

**Pacific Gas and Electric Company**  
*Humboldt Bay Power Plant*  
*Paul J. Roller*  
*Director and Plant Manager Humboldt Bay Nuclear*

1000 King Salmon Avenue  
Eureka, CA 95503  
707/444-0700

September 4, 2009



PG&E Letter HBL-09-011

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D.C. 20555

Docket No. 50-133, OL-DPR-7  
Humboldt Bay Power Plant, Unit 3  
Request for Exemption from 10 CFR 20, Appendix G, Section III.E

Dear Commissioners and Staff:

In accordance with 10 CFR 20.2301, "Applications for exemptions," Pacific Gas and Electric Company (PG&E) requests NRC approval for exemption from the requirements of Section III.E of 10 CFR 20, Appendix G, "Requirements for Transfers of Low-Level Radioactive Waste Intended for Disposal at Licensed Land Disposal Facilities and Manifests," to investigate and report to the NRC when PG&E does not receive notification of receipt of a shipment, or part of a shipment, of low-level radioactive waste within 20 days after transfer. PG&E is requesting that the time period for PG&E to receive acknowledgement that the shipment has been received by the intended recipient be extended from 20 days to 45 days for shipments from Humboldt Bay Power Plant (HBPP) Unit 3. The requested exemption would be applicable to HBPP Unit 3 mixed-mode shipments, such as combination truck/rail, barge/rail and barge/truck. The enclosure to this letter provides an evaluation of the request, which includes a description and purpose of the request, as well as justification for granting the exemption.

The requested exemption is similar to one submitted to the NRC on January 26, 2004, by Southern California Edison Company for the San Onofre Nuclear Generating Station Units 1, 2 and 3. That request was approved by the NRC on June 2, 2004 in a letter to Southern California Edison Company.

This exemption request is not required to address an immediate safety concern; however, PG&E has been making low-level radioactive waste shipments, and therefore requests NRC approval of this exemption request within six months.

UMSSO/  
FSME

If you wish to discuss the information in the enclosure, please contact David Sokolsky at (707) 444-0801.

Sincerely,

A handwritten signature in black ink, appearing to read "Paul J. Roller". The signature is fluid and cursive, with a long horizontal stroke at the end.

Paul J. Roller  
*Director and Plant Manager Humboldt Bay Nuclear*

cc/enc: Mr. R. William Borchardt, NRC Executive Director for Operations  
Gary W. Butner, DHS  
Elmo E. Collins, Jr.  
Robert Evans  
John B. Hickman  
Humboldt Distribution

Enclosure

## EXEMPTION REQUEST EVALUATION

### 1.0 DESCRIPTION

In accordance with 10 CFR 20.2301, "Applications for exemptions," Pacific Gas and Electric Company (PG&E) requests NRC approval for exemption from the requirements of Section III.E of 10 CFR 20, Appendix G, "Requirements for Transfers of Low-Level Radioactive Waste Intended for Disposal at Licensed Land Disposal Facilities and Manifests," to investigate and report to the NRC when PG&E does not receive notification of receipt of a shipment, or part of a shipment, of low-level radioactive waste within 20 days after transfer. PG&E is requesting that the time period for PG&E to receive acknowledgement that the shipment has been received by the intended recipient be extended from 20 days to 45 days for shipments from Humboldt Bay Power Plant (HBPP) Unit 3. The requested exemption would be applicable to HBPP Unit 3 mixed-mode shipments, such as combination truck/rail, barge/rail and barge/truck.

### 2.0 PURPOSE

As described in Section 3.0 below, historical data obtained from Southern California Edison Company indicates that numerous rail shipments could take longer than 20 days, resulting in an excessive administrative burden for PG&E because of required investigations and reporting. By extending the time for receipt notification to 45 days before requiring investigation and reporting, a reasonable upper limit on shipment duration is still maintained if a shipment is delayed.

### 3.0 BACKGROUND

Section III.E of 10 CFR 20, Appendix G requires that any shipment, or part of a shipment, be investigated by the shipper if the shipper has not received notification of receipt within 20 days after transfer. Each licensee who conducts a trace investigation shall file a written report with the appropriate NRC Regional Office within two weeks of completion of the investigation.

PG&E is in the process of decommissioning HBPP Unit 3. Inherent to the decommissioning process, large volumes of slightly contaminated debris are generated and require disposal. PG&E transports low-level radioactive waste from HBPP Unit 3 to distant locations such as a waste disposal facility operated by Energy Solutions in Clive, Utah, and waste processors in Tennessee.

Historical data derived from the experiences of Southern California Edison Company's San Onofre Nuclear Generating Station (SONGS), indicates that rail transportation time to waste disposal facilities frequently exceeded the 20-day reporting requirement. A review of the SONGS data indicates that transportation time for shipments by rail or truck/rail took over 16 days on average and, on occasion, took up to 57 days. In addition, administrative processes at the disposal facilities and mail delivery times could add several additional days.

A similar exemption from the reporting requirements of 10 CFR 20, Appendix G, Section III.E was submitted to the NRC by Southern California Edison Company on January 26, 2004 for SONGS Units 1, 2 and 3 (Reference 1). That exemption was approved by the NRC on June 2, 2004 in a letter to Southern California Edison Company granting SONGS an extension to 35 days (Reference 2).

HBPP Unit 3 is in a more remote location than SONGS and is not near a railhead. Shipping from HBPP Unit 3 may require a combination of truck/rail, barge/rail or barge/truck shipments. These mixed-mode shipments will be comprised of truck and barge shipments from HBPP Unit 3 to inland locations in California or nearby states, followed by rail shipments to the waste disposal facilities or processors. The additional step of transloading material at a remote railyard (e.g., unloading and loading, waiting for the train to depart) is expected to add to shipping delays that exceed the time of shipments from SONGS. Therefore, HBPP is requesting an extension to 45 days.

#### **4.0 JUSTIFICATION FOR EXEMPTION**

As stated in 10 CFR 20.2301, "The Commission may, upon application by a licensee or upon its own initiative, grant an exemption from the requirements of the regulations in this part if it determines the exemption is authorized by law and would not result in undue hazard to life or property."

##### **(1) The Requested Exemption is Authorized by Law**

There are no provisions in the Atomic Energy Act (or in any other federal statute) that impose a requirement to investigate and report to the NRC low-level radioactive waste shipments that have not been acknowledged by the intended recipient within 20 days after transfer. Therefore, there is no statutory prohibition on the issuance of the requested exemption, and the NRC is authorized to grant the exemption under law.

(2) The Requested Exemption Would Not Result in Undue Hazard to Life or Property

The intent of 10 CFR 20, Appendix G, Section III.E is to require licensees to investigate, report, and trace radioactive shipments that have not reached their destination, as scheduled, for unknown reasons. For mixed-mode shipments, PG&E bid requests and contracts awarded to carriers will require electronic data tracking system interchange, or similar tracking systems that allows monitoring the progress of the shipments. The contracts will request a daily update to be provided for the location of the conveyance via email. As a result, granting an exemption to PG&E for HBPP Unit 3 mixed-mode shipments of low-level radioactive waste to waste disposal facilities or waste processors results in no undue hazard to life or property.

The underlying purpose of the 10 CFR 20, Appendix G rule is to investigate a late shipment that may be lost, misdirected, or diverted. For mixed-mode shipments, PG&E bid requests and contracts awarded to carriers will require electronic data tracking system interchange, or similar tracking systems that allows monitoring the progress of the shipments. The contracts will request a daily update to be provided for the location of the conveyance via email. As a result, it will be unlikely that a shipment could be lost, misdirected, or diverted without the knowledge of the carrier or PG&E.

## 5.0 CONCLUSION

The information provided gives the NRC sufficient basis for granting PG&E an exemption from 10 CFR 20, Appendix G, Section III.E. Under the exemption, PG&E would not be required to report a late shipment in accordance with 10 CFR 20, Appendix G, Section III.E unless a copy of the signed NRC Form 540 (or NRC Form 540A, if required) acknowledging receipt has not been received by PG&E within 45 days of the shipment leaving HBPP Unit 3. This exemption would apply to mixed-mode shipments of low-level radioactive waste from HBPP Unit 3. PG&E mixed-mode shipping contracts will request a daily update to be provided for the location of the conveyance via email. As a result, it will be unlikely that a shipment could be lost, misdirected, or diverted without the knowledge of the carrier or PG&E.

## 6.0 REFERENCES

1. Southern California Edison letter from Mr. Edward Scherer, Manager of Nuclear Regulatory Affairs, to the Nuclear Regulatory Commission, Dr.

William Travers, Executive Director for Operations, re: Request for Exemption from 10 CFR 20 Appendix G Section III.E, dated January 26, 2004.

2. Nuclear Regulatory Commission letter from Mr. William C. Huffman, Project Manager, to Southern California Edison Company, Mr. Harold B. Ray, Executive Vice President, re: Exemption From Certain Low-Level Waste Shipment Tracking Requirements of 10 CFR Part 20, Appendix G, Section III.E (TAC NO. L52615), dated June 2, 2004.