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PG&E Letter HBL-06-020

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

Docket No. 50-133 OL-DPR-7  
Humboldt Bay Power Plant, Unit 3  
License Amendment Request 06-03  
Revision of Paragraph 2.B.3.(c) of Facility Operating License No. DPR-7

Dear Commissioners and Staff:

In accordance with 10CFR 50.90, enclosed is an application for amendment of Facility Operating License No. DPR-7 for Unit 3 of the Humboldt Bay Power Plant (HBPP). The enclosed License Amendment Request (LAR) proposes amending the existing license to eliminate the current restrictions on the type and limits of byproduct materials to be received, possessed, and used.

Enclosure 1 provides the evaluation of the change proposed in this LAR. Enclosure 2 provides a markup of the affected page in Facility Operating License No. DPR-7, incorporating the proposed change. Enclosure 3 shows a clean version of the affected page with the proposed change incorporated.

The change proposed in this LAR is not required to address an immediate safety concern. However, the proposed change will provide the necessary flexibility to support HBPP activities currently being performed in preparation for dismantlement and decommissioning of the facility. As a result, Pacific Gas and Electric Company (PG&E) requests the NRC process this amendment request within six months. PG&E also requests that the license amendment be made effective upon issuance, to be implemented within two weeks of issuance.

I state under penalty of perjury that the foregoing is true and correct.

Executed on December 20, 2006.

Sincerely,

  
John S. Keenan

NMSS01

Enclosures

cc/enc: Edgar Bailey, DHS  
John B. Hickman  
Bruce S. Mallett  
PG Fossil Gen HBPP Humboldt Distribution

## EVALUATION

### 1.0 DESCRIPTION

This letter is a request to amend Facility Operating License No. DPR-7 for Unit 3 of the Humboldt Bay Power Plant (HBPP).

The proposed change would revise the Facility Operating License to remove current restrictions on the type and limits of byproduct and special nuclear material to be received, possessed, and used.

### 2.0 PROPOSED CHANGES

This License Amendment Request (LAR) proposes to amend the Facility Operating License, DPR-7, by deleting paragraph 2.B.3(c), and replacing it with a new paragraph 2.B.4 to read as follows:

“Pursuant to the Act and Title 10, CFR, Chapter I, Parts 30, 40, and 70, to receive, possess, and use in amounts as required any byproduct, source, or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components.”

The following editorial changes are proposed to accommodate the renumbering of paragraphs:

Existing paragraph 2.B.4 would be renumbered 2.B.5.

The word “and” would be added to the end of paragraph 2.B.3(a).

The word “and” would be deleted at the end of paragraph 2.B.3(b).

The semicolon would be replaced with a period at the end of paragraph 2.B.3(b).

The proposed license condition is similar to license conditions approved by the NRC for Pacific Gas and Electric Company’s (PG&E’s) Diablo Canyon Power Plant (DCPP), Units 1 and 2, License Nos. DPR-80 and DPR-82 (References 1 and 2).

### **3.0 BACKGROUND**

Current License Condition 2.B.3(c) was included in the license that was established and approved by the NRC when HBPP entered the possess-but-not-operate SAFSTOR phase. The license, including License Condition 2.B.3(c), was proposed by PG&E on July 30, 1984, in PG&E Letter No. HBL-84-027 (Reference 3), and approved and issued by the NRC on July 16, 1985, as Amendment No. 19 to the facility license (Reference 4). License Condition 2.B.3(c) was established based on the byproduct materials onsite at the time, and limits the byproduct material HBPP is allowed to receive, possess, and use to "...a maximum of 1 curie of various byproduct materials between atomic numbers 3 and 83 inclusive, and each of the radionuclides Am-241 and Ra-226, in any form, but not to exceed 100 millicuries of any one isotope." At the time the license condition was established, consideration was not given to the possibility of receiving, possessing, or using other byproduct material with different atomic numbers or different limits of radionuclides for future decommissioning and dismantlement activities. The restrictions of License Condition 2.B.3(c) do not exist in the DCPD licenses.

HBPP is currently preparing to transfer spent nuclear fuel from the spent fuel pool to the onsite Independent Spent Fuel Storage Facility (ISFSI), and to perform dismantlement and decommissioning activities. Offsite equipment is needed to be received to perform these activities. In October 2006, equipment was planned to be shipped by a vendor to HBPP for decommissioning activities. However, upon review of the equipment radiological composition, the equipment was not deemed suitable because it contained atomic numbers not allowed by License Condition 2.B.3(c). The resultant schedule delay impacted manpower and work planning activities. PG&E anticipates that, without the requested License Amendment, similar schedule delays could challenge efforts to prepare for the transfer spent fuel from the spent fuel pool to the ISFSI.

### **4.0 TECHNICAL ANALYSIS**

The restrictions in HBPP License Condition 2.B.3(c) were established in 1985 based on the material onsite at the time, and were not based on any safety issues. The proposed License Amendment would make the HBPP license similar and consistent with the DCPD licenses, which do not contain the restrictions in HBPP License Condition 2.B.3(c). The proposed HBPP License Condition 2.B.4 incorporates into the license the ability to receive, possess, and use in amounts as required any byproduct, source, or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated

with radioactive apparatus or components as allowed by the Act and Title 10, CFR, Chapter I, Parts 30, 40, and 70.

## 5.0 REGULATORY ANALYSIS

### 5.1 No Significant Hazards Consideration

PG&E has evaluated the no significant hazards consideration involved with the proposed amendment, focusing on the three standards set forth in 10 CFR 50.92(c) as quoted below:

"The Commission may make final determination, pursuant to the procedures in §50.91, that a proposed amendment to an operating license for a facility licensed under §50.21(b) or §50.22 or for a testing facility involves no significant hazards consideration, if operation of the facility in accordance with the proposed amendment would not:

- (1) Involve a significant increase in the probability or consequences of an accident previously evaluated; or
- (2) Create the possibility of a new or different kind of accident from any accident previously evaluated; or
- (3) Involve a significant reduction in a margin of safety."

The following evaluation is provided for the no significant hazards consideration standards:

- (1) Does the change involve a significant increase in the probability or consequences of an accident previously evaluated?

Response: No.

The proposed change eliminates a restriction regarding the type and limits of byproduct and special nuclear material to be received, possessed, and used onsite. However, in the proposed change, the type or amount of byproduct, source, or special nuclear material to be received, possessed, or used would not change plant systems or accident analysis, and as such, would not affect initiators of analyzed events or assumed mitigation of accidents. Therefore, the proposed change does not increase the probability or consequences of an accident previously evaluated.

- (2) Does the change create the possibility of a new or different kind of accident from any accident evaluated?

Response: No.

The proposed change eliminates a restriction regarding the limits and type of byproduct and special nuclear material to be received, possessed, and used onsite. The proposed change does not involve a physical alteration to the plant or require existing equipment to be operated in a manner different from the present design. Temporary equipment brought onsite for decommissioning activities would still be required to be operated in accordance with plant procedures and licensing bases documents, regardless of the byproduct material content. Therefore, the proposed change does not create the possibility of a new or different kind of accident from any accident evaluated.

(3) Does the change involve a significant reduction in a margin of safety?

Response: No.

The proposed change eliminates a restriction regarding the limit and type of byproduct and special nuclear material to be received, possessed, and used onsite. The proposed change has no effect on existing plant equipment, operating practices, or safety analysis assumptions. Temporary equipment brought onsite for decommissioning activities would still be required to be operated in accordance with plant procedures and licensing bases documents, regardless of the byproduct material content. Therefore, the proposed change does not involve a significant reduction in a margin of safety.

