

## 12 QUALITY ASSURANCE

### 12.1 Conduct of Review

The purpose of this review is to determine whether Pacific Gas and Electric Company (PG&E) has a quality assurance (QA) program that complies with the requirements of 10 CFR Part 72, Subpart G, to be applied to activities at the Humboldt Bay ISFSI. The basis for that determination is a review and evaluation of the applicant's QA program submitted as part of the application in accordance with 10 CFR 72.24(n).

Paragraph (b) of 10 CFR 72.140 states in part, that each licensee shall establish, maintain, and execute a QA program satisfying each of the applicable criteria of 10 CFR Part 72, Subpart G. Paragraph (d) states that a Commission-approved QA program which satisfies the applicable criteria of Appendix B of 10 CFR Part 50 and which is established, maintained, and executed with regard to an ISFSI will be accepted as satisfying the requirements of 10 CFR 72.140(b).

The staff reviewed the following aspects of the applicant's proposed QA program for the Humboldt Bay ISFSI, as described in Chapter 11 of the SAR, Attachment E of the License Application (Pacific Gas and Electric Company, 2004b), and associated references :

- QA Organization (10 CFR 72.142)
- QA Program (10 CFR 72.144)
- Design Control (10 CFR 72.146)
- Procurement Document Control (10 CFR 72.148)
- Instructions, Procedures and Drawings (10 CFR 72.150)
- Document Control (10 CFR 72.152)
- Control of Purchased Material, Equipment and Services (10 CFR 72.154)
- Identification and Control of Materials, Parts, and Components (10 CFR 72.156)
- Control of Special Processes (10 CFR 72.158)
- Licensee Inspection (10 CFR 72.160)
- Test Control (10 CFR 72.162)
- Control of Measuring and Test Equipment (10 CFR 72.164)
- Handling, Storage, and Shipping Control (10 CFR 72.166)
- Inspection, Test, and Operating Status (10 CFR 72.168)
- Nonconforming Materials, Parts or Components (10 CFR 72.170)
- Corrective Action (10 CFR 72.172)
- Quality Assurance Records (10 CFR 72.174)
- Audits (10 CFR 72.176)

PG&E is currently licensed under 10 CFR 50 to operate the Diablo Canyon Power Plant (DCPP), Units 1 and 2, and has a Commission-approved quality assurance program meeting the requirements of 10 CFR Part 50, Appendix B. In Chapter 11 of the Humboldt Bay ISFSI Safety Analysis Report, PG&E states the governing document for this QA program is the DCPP Quality Assurance Program, as described in Chapter 17 of the DCPP Final Safety Analysis Report (FSAR) Update. PG&E further states that it will apply this QA program to the design, purchase, fabrication, handling, shipping, storing, cleaning, assembly, inspection, testing, operation, maintenance, repair, modification, and decommissioning of Humboldt Bay ISFSI

structures, systems, and components to an extent that is commensurate with the importance to safety, and to managerial and administrative controls used to ensure safe ISFSI operation.

Given that the existing approved QA program satisfies Appendix B to 10 CFR Part 50 and that PG&E's stated intent is to apply that program to the Humboldt Bay ISFSI, the staff concludes that PG&E has met the conditions of 10 CFR 72.140(d) and, therefore, satisfies the requirements of 10 CFR 72.140(b).

The staff reviewed Chapter 17, "Quality Assurance," of the DCPD Units 1 & 2 FSAR Update, and concludes that the description of PG&E's QA program for the Humboldt Bay ISFSI satisfies the requirements of 10 CFR Part 72, Subpart G. The QA program is comprehensive and will provide adequate control over activities affecting quality.

## **12.2 Evaluation Findings**

The staff made the following findings regarding the QA program for the Humboldt Bay ISFSI:

- The QA program describes requirements, procedures, and controls that when properly implemented, comply with the requirements of 10 CFR 72, Subpart G.
- The QA program covers activities affecting SSCs important-to-safety as identified in Section 4.5 of the SAR.
- The organizations and persons performing QA functions have the independence and authority to perform their functions without undue influence from those directly responsible for costs and schedules.
- The applicant's description of the QA program is in compliance with applicable NRC regulations and industry standards, and the QA program can be implemented for the design, fabrication and construction, operation, and decommissioning phases of the installation's life cycle.

## **12.3 References**

Pacific Gas and Electric Company. *Humboldt Bay Independent Spent Fuel Storage Installation Safety Analysis Report, Amendment 1*. Docket No. 72-27. Avila Beach, CA: Pacific Gas and Electric Company. 2004a.

Pacific Gas and Electric Company. *Humboldt Bay Independent Spent Fuel Storage Installation License Application, Amendment 1*. Docket No. 72-27. Avila Beach, CA: Pacific Gas and Electric Company. 2004b.