



**Pacific Gas and
Electric Company**

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PG&E Letter HBL-16-009

U.S Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Docket No. 50-133, License No. DPR-7
Humboldt Bay Power Plant, Unit 3
Reclassification of Intake Structure

Dear Commissioners and Staff:

This letter is being submitted in accordance with Humboldt Bay Power Plant Unit 3 (HBPP) License Condition 2.C.(5) that requires Pacific Gas and Electric Company (PG&E) to notify the NRC at least 14 days prior to implementation of reclassification of a survey area to a less restrictive classification. PG&E intends to reclassify the intake structure from Class 1 to Class 3, as described below.

At the time the HBPP Historical Site Assessment was developed, there were no characterization data available for the intake structure. As a result, PG&E labeled the intake structure a Multi Agency Radiation Survey and Site Investigation Manual (MARSSIM) Classification 1. Since a portion of the structure is now slated to remain, PG&E designed and performed a characterization survey to determine the appropriate classification.

The configuration of the intake structure was such that the entire structure was a confined space and could not be safely accessed. Therefore, PG&E surveyed the area of the structure where the most potential for contamination exists (i.e., the Unit 1 intake chambers with proximity to spill area).

The characterization survey performed included beta measurement scans and direct measurements for alpha and beta surface emissions using gas flow proportional detectors. The results indicated a highest alpha measurement of 23 dpm/100cm² or approximately 1 percent of the alpha Derived Concentration Guideline Level, Gross Activity (DCGL_{GA}). The highest beta measurement was 957 dpm/100cm² or approximately 2.4 percent of the beta DCGL_{GA}. None of the direct measurements were adjusted for background. Scans of the floor and walls indicated no audible indications above background. In total, fifteen (15) direct alpha and direct beta measurements were taken and greater than 10 percent of the accessible

NMSSO1
NMSS



interior structure surfaces were beta scanned. Additionally, laboratory sample analysis of material removed from the intake surface to facilitate the survey indicated no plant related radioactivity. The characterization survey was performed to the rigors of a Final Status Survey (FSS).

Based on the results of the characterization survey and sampling, PG&E determined that the following methodology is appropriate for the intake structure:

1. The characterization supports the reclassification of the HBPP intake structure to a MARSSIM Classification 3 (i.e., results were at a small fraction of the HBPP building surface DCGL).
2. The survey data from the characterization is sufficiently rigorous and will be used for the FSS of the structure.
3. Due to safety concerns for survey personnel, PG&E determined the structure to be a special situation that will be evaluated by judgmental measurements. As described in Section 5.5.3.3 of MARSSIM, the judgmental measurements will be compared directly to the HBPP building surface DCGLs. The measurements will not be used for a nonparametric statistical test described in MARSSIM, but will be compared directly to the HBPP building surface DCGLs.
4. The radiological status of the entire structure will be determined from the data collected in the characterization survey.

There are no new or revised regulatory commitments (as defined in NEI 99-04) made in this letter.

If you wish to discuss the information above, please contact Mr. Hossein Hamzehee at (805) 545-4720.

Sincerely,

Loren D. Sharp
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cc: Kriss M. Kennedy, NRC Region IV Administrator
John B. Hickman, NRC Project Manager
HBPP Humboldt Distribution