accident at TMI on March 28, 1979, this Commission ordered TECo and its co-licensee of Davis-Besse, Cleveland Electric Illuminating Company (CEI) to implement certain design changes and personnel retraining prior to NRC authorization to restart Davis-Besse. This order of the NRC issued May 16, 1979.

3. On April 24, 1979, TCSE by letter complained to James Keppler of NRC-Chicago of operating deficiencies at

Davis-Besse, and of certain discrepancies, inadequacies and deficiencies in emergency and evacuation preparations for Davis-Besse, said preparations having been made by TECo and the State of Ohio, Disaster Services Agency.

4. This Commission notified Complainant TCSE on June 1, 1979 of its decision to treat the TCSE letter of April 24, 1979 as a "Request for Action Under 10 CFR §2.206." As of this date, the NRC has indicated an intention to process TCSE's Complaint.

5. This Commission is required by 42 U.S.C. §2232 to require licensees of special nuclear material to provide such information as the "Commission may, by rule or regulation, deem necessary in order to enable it to find that the utilization or production of special nuclear material...will provide adequate protection to the health and safety of the public." Pursuant to that statute and relevant NRC guidelines, each licensee of a nuclear power plant must document the establishment of emergency and evacuation procedures to protect public health and safety.

6. There are certain characteristics of the emergency plans for Davis-Besse as detailed hereafter in this Complaint and Memorandum of Particulars, which, taken in some instances individually, as well as severally and collectively, pose a substantial and immediate threat to the property and physical well-being of TCSE members and to the public at large within a fifty (50) mile radius of Davis-Besse. Said characteristics of emergency preparations will continue to pose an imminent threat until they are revised to reflect NRC guideline mandates, suggestive indicators and the rational dictates of

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common sense.

7. The licensees of Davis-Besse, TECo and CEI, have failed to formulate a comprehensive, workable and dependable emergency and evacuation plan, and have thus ignored federal requirements, with the result of placing residents within 50 miles of the plant in unnecessary danger.

8. Licensees have failed to abide by the specifications and needed actions outlined in their own already-deficient emergency and evacuation plan, ignoring federal regulations and suggestions and exposing residents within a 50 mile radius to unnecessary peril in the event of a nuclear accident.

9. The operational record of Davis-Besse is so poor with respect to performance characteristics and safety measures that an effective, comprehensive and workable emergency and evacuation setup is needed to ensure the health and welfare of residents within a 50 mile radius..

10. Complainant TCSE hereby alleges that the technical pleadings herein constitute more than sufficient grounds in support of a Preliminary Injunction or such other restraining order available to the NRC to enjoin operations at Davis-Besse until corrections and modifications have been completed to both the utility and state emergency and evacuation plans.

I. THE PLANNING RADIUS KNOWN AS THE LOW POPULATION ZONE (LPZ) IN THE DAVIS-BESSE EMERGENCY PLAN IS INSUFFICIENT AND INAPPROPRIATE TO GUARANTEE PUBLIC HEALTH AND SAFETY

11. Complainant hereby re-alleges and incorporates the allegations of paragraphs 1 through 10 of this Complaint.

12. The "Davis-Besse Nuclear Power Station Emergency Plan" (Utility Plan) designates a circular Low Population Zone (LPZ) having a radius of two (2) miles, using the plant as the centerpoint. "Final Safety Analysis Report of the Davis-Besse Nuclear Power Station," Appendix 13-D (Utility Plan), Figure 4-1 at p. 41. It is this LPZ which has been set forth by Licensees of Davis-Besse, to which emergency and evacuation measures are addressed in the Utility Plan and the "Ottawa County Radiological Emergency Plan" (Ottawa County Plan, attached hereto as Appendix I). See generally Utility Plan §§4.2.2.1(a) at p. 19; 5.3.1.4 at p. 24; and County Plan, §§3.01, 5.0151.

Section 100.3 of the Code of Federal Regulations, at (b) defines "Low Population Zone" as "the area immediately surrounding the exclusion area which contains residents, the total number and density of which are such that there is a reasonable probability that appropriate protective measures could be taken in their behalf in the event of a serious accident." In light of this standard, Licensees' use of a two-mile emergency planning radius is highly illogical and inappropriate for numerous reasons. For one, the Utility Plan LPZ ignores the very authoritative suggestion that a ten (10) mile zone be utilized for LPZ purposes. See "Planning Basis for the Development of State and Local Government Radiological Emergency Response Plans in Support of Light Water Nuclear Power Plants" ("Planning Basis"), NUREG-0396, December, 1978 (attached hereto as Appendix II),

at 16. "Planning Basis" was compiled in late 1978 by a task force consisting of NRC and EPA officials, ranging in rank and prestige as high as the NRC Assistant Director for Emergency Preparedness, Office of State Programs; the NRC Assistant Director for Engineering and Projects; and the EPA Director, Environmental Analysis Division, Office of Radiation Programs. Staff engineers, physicists and other technical specialties were also directly involved in the study.

The stated purpose behind "Planning Basis" is to provide a basis for Federal, State and local government emergency preparedness organizations to determine the appropriate degree of emergency response planning efforts in the environs of nuclear power plants. (Id. at 1)

The study identified two "predominant [radiation] exposure pathways" around a nuclear plant which require consideration for emergency planning purposes. Id. at 9. One is a "plume exposure pathway," defined as that area in which there would be a high possibility of "whole body external exposure" and "inhalation exposure" from an airborne radiation release. Id. The time for potential exposure within this pathway "could range from hours to days." Id.