## 5.2 Applicable Regulatory Requirements/Criteria

The proposed change reflects NRC criteria established in the licenses for DCPD Units 1 and 2 that allows the receipt, possession, and use of byproduct, source, and special nuclear material without restrictions on the limits and type of byproduct materials. Because the proposed change has no effect on any plant systems or on maintaining the plant in a safe condition, the proposed change is not considered to have any adverse safety significance. HBPP would continue to satisfy applicable regulatory and safety criteria.

In conclusion, based on the considerations above:

- (1) There is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner;
- (2) Such activities will be conducted in compliance with the Commission's regulations; and
- (3) The issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

## 6.0 ENVIRONMENTAL CONSIDERATION

PG&E has evaluated the proposed change and determined that the change does not involve:

- (1) A significant hazards consideration;
- (2) A significant change in the types or significant increase in the amounts of any effluents that may be released offsite; or
- (3) A significant increase in individual or cumulative occupational radiation exposure.

Accordingly, the proposed change meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). Therefore, pursuant to 10 CFR 51.22(b), an environmental impact statement or environmental assessment of the proposed change is not required.

## 7.0 REFERENCES

1. Diablo Canyon Power Plant, Unit 1, License No. DPR-80, Docket No. 275

2. Diablo Canyon Power Plant, Unit 2, License No. DPR-82,  
Docket No. 323
3. PG&E Letter No. HBL-84-027, from Mr. J. O. Schuyler to  
Mr. Harold B. Denton, dated July 30, 1984
4. NRC Letter re: Amendment of License No. DPR-7 to  
Possess-But-Not-Operate Status, from Mr. John A. Zwolinski to  
Mr. J. D. Shiffer, dated July 16, 1985

**MARKUP OF PROPOSED CHANGES TO THE  
HBPP UNIT 3 FACILITY OPERATING LICENSE NO. DPR-7**

3. Pursuant to the Act and Title 10, CFR, Chapter I, Part 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material", to receive, possess and use a maximum of:

(a) 12,000 curies of Antimony-124 in the form of two Antimony cylinders (for use in Antimony-Beryllium neutron sources) and 3000 curies of Antimony-124 in the form of two Antimony cylinders (for use in Antimony-Beryllium neutron sources) in storage awaiting transfer offsite; and

(b) 30 curies of cobalt 60 in the form of two sealed sources; and.

~~(c) 1 curie of various byproduct materials between atomic numbers 3 and 83 inclusive, and each of the radionuclides Am-241 and Ra-226, in any form, but not to exceed 100 millicuries of any one isotope.~~

4. Pursuant to the Act and Title 10, CFR, Chapter I, Parts 30, 40 and 70, to receive, possess and use in amounts as required any byproduct, source or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components.

45 Pursuant to the Act and Title 10, CFR, Chapter I, Parts 30 and 70, to possess, but not to separate, such byproduct and special nuclear materials which were produced by operation of the reactor.

**CLEAN VERSION OF AFFECTED PAGE  
INCORPORATING THE CHANGES TO THE  
HBPP UNIT 3 FACILITY OPERATING LICENSE NO. DPR-7**

3. Pursuant to the Act and Title 10, CFR, Chapter I, Part 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material", to receive, possess, and use a maximum of:
  - (a) 12,000 curies of Antimony-124 in the form of two Antimony cylinders (for use in Antimony-Beryllium neutron sources) and 3000 curies of Antimony-124 in the form of two Antimony cylinders (for use in Antimony-Beryllium neutron sources) in storage awaiting transfer offsite; and
  - (b) 30 curies of cobalt 60 in the form of two sealed sources.
4. Pursuant to the Act and Title 10, CFR, Chapter I, Parts 30, 40, and 70, to receive, possess, and use in amounts as required any byproduct, source, or special nuclear material without restriction to chemical or physical form, for sample analysis or instrument calibration or associated with radioactive apparatus or components.
5. Pursuant to the Act and Title 10, CFR, Chapter I, Parts 30 and 70, to possess, but not to separate, such byproduct and special nuclear materials which were produced by operation of the reactor.