

cable TV stations. Joint Intervenors have not pointed out any deficiency in the evacuation scheme or in the method of disseminating the information. Except for the absence of information upon pick-up points for persons without transportation, the emergency public information scheme complies with the applicable regulatory requirements, and there is reasonable assurance that the scheme can be implemented in a radiological emergency. The informational deficiency noted above is dealt with in our discussion of Contention 17/26(1)(f), infra.

3. Command Decision Structure (Fdgs. 41-52)

Joint Intervenors' Contention 17/26(1)(d) alleges that the command decision structure, including appropriate guidance, is inadequate for commencing evacuation.

Any threat to safety at Waterford 3 is first recognized by the Plant's Operation Shift Supervisor. At that time, he assumes the duties of Emergency Coordinator. He alerts the Plant Manager Nuclear, who will become Emergency Coordinator if the situation so requires. The Emergency Coordinator assesses the emergency and notifies the State agencies, LNEC and LOEP, and the two Parishes adjacent to the plant, St. Charles and St. John the Baptist. The information transmitted to the State agencies and the Parishes via the operational hotline includes the class of the emergency, information concerning the actual or projected releases of radioactivity, and recommended protective measures.

Upon receipt of the initial notification from the utility, the Parishes implement the notification and mobilization procedures for

77. The Parish Plans provide for direct transmission of emergency messages to industrial centers (See Fdg. 28, supra).

78. FEMA, in Interim Findings, found that the implementing measures for evacuation were incomplete (Staff Ex. 5, at F-37, F-38 (comments on elements J.9 and J.10.g)).

79. FEMA officials testified that the absence of letters of agreement with support parishes prevented a conclusion that the evacuation plans were adequate (FEMA testimony, fol. Tr. 2864, at 9-16).

80. NUREG-0654, J.10.c requires that State and local plans provide for the use of radioprotective drugs for emergency workers and institutionalized persons within the plume exposure EPZ whose immediate evacuation may be infeasible or very difficult. No evidence was adduced that evacuation of prisoners was either infeasible or very difficult.

81. Based on the foregoing, the Board finds that, subject to the following conditions, the plans are adequate for evacuating special classes of persons. The conditions are: (1) that letters of agreements with support parishes for the necessary vehicles and drivers be completed and submitted to the NRC staff; (2) that the parish plans be amended to specify vehicles allotted to evacuate the prisons (such vehicles shall have a combined capacity to evacuate the prison population) and to specify the personnel commitment for drivers and guards (the drivers, guards, and vehicles shall have no other emergency

thyroid gland appears to be dependent on two factors:

(1) the proportion of radioactive iodide relative to the increased amount of stable iodide in the circulating blood is greatly reduced (dilution effect) and (2) as the levels of iodide in blood increases, there is an autoregulatory mechanism that limits the rate at which further iodide is accumulated by the gland. The suppression of uptake of radioiodine persists for as long as the intake of stable iodide is maintained at adequate levels. When doses approximating 130 mg of stable KI have been given prior to exposure to radioactive I-131, a 90 percent or greater reduction in peak thyroid accumulation of I-131 has been observed (Id.).

84. EPA Protective Action Guides call for protective action when projected total accumulated thyroid doses are estimated at 5-25 rem for the general public (Staff Ex. 6, Encl. C, at 9). FDA proposed guidelines suggest potassium iodide for thyroid blocking is considered to be a proper response in a nuclear emergency when the projected radiation dose to the thyroid is 10 rem or greater (Staff Ex. 6, Encl. C, at 10). The 10 rem level is arbitrary. It is based upon an assumption that on a population basis, the risk of potential adverse effects from a 10 rem radiation dose to the thyroid exceeds the risk of any adverse effects that might be encountered as a result of administering potassium iodide in daily dose of 65 mg to individuals under one year of age or 130 mg to the remainder of the population for several days. As radiation doses decrease below 10 rem, the relative

values for releases, and on the topography, geography, meteorology at Waterford (Staff Ex. 1, § 5.9). The calculations yielded approximately 6 mrem per year as the dose for the maximally exposed individual (Id. at J-7; Tr. 1000, 1010), and .01 mrem per year as an average dose to members of the population within a 10 mile radius of the plant (Appl's. testimony, fol. Tr. 461, at 4-5).

100. Staff's analysis of the releases followed the methodology established in NUREG-0017, "Calculations of Releases of Radioactive Materials in Gaseous and Liquid Effluents from Pressurized Water Reactors" (PWR-GALE code) (Staff Ex. 1, at 5-35). Applicant used the same methodology (Gale code) (Tr. 491), and the Staff and Applicant's projections agreed within narrow levels (Tr. 498).

101. Applicant reports from its ongoing monitoring program of existing natural background radiation in the area of the plant site that existing natural levels average about 80 mrem per year with considerable variations, for example, a variation of about 20 mrem per year between two points only about a mile or two apart (Appl's. testimony, fol. Tr. 461, at 8).

102. The effects of the radiological releases from Waterford 3 were evaluated explicitly by Applicant and by the Staff. Their evaluations, summarized by Applicant in its testimony and provided in detail by the NRC Staff in their FES and in testimony, were that the impact would be very small (See Appl's. testimony, fol. Tr. 461, at 10; Staff Ex. 1, at 5-36; Staff testimony, fol. Tr. 735, at 3-6). Their evaluations are based on commonly accepted methodology and risk