"Planning Basis" also identified an "ingestion exposure pathway," within which radiation exposure might occur from consumption of contaminated water or foods such as milk or fresh vegetables. Id. at 10. The time for potential exposure could range in length from hours to months. Id.

The authors of "Planning Basis" have recommended that a ten (10) mile radius be utilized for the low population zone

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around a light water reactor such as Davis-Besse. Id. at 16.

The EPZ [emergency planning zone] recommended is of sufficient size to provide dose savings to the population in areas where the projected dose from design basis accidents could be expected to exceed the applicable PAGs [Protective Action Guides, federally-set "trigger" levels of radiation "to assist public health and other governmental authorities in deciding how much of a radiation hazard in the environment constitutes a basis for initiating emergency protective actions," id. at 3,4] under unfavorable atmospheric conditions. Id. at 16.

Complainant TCSE asserts that the two (2) mile LPZ/EPZ radius utilized by Licensees for Davis-Besse is not consonant with the knowledgeable and reasonable recommendation of 10 miles which technically astute personnel from the NRC suggested in "Planning Basis:"

...[T]he Task Force concluded that about a 10 mile Emergency Planning Zone for the plume exposure pathway was justified to assure that predetermined actions would be planned in those areas where PAGs could be exceeded in the event of a release comparable to a design basis accident. Id. at I-34.

13. 10 CFR §100.3(a), supra paragraph 12, requires the LPZ around a nuclear facility to be so designed as to assure a "reasonable probability" of taking protective measures on behalf of the public in the event of accident. Complainants submit that Licensees for Davis-Besse have flatly failed to meet this "reasonable probability" cri-

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\*It is important to note that the plume and ingestion exposure pathways were considered highly necessary by the NRC/EPA authors of "Planning Basis" despite the then-perceived extremely low probability of a so-called "Class 9" or most disastrous nuclear core meltdown. The authors of "Planning Basis" concluded that "there is about a 1% chance of emergency plans being activated in the U.S. beyond the recommended EPZ's within the next few years" (emphasis in original). Id. at I-10. This smugness arose from the fact that in November, 1978, when the Task Force was drafting its study,



terion by using a totally inadequate two mile radius for purposes of evacuation planning.. In fact, 10 CFR §100.11(a) provides an aid to nuclear plant license applicants: "assume a fission produce [sic] release from the core, the expected demonstrable leak rate from the containment and the meteorological conditions pertinent to his site to derive an exclusion area, a low population zone and population center distance."

Nowhere in the Utility Plan do Licensees discuss the expected demonstrable leak rate nor meteorological conditions in deriving a two mile radius LPZ. Moreover, footnote 1 to 10 CFR §100.11(a) adds that

The fission product release assumed for these calculations should be based upon a major accident, hypothesized for purposes of site analysis or postulated from considerations of possible accidental events, that would result in potential hazards not exceeded by those from any accident considered credible.. Such accidents have generally been assumed to result in substantial meltdown of the core with subsequent release of appreciable quantities of fission products.

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it relied upon the low probabilities of severe core meltdown and radiation release as calculated in Reactor Safety Study, WASH-1400, otherwise known as the "Fasmussen Report." That report was specifically disavowed and repudiated by the Nuclear Regulatory Commissioners on January 18, 1979, when the Commission stated that "it does not regard as reliable the Reactor Safety Study's numerical estimate of the overall risk of a reactor accident." 1 UCS Nucleus 3 (May, 1979). In light of this significant official policy shift, it is quite likely that much more emphasis needs to be put upon implementing the 10-mile LPZ concept. It becomes even more crucial in light of the de facto RSS debunking epitomized by Three Mile Island, where it will be remembered that pregnant mothers and children were urged to voluntarily evacuate a five mile radius area around the reactor.

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In consideration of the fact that Davis-Besse is a Babcock & Wilcox reactor like TMI, with design and personnel procedure problems, merely underscores the need for Licensees and NRC officials to set about immediately to bring emergency and evacuation plans for Davis-Besse into compliance with 8100.11 by expanding the planning radius to 10 miles..

LICENSEES HAVE FAILED TO CONSIDER MORE THAN ONE POSSIBLE OFFSITE ACCIDENT SEQUENCE IN SELECTING AN ADEQUATE EVACUATION RADIUS, PLACING NEARBY RESIDENTS OUTSIDE THE PRESENT RADIUS IN UNNECESSARY DANGER

14.. Complainant TCSE hereby incorporates and re-alleges paragraphs 1 through 13 of this Complaint..

15. The Davis-Besse emergency accident sequence for offsite mobilization of evacuation resources contemplates only a sequence which would involve evacuation in a circumscribed, 2-mile radius..

16. "Planning Basis," supra paragraph 13, at 8, concludes that it is not possible to choose only one accident sequence and remain credible in emergency/evacuation planning: "[The Task Force] determined that a single accident for a light water reactor nuclear power plant cannot be identified as a planning basis" (emphasis added).

17. The Utility Plan contains no mention of either the "plume exposure pathway" or the "ingestion exposure pathway" nor does it utilize any such descriptive approach. This contradicts the "Planning Basis" findings that "a single emergency plan would include elements common to assessing or taking protective actions for both pathways." Id. at 10.



LICENSEES' PROVISIONS FOR OFFSITE TREATMENT OF RADIATION VICTIMS ARE GROSSLY INADEQUATE, WHOLLY UNWORKABLE AND DO NOT DEFINITELY PROVIDE FOR TRANSPORT AND TREATMENT

18. Complainant TCSE hereby incorporates and re-alleges paragraphs 1 through 17 of this Complaint..

19. An NRC document, "Standard Format and Content of Safety Analysis Reports for Nuclear Plants - LWR Edition," NUREG-75/094 ("Regulatory Guide"), advises plant licensees at §1.70.14 to identify and formulate arrangements with two (2) hospitals for treatment of radiological accident victims and to provide other medical planning linkages in utility emergency plans..

20. Licensees' Utility Plan includes the following contractual or cooperative arrangements for emergency medical services in five (5) documents. See Utility Plan, Appendix B at 55, Letter of Agreement from Drs. Kenneth L. Akins, V.W. Wagner and G.V. Crisologo; at 56-8, Letter of Agreement with Radiation Management Corporation; at 60, Letter of Agreement with Ottawa County Board of Health; at 61, Letter of Agreement with Robinson Funeral Home, Inc.; at 63, Letter of Agreement with Robert Dumminger, Administrator of H.B. Magruder Memorial Hospital.

21. Taken individually or as a system of emergency medical arrangements, these commitments are insufficient and ineffective.

22. The letter from the three doctors, id. at 55, contains several inadequacies on its face. The three evidently operate in some relationship to Magruder Hospital, according

to the letterhead, which is Magruder's. According to the terms of the agreement, only one of the three would be available for emergencies at any given time.. That individual would "respond to an accident at the Davis-Besse Nuclear Power Station provided, in our judgement /sic/ no other urgent medical duties preclude our availability" (emphasis added). Thus there is no real guarantee of the availability of even one physician should an accident of any size occur..

23. The Magruder Hospital apparently has facilities to accommodate some 80 radiological victims. See Testimony of Kathy Westby and Janis White Before the Citizens' Commission on Nuclear Power in Ohio, May 5, 1979 (attached as Appendix III); Westby and White conducted a study of Davis-Besse evacuation plans for Ohio Public Interest Research Group. At most, there is only one doctor to treat 80 cases or more. Given the awful severity of many radiation injuries, that is a questionable and insufficient arrangement..

24.. The Radiation Management Corporation letter (RMC), id. at 56-8 contains many deficiencies. Apart from its reference to coordination and umpiring of drills which have never occurred, there are other statements for which evidence is lacking:

- RMC agreed to "establish the procedures for coordinating the local medical emergency support with the central support facilities in Philadelphia" (the second hospital ostensibly for which services have been contracted for). There is no reference whatsoever in any other part of the Utility Plan

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to the formulation of any transportation arrangements to Philadelphia. This is inconsistent and inexcusable.

- even the medical emergency transportation arrangements which do appear in the Utility Plan, Robinson Funeral Home at 61, are phantom in nature. The OPIRG study mentioned supra paragraph 23 above indicated that Robinson sold its ambulance business to another firm. There has been no revision of the Utility Plan in the form of new or alternative provisions! Given the likely small size of a rural ambulance service, it would nonetheless be highly probative whether Robinson or any local successor provider could supply adequate vehicle availability.

- RMC promises to "annually review and make recommendations for updating the medical emergency plans such reviews and recommendations specifically covering the adequacy of medical equipment and supplies, the degree of training of involved personnel, and the efficacy of existing procedures." If RMC has performed such updating services, they are nowhere evident on the face of the Utility Plan. As mentioned previously, no changes in medical support procedures have been entered in that portion of the Utility Plan since October, 1975.

25. The letter of the Ottawa County Board of Health, id. at 60, is a model of ambiguity. The Board states that it has no prepared plan on file concerning radioactive material, accidental spills or fall-out procedures. Yet the Board acknowledges that "it would be under the jurisdiction of this

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department to take action if such an accident would happen." From the date of this correspondence (March 30, 1973) it was apparently successfully passed off to the AEC as part of the Preliminary Safety Analysis Report!.

Further, the Board states that it "would have available personnel that could evaluate conditions and carry out the necessary procedure to condemn food products." Precisely what "conditions" would be evaluated is not clarified. There is no description of monitoring equipment, monitoring frequency, or methodology as to how food products would be condemned, nor how radioactively contaminated food would be disposed of..

26. As if these deficiencies do not reveal a chaotic and decidedly inept set of emergency medical plans, the most recent (and presumably most applicable) Ottawa County Radiological Emergency Plan (County Plan, supra in paragraph 12 above) makes no mention whatsoever of Magruder Hospital, any ambulance service, or any Davis-Besse area doctors as being cooperating entities in its provision of health procedures. This is incomprehensible in light of the County Plan's "purpose and scope" statement (83.01), to the effect that "the Ottawa County governmental agencies will act as necessary to insure [sic] public safety and prevent radiation injury to the populace of the area designated as the Low Population Zone in the event of a release or potential release of radioactive material from the Davis-Besse Nuclear Power Station."

It would be incredible to assume that a radiological

consultant firm such as RMC, which is supposedly under contract to coordinate and consult with local hospital and health authorities, would not be in extensive contact with governmental health officials during a major radiological accident at Davis-Besse - yet RMC is not mentioned in the County Plan.\*

THE UTILITY ASSIGNS EXCESSIVE TASKS AND RESPONSIBILITIES TO THE PLANT SHIFT FOREMAN, WHICH COULD NOT REALISTICALLY BE ADDRESSED DURING AN EMERGENCY SITUATION

27. Complainant TCSE hereby incorporates and re-alleges the allegations of paragraphs 1 through 26 herein.

28. The Utility Plan, in identifying tasks for the Plant Shift Foreman throughout Section 4.-- of the Utility Plan, assigns excessive and thereby impossible to perform tasks in the event of emergency, creating doubts as to the ability of TECo officials to respond speedily, adequately, and effectively.

29. A sampling of assignments of the Shift Foreman include:

- taking charge of the plant and supervising all emergency procedures;
- announcing the location, type and classification of the emergency to the media;

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\*In fact, OPIRG researchers, supra paragraph 23 above, found that the Magruder Hospital administrator with which RMC is to consult is unaware of RMC's support status or existence. This merely underscores the primitive status of emergency arrangements.

- supervising a coordinated evaluation of station conditions on a continuing basis;
- supervising an evaluation of radiation levels on a continuing basis;
- notifying Ottawa County Sheriff's Department of the situation and advising them of the areas affected;
- making notations on meteorological conditions;
- notifying officials at the NRC-Chicago Operations Office and informing them of problems;
- directing evacuation of personnel to a safe onsite assembly area;
- notifying Detroit Edison Co. and Consumers Power Company and apprising them of the accident and requesting assistance if needed;
- sounding the evacuation alarm;
- notifying the Oak Harbor Fire Department upon determining the need for fire fighting personnel;
- securing ambulance service (which should be especially difficult since it is documented elsewhere, supra paragraph 24 above, that there is no ambulance service under contract, which service would have to be willing to transport contaminated radiological accident victims);
- updating the media through a second accident announcement;
- notifying Magruder Hospital and making preparations for treatment of accident victims;
- determining the cause and extent of the offsite



emergency;

- notifying the Radiation Management Corporation, advising them of the situation, and requesting their assistance;

- notifying the station superintendent or his designated alternate and requesting assistance of additional offsite personnel;

- notifying the Ohio Disaster Services Agency, advising them as to the details of the incident, and preparations for their assistance;

- work with the Disaster Services Agency to help prepare evacuation procedures and relocation centers.

30.. Instead of assigning separate and distinct responsibilities to a team of capable utility officials, the Utility Plan delegates too much responsibility to one person's discretion. The sheer time consumption of so central a management setup cannot afford prompt protective action in the event of an emergency. Such overburdening handicaps emergency efforts, makes quick and responsive procedures impossible, and would have the effect of placing the lives of nearby residents in unnecessary danger..

31. The management approach adopted by the Utility Plan fails to comply with NRC regulations requiring proper training of personnel and offsite persons. See 10 CFR Part 50, Appendix E(IV)(H):

The emergency plans shall contain provisions for training of employees of the licensee who are assigned specific authority and responsibility in the event of

an emergency and of other persons whose assistance may be needed in the event of a radiation emergency.

The Utility Plan includes no arrangements for the training and/or indoctrination of all offsite groups and individuals responsible for in most instances implementing the bulk of emergency protection actions.\*

LICENSEES HAVE FAILED TO COMPLY WITH NRC GUIDANCE  
CONCERNING THE IDENTIFICATION OF MILK PROCESSING  
PLANTS IN THE EMERGENCY PLANNING ZONE

32. Complainant TCSE hereby incorporates and re-alleges paragraphs 1 through 31 herein.

33. "Planning Basis" sets out a radius of 10 to 50 miles wherein it advises protective actions to minimize subsequent contamination of milk or other food. Id. at 12 and 14.

34. The Utility Plan makes no note whatsoever of the existence of at least one milk plant within the radius of ten (10) miles of Davis-Besse. The Chatteau Drive-In Dairy, 1817 Route 163, Lakeside, Ohio, is a milk processing facility located approximately six (6) miles from Davis-Besse, well within the range of even a TMI-type nuclear accident. Neither this plant nor any other key food processing facilities are identified or addressed in the Utility Plan.

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\*OPIRG, supra paragraph 23 above, quotes the fire chief of the Village of Oak Harbor, with which Licensees have formal arrangements, Utility Plan, supra at 64, as saying that TECo officials told him "we don't have any of that wicked stuff /meaning plutonium/ here at the plant. Besides, the stuff we do have decays quickly."

THE LICENSEES' HAVE FAILED TO CONDUCT EMERGENCY DRILLS,  
IN CONTRADICTION OF NRC GUIDELINES AND THEIR OWN  
ALLEGED ARRANGEMENTS

35. Complainant TCSE hereby incorporates and re-alleges the allegations of paragraphs 1 through 34 herein.

36. 10 CFR Part 50, Appendix E(IV)(I) requires nuclear licensees to establish

Provisions for testing, by periodic drills, of radiation emergency plans to assure that employees of the licensee are familiar with their specific duties, and provisions for participation in the drills by other persons whose assistance may be needed in the event of a radiation emergency. (emphasis added)

37. As of the date of this Complaint, Licensees have never conducted any drills on or off the Davis-Besse site, with cooperating officials of federal, state and local governments, or private parties.

38. Licensees included in the Utility Plan certain Letters of Agreement with private, state, federal and local governmental entities. See generally Utility Plan, Appendix B.

39. In no less than five (5) of said Letters of Agreement, specific reference is made to the signatory parties' participation in the formulation, conduct and/or implementation of periodic emergency drills in cooperation with Davis-Besse officials. Those Letters include the Ottawa County Sheriff, id. at 65; Village of Oak Harbor, id. at 64; Magruder Hospital, id. at 63; Robinson Funeral Home, id. at 61; and Radiation Management Corporation, id. at 56-8.

40. Each of the five subject letters in paragraph 39 above was entered into Licensees' Utility Plan as of October,

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1975, nearly four (4) years prior to the date of this Complaint, yet there has never been any drill or similar participatory activity conducted which has involved any of the signatories of said letters or their agents.

41. The study conducted by OPIRG, supra paragraph 23 above, in the first few months of 1979 revealed that contact parties in Licensees' Letters of Agreement were vague or unaware as to their duties, the scope of their commitments and/or the range of the potential emergency hazard scenarios in the event of a Davis-Besse offsite emergency. Some examples:

- as mentioned previously, the Oak Harbor fire chief minimized the dangers of radioactivity. Supra paragraph 31, fn.

- as mentioned previously, the Magruder Hospital administrator was unaware of the backup availability of the University of Pennsylvania Hospital through the Radiation Management Corporation. Supra paragraph 26, fn.

- the Ottawa County Sheriff was not knowledgeable of the potential widespread damage of a large-scale nuclear accident. He commented upon his department's flood evacuation experience, quite a different emergency action, with more potential response time.

- the Shift Foreman at Davis-Besse, according to the Utility Plan, is to notify offsite emergency groups in the event of "offsite high radiation" and offsite "high [radiation] airborne activity" accidents. Id. §4.2.1(a) and §4.2.2.1(a). By contrast, the most recent revision of the County Plan

indicates (at #5.0111) that

Sheriff will be responsible for providing [sic] a 24 hour operation to serve as a notification point of contact by DENPS to receive warning relative to radiological incident.

At #5.0112, the County Plan indicates that "Sheriff will provide notification and warning to all County and State agencies..." The problem is, the technical information about a radiological emergency which would be of pertinence to agencies with varying informational needs according to function must be filtered through a sheriff's office staff. Information such as radiation levels of a leakage may not be important to a roadblocking sheriff or Civil Defense officials without confirmation of medical effects from, say, the Board of Health or Magruder Hospital. There is much potential for misinformation and consequent loss of time if the Sheriff's office is solely responsible for dissemination of technical data to agencies with complex roles. The Ohio Disaster Services Agency, author of County Plan, apparently does not clearly grasp the need for a defined and sophisticated informational linkage with the utility.

42. For the NRC to allow this situation to continue unabated places the public in the vicinity of Davis-Besse in imminent danger from even a relatively small offsite radioactive leakage..

LICENSEES HAVE FAILED TO QUANTIFY ESTIMATED EVACUATION TIMES AND EXPECTED REQUIRED TIMES TO NOTIFY THE POPULATION IN THE LPZ

43. Complainant TCSE hereby incorporates and re-alleges paragraphs 1 through 42 herein.

44. 10 CFR Part 50, Appendix E(IV(C) and (D) require Licensees to have in their emergency plans:

C. Means for determining the magnitude of the release of radioactive materials, including criteria for determining the need for notification and participation of Local and State agencies and the Atomic Energy Commission\* and other Federal agencies, and criteria for determining when protective measures should be considered within and outside the site boundary to protect health and safety and prevent health and safety and prevent damage to property;

D. Procedures for notifying, and agreements reached with local, State, and Federal officials and agencies for the early warning of the public and for public evacuation or other protective measures should such warning, evacuation or other protective measures become necessary or desirable, including identification of the principal officials, by title and agencies...

"Regulatory Guide" §1.70.14, supra paragraph 19 above, requires estimates of evacuation times of residents and transients "projected as peak values during the life of the plant." The same reference also requires utility emergency plans to specify an expected accident time, and the time required to notify the population, with data to back up both.

45. The instant Utility Plan contains no such information.. A complete and exhaustive postulation of time needs and availability during a radiological accident or accidents of differing magnitudes is quintessential to  
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\*This quotation was excerpted from the 1979 edition of 10 CFR. Has it really been five years since an NRC official has read this portion of the NRC guidelines?

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adequate emergency planning.. The consequent need for specification of notification procedures for cooperating emergency agencies and the public speaks for itself.

46. "Planning Basis", supra paragraph 12 above, places considerable emphasis upon an understanding of the time factors associated with releases of radiation:

The Reactor Safety Study indicates, for example, that major releases may begin in the range of one-half hour to as much as 30 hours after an initiating event and that the duration of the releases may range from one-half hour to several days with the major portion of the release occurring well within the first day. In addition, significant plume travel times are associated with the most adverse meteorological conditions that might result in large potential exposures far from the site. For example, under poor dispersion conditions associated with low windspeeds, two hours or more might be required for the plume to travel a distance of five miles. Higher windspeeds would result in shorter travel times but would provide more dispersion, making high exposures at long distances much less likely. Id. at 18.

Table 2 at page 20, id., estimates that radioactive material could be mostly released from 0.5 hours to 1 day after the start of the release from plant containment. It is utterly naive, therefore, for public officials such as the Ottawa County Sheriff to assume that a radiological emergency evacuation would be possible under the more flexible time constraints of a flooding Lake Erie. And as is pointed out in "Planning Basis," "the time available for action is strongly related to the time consumed in notification that conditions exist that could cause a major release or that a major release is occurring. Development and periodic testing of procedures for rapid notification are encouraged" (emphasis added). Evidently and unfortunately, this self-evident relationship has been lost upon Licensees, who have never

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conducted "periodic testing of procedures for rapid notification" at all. The wisdom of the NRC/EPA professionals in "Planning Basis" is notably absent from the judgment exercised by the NRC in approving a woefully deficient Utility Plan.\*

LICENSEES HAVE COMPLETELY OMITTED FROM THE UTILITY PLAN ANY IDENTIFICATION OF EGRESS ROUTES AND THEIR CAPACITY CHARACTERISTICS, AND HAVE SUMMARILY FAILED TO IDENTIFY LPZ RESIDENTS HAVING SPECIAL EVACUATION NEEDS

47. Complainant TCSE hereby incorporates and re-alleges the allegations of paragraphs 1 through 46 herein.

48. "Regulatory Guide" §1.70.14, supra paragraph 19 above, requires utility emergency plans to specify potential egress routes and their traffic capacity characteristics within the boundaries of the LPZ around a nuclear facility.

49. Nowhere in their already-deficient Utility Plan do Licensees include any maps, diagrams, data or meaningful discussion of escape routes.\*\*

50. Neither Utility Plan nor County Plan, supra paragraph 12 above, have identified any resident populations within the inadequately-drawn LPZ which may have special transportation

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\*Northwest Ohio has twice experienced catastrophically paralyzing blizzards, in the winters of 1976-77 and 1977-78. What response do Licensees have to the potential of a core meltdown and radiation leakage during conditions of such meteorological severity and population immobility?

\*\*In light of growing and, for the foreseeable future, permanent shortages and uncertainty concerning the availability of gasoline, Complainant TCSE urges that NRC require Licensees to identify and set aside stockpiles of fuel to be made available to the public freely in the event of evacuation.

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needs in the event of evacuation, viz., hospitals, nursing homes, individual elderly or handicapped households, persons without private motor vehicles, etc.

51. The Utility Plan and the County Plan fail to include any data or reference to planning linkages with professional planning organizations with expertise in transportation planning and population density information, all of which is publicly-available. These include at a minimum the Toledo Metropolitan Area Council of Governments, which includes Ottawa County within its planning jurisdiction and which has been designated by the U.S. Department of Transportation as the regional transportation planning body; and the Ottawa County Planning Commission, a county agency.

52. Complainants urge that neither the Utility Plan nor the County Plan evidence any satisfactory or reasonable provision for special needs populations, and especially that no effort has reasonably been put forth by Licensees or the State of Ohio, Disaster Services Agency, to utilize available resources in developing these and other planning elements.

LICENSEES HAVE HAD SINCE AT LEAST 1975 TO UPDATE,  
REVISE AND UPGRADE THE STATUS OF DAVIS-BESSE EMERGENCY  
PLANS

53. Complainant TCSE hereby incorporates and re-alleges the paragraphs 1 through 52 herein.

54. 10 CFR Part 50, Appendix E(IV)(E) requires licensees to maintain in utility emergency plans:

Provisions for maintaining up to date: 1. The organization for coping with emergencies. 2. the procedures for use in emergencies, and 3. the lists of persons with special qualifications for coping with emergency conditions;...

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55. Licensees have failed, on the face of their Utility Plan and as detailed elsewhere in this Complaint, to either provide comprehensively for updating the status of the Utility Plan, or to actually update it. Since October, 1975, nine (9) minor, insubstantial and inconsequential revisions have been made to the Utility Plan.

56. Licensees have had nearly four (4) years, since the filing of their Final Safety Analysis Report (FSAR), to revise and prove the viability, workability and effectiveness of their Utility Plan as written, through drills and continuous evaluations as required by NRC regulations, supra paragraph 54 above.. Licensees have further had the same period of time to coordinate and cooperate with the State of Ohio, Disaster Services Agency, to come up with something more conclusive than the "draft copy" County Plan which the state government is pawning off as a statement of emergency readiness. Complainant TCSE would emphatically repeat that emergency plans should have been formulated and in place and proven workable BEFORE Davis-Besse was ever allowed to start up in the first place. Neither Licensees nor the State of Ohio can make any credible argument that nearly four (4) years is not enough time to have developed workable and effective emergency and evacuation plans.

57. No less than eleven (11) other states than Ohio have NRC-endorsed emergency plans. "U.S., States Termed Ill-Prepared For Atomic Emergencies," The Blade 1 (April 27, 1979).\* Yet an NRC official indicated that it may take until April, 1980 before Ohio has an approvable emergency plan developed

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\*Attached hereto as Appendix IV.

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developed by its Disaster Services Agency. Id.

58. This Commission is mandated by its own guidelines to apply a high standard to its evaluation of utility emergency plans. 10 CFR Part 50, Appendix E(III) says:

The Final Safety Analysis Report shall contain plans for coping with emergencies. The details of these plans and the details of their implementation need not be included, but the plans submitted must include a description of the elements set out in section IV to an extent sufficient to demonstrate that the plans provide reasonable assurance that appropriate measures can and will be taken in the event of an emergency to protect public health and safety and prevent damage to property. (emphasis added)

By approving the deplorable excuse for a "Utility Plan" of the present Licensees, the Nuclear Regulatory Commission has perpetrated a considerable abuse of its administrative discretion upon the trust reposed in it by Congress and the public. Licensees have not proven through their treatment and consideration of their own Utility Plan that there is "reasonable assurance" that appropriate emergency procedures exist to minimize property losses, personal injury and death in the event of any emergency at Davis-Besse.

LICENSEES' PLANT HAS AMONG THE POOREST OPERATING RECORDS OF ANY COMMERCIAL REACTOR IN THE UNITED STATES, AND A CONSEQUENTLY GREATER NEED FOR WORKABLE EMERGENCY AND EVACUATION PLANS

59. Complainant TCSE hereby incorporates and re-alleges the allegations of paragraphs 1 through 58 herein.

60. TECo and CEI have been subjected repeatedly to criticism by the NRC. The Davis-Besse plant sported a 1978 capacity factor of 32.5%, virtually the lowest in the commercial nuclear industry, and a consequence in

large part of poor operator performance. On or about April 20, 1979, James G. Keppler of NRC-Chicago rated Davis-Besse operator performance at a "D" (on an A to F scale, F being worst). "Frequency Of Errors By Personnel At Davis-Besse Is Under NRC Study," The Blade 1 (April 20, 1979) (attached hereto as Appendix V).

Moreover, NRC consternation over the plant's safety features actuation system (SFAS) mounted in summer, 1978 such that enforcement responsibility was transferred from NRC-Chicago to NRC-Washington. "Nuclear Troubles at Davis-Besse," The Plain Dealer (April 29, 1979) (attached hereto as Appendix VI).

The topic of technical troubles at Davis-Besse was also the subject of discussion in the immediate wake of the TMI accident. On April 4, 1979, NRC staff member D. Eisenhut told the Commission that Davis-Besse had had "three or four" automatic feedwater system transients (incidents). See In the Matter of: Babcock & Wilcox Plants, Closed Meeting of the Nuclear Regulatory Commission, April 4, 1979, transcript, at 13.

The NRC has threatened to fine TECo for lengthy delays in reporting to the Commission (2 months) the fact that in January, 1979, a 4"-5" section of feedwater pipe froze in the plant's emergency core cooling system (ECCS), a last-ditch reactor core cooling mechanism. This incident rendered the ECCS useless for more than a day, and could have figured critically in any operational mishap during that period. See "Davis-Besse to restart Wednesday," The Plain Dealer, 1, 7 (April 20, 1979) (attached hereto as Appendix

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VII ).

Perhaps most disturbing, however, has been Licensees' (or at least Toledo Edison Company's) bad faith or incompetent dealings with the NRC itself. By letter dated June 29, 1979, Harold R. Denton, Director of the NRC Office of Nuclear Reactor Regulation, expressed "concern over the failure of Toledo Edison Company...to bring to the attention of the NRC Staff members evaluating the Company's compliance with the Commission's confirmatory order of May 16, 1979, Reportable Occurrence (RO) #79-062...." (Letter attached hereto as Appendix VIII). In that correspondence, Dr. Denton pointedly asked TECO to explain why a TECO Vice-President was unaware of a May 21 occurrence involving an inoperable auxiliary feedwater suction pressure switch and out-of-tolerance pressure setpoints, id., when NRC personnel met with the utility officials on June 8. The NRC has further inquired as to why the Davis-Besse plant superintendent seemed equally unaware of that occurrence on June 8.

Davis-Besse has a notably questionable history of problems with its core cooling mechanisms. On September 24, 1977, while operating at one-quarter power or less, a valve in the reactor core failed, and a pump started too slowly as a coolant feedwater leak occurred. See The Plain Dealer article, Appendix VI herein. That incident was cited by Harold Denton to this Commission when he argued in May of this year for a shutdown of Babcock & Wilcox reactors in the wake of Three Mile Island. Id. Finally, corrective operator retraining

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for Davis-Besse personnel which centered upon the parallels between that incident and the early stages of the TMI crisis has taken place in the past six weeks at Babcock & Wilcox's control room simulator in Virginia. See Memorandum to NRC Commissioners from Harold R. Denton, June 27, 1979 concerning the "Removal of Suspension of Operation of Davis Besse [sic] 7," at 29-33, which extensively discusses the technical parallels of the September 24, 1977 incident and the TMI incident, and specifies operator retraining measures which have been taken.

61. Through February of this year, Davis-Besse personnel have filed reports of more than 280 "events" at the plant, reflecting countless instances of operator error, technical malfunction, and equipment failure. As of July 5, when the NRC gave permission to TECo to restart the plant, NRC officials still appeared cautionary in their approach to the problems which have occurred.

Harold Denton commented

I'd be willing to let them start up and demonstrate that they are on top of problems. But the situation should be monitored carefully. See "NR: Expected To OK Start-Up Of Davis-Besse," The Blade 1 (July 6, 1979) (Attached hereto as Appendix IX).

Thus permission to restart the plant should not be interpreted as a completely clean bill of health for TECo and its operational performance with Davis-Besse.

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THIS COMMISSION IS STATUTORILY AUTHORIZED ONLY TO CONSIDER THE PUBLIC HEALTH AND SAFETY IN IMPOSING LICENSE CONDITIONS, AND CONSIDERATION OF COMPLAINANT'S REQUEST FOR TEMPORARY SHUTDOWN OF THE PLANT MAY BE UNDERTAKEN ONLY UPON SUCH A BASIS

62. Complainant TCSE hereby incorporates and re-alleges the allegations of paragraphs 1 through 61 herein.

63. Complainant TCSE has caused to be affixed to this Complaint a Motion for Preliminary Injunction, which is hereby incorporated in its entirety by this reference.

64. In said Motion, Complainant TCSE apprises this Commission that it is empowered by 42 U.S.C. §2232 to ensure that nuclear operating licenses contain adequate conditions to "provide adequate protection to the health and safety of the public."

65. Complainant TCSE has in this Complaint alleged and documented numerous failures by Licensees of Davis-Besse to adhere to 42 U.S.C. §2232 and variously-cited NRC guidelines as set forth in the Code of Federal Regulations.

66. During the extensive shutdown ordered by the NRC of Babcock & Wilcox reactors since TMI, TECo officials have been able to provide electric service to customers through the purchase of power generated elsewhere when customer demand exceeded output by TECo facilities.

67. This Commission is nowhere empowered by statute to consider economic factors in directing a shutdown of a nuclear generating facility.

68. Complainant TCSE has focused directly upon vital issues of public health and safety in the composition of this Complaint, and has documented that Davis-Besse Licensees

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have had ample time, while Davis-Besse has been licensed and considered operational by the NRC, to fulfill the letter and spirit of statutes, guidelines, and common sense as regards providing adequately for the continued health and safety of the public.

69. Licensees would suffer no greater economic harm than they have already undergone during the NRC-ordered shutdown after TMI.

70. Licensees are protected and held harmless from economic loss by the allowance in the State of Ohio of the costs from purchasing power elsewhere being passed through the "fuel adjustment clause" directly to customers.

71. The interests of the membership of TCSE, and those of the public within a fifty (50) mile radius of Davis-Besse will be unnecessarily threatened and compromised if DECO is allowed by this Commission to continue power generation while emergency preparedness plans have not been adequately established and/or finalized by Licensees and pertinent agencies of the State of Ohio.

WHEREFORE, Complainant TCSE prays that this Honorable Commission:

1. Find that Davis-Besse is not presently safe to operate and is an immediate threat to the public health, safety, welfare and protection of property interests of those citizens living within a fifty (50) mile radius of the plant;

2. Grant a Preliminary Injunction or such other order as may have the practical effect of shutting down

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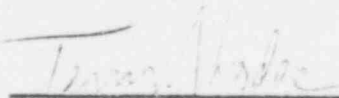
Davis-Besse immediately pending implementation of the corrective measures sought herein, and any other rectifying steps which the NRC sees fit to impose;

3. Order Licensees to conduct full-scale drills which demonstrate to the public the emergency readiness needed to minimize danger to the health and property of the public;

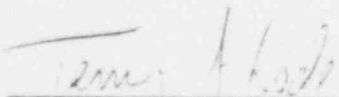
4. Order posting of emergency and evacuation information in public places within a fifty (50) mile radius of Davis-Besse, the expenses of such posting to be borne solely and exclusively by Licensees; and

5. Order Licensees to enclose emergency and evacuation instructions in utility billings to their customers at least once (1 time) per year, the first time to be prior to any authorized startup of Davis-Besse.

Respectfully submitted,

  
\_\_\_\_\_  
TERRY J. LODGE  
Counsel for the Toledo Coalition  
for Safe Energy

Served by me this day via certified U.S. mail upon  
Bruce Churchill, Counsel for TECo and CEI.

  
\_\_\_\_\_  
Terry J. Lodge

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AFFIDAVIT

STATE OF OHIO, COUNTY OF LUCAS, SS:

Michael Ferner, first being duly sworn, deposes and says that he is the Chairperson of the Toledo Coalition for Safe Energy, the Complainant herein, and that the facts stated in the foregoing Complaint are true as he verily believes.

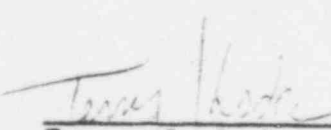
\_\_\_\_\_  
Michael Ferner

STATE OF OHIO, COUNTY OF LUCAS, SS:

Christopher Kerosky, first being duly sworn, deposes and says that he is a member of the Toledo Coalition for Safe Energy, the Complainant herein, and that the facts stated in the foregoing Complaint are true as he verily believes.

\_\_\_\_\_  
Christopher Kerosky

Sworn to before me and subscribed in my presence by Michael Ferner and Christopher Kerosky this 9th day of July, 1979.

  
\_\_\_\_\_  
Terry J. Lodge, Notary Public  
State of Ohio  
My Commission Does Not Expire

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