

ENVIRONMENTAL IMPACT APPRAISAL  
THREE MILE ISLAND  
PROPOSED TECHNICAL SPECIFICATION  
CHANGE NOS. 33.2 and 33.3

Evaluation

The proposed change for the determination of anomalous measurements from 10 times the operational control station level of radioactivity in environmental medium to 10 times the mean of the preop/operational control station data does not reduce the effectiveness of the reporting requirement. The preop/operational data is representative of the background level of radioactivity and provides a better mean value for determining levels of radioactivity in environmental media from plant releases. For cases when preop/operational control station data is not available, the applicable control station data will be used to determine anomalous measurements. The proposed deletion of a reporting requirement associated with a measured level of radioactivity in an environmental medium greater than 4 times the control station value is in keeping with current NRC guidelines, proposed Regulatory Guide 4.8. In many instances the variation in background levels could result in measurements that exceed 4 times the control value. The licensee has proposed a specification for confirming levels of radioactivity when an investigation level is exceeded. An investigation level is exceeded when there is a 99.9% probability of the measurement not belonging to the background or control station level data distribution (i.e., greater than the mean value plus 3.1 times the standard deviation). The mean value is determined from data collected at the applicable control station and preoperational data. An investigation level set at the mean plus 3.1 standard deviations assures that measurements that are likely to be attributable to plant effluents are investigated but that measurements which are within the normal fluctuation of

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the natural background are not unnecessarily investigated. This confirmatory specification provides for better analysis of plant related level of radioactivity in environmental media without causing unnecessary reports to be submitted. All measurements will continue to be summarized in annual environmental reports.

The licensee proposed to delete the reporting requirement when individual milk samples show I-131 concentrations of 10 picocuries per liter or greater. Individual milk samples that show high concentrations of I-131 would not have to be reported if the average concentrations over a quarter time period was below 4.8 picocuries per liter. We conclude that this deletion is unacceptable because of the importance of the milk pathway for gaseous releases of I-131. The licensee has agreed to revise the proposed change to retain the present Technical Specification requirement that individual milk samples showing I-131 concentrations of 10 picocuries per liter or greater be reported.

The proposed change in non-radiological reporting requirement for a written report when a Limiting Condition for Operation is exceeded from within one week to within two weeks does not alter the effectiveness of the program and is in accordance with current NRC practice. The licensee is still required to make a report within 24 hours by telephone and telegraph to the Office of Inspection and Enforcement - Region I when an LCO is exceeded.

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