

Regulatory

File Cy.

PACIFIC GAS AND ELECTRIC COMPANY  
245 Market Street  
San Francisco, California 94106

Received w/1st Docket 3-2-71

March 4, 1971

AIR MAIL

U. S. Atomic Energy Commission  
Washington, D. C. 20545

Attention: Director, Division of  
Reactor Licensing

Reference: Docket No. 50-133  
License No. DPR-7  
Proposed Change No. 33



Gentlemen:

Pursuant to 10 CFR 50.59, Pacific Gas and Electric Company (the Company) hereby requests authorization to make changes in Unit No. 3 of its Humboldt Bay Power Plant which involve changes in the Technical Specifications incorporated in the above-numbered license.

I. Introduction

This change covers the proposed use of a third Jersey Nuclear Company (JNC) qualification fuel assembly in the core of the Company's Humboldt reactor. As authorized by Change No. 27 dated April 23, 1970, two such fuel assemblies were loaded in the reