POSITION STATEMENT ON DAVIS-BESSE
METEOROLOGICAL PROGRAM
TOLEDO EDISON COMPANY
DAVIS-BESSE PLANT
DOCKET NO. 50-346

The present meteorological facility at the Davis-Besse site, operating since December 1969, is unacceptable to the staff at the present time for the following reasons: 1) the tower is in a location where the measurements of meteorological parameters are affected by the structures of Unit 1, and 2) the instrumentation of this tower does not meet the recommendations of Regulatory Guide 1.23. Data collected onsite prior to the construction of Unit 1 buildings, and prior to the issuance of Regulatory Guide 1.23, are considered acceptable and have been used in the evaluation by the staff.

The applicant is aware of the inadequacies of the present meteorological facility, and is currently planning a 340 ft free-standing meteorological tower and 35 ft satellite tower (for low level measurements) to be constructed near the southwest corner of the Davis-Besse site. On the free-standing tower, there will be wind speed and direction / sensors at 250 ft and 340 ft, delta-T 35 ft to 250 ft and 35 ft to 340 ft, and dewpoint

temperature at 35 ft and 340 ft. The satellite tower, to be erected about 110 ft from the center of the free-standing tower, will have wind speed and direction sensors at 35 ft. The applicant has stated that the instrumentation will meet the recommendation of Regulatory Guide 1.23.

The staff notes that there are several problems with the new location of the meteorological towers. One possible problem is the effect that two ponds which lie between the reactor structures and the towers may have on the vertical temperature structure as measured at the new tower location. A correlation study between temperature data collected on the old tower and temperature data collected on the new tower, covering a significant time period, is needed to determine the ponds' effect on the vertical temperature structure. A second problem is that cooling towers for the proposed Units 2&3 will be positioned such that the new meteorological towers will be within the area of influence of the cooling towers. The construction of the cooling towers is not scheduled for about four years, and the new meteorological facility will provide representative data until that time.

The staff feels that the proposed meteorological program is acceptable at this time, however, correlation studies will be required to assess the effect of the cooling towers on wind speed and direction as measured at the tower sensors, and to assess the effect of the cooling towers on the vertical temperature structure. A second satellite tower, operating at least one year prior to, and one year after, construction of the cooling towers will be required to determine their effects on wind flows and vertical temperature structure. The correlation studies will have to be evaluated by the staff prior to the use of these meteorological facilities for the operational meteorological programs of Units 2&3, and for the continued use of these facilities for the operational program of Unit 1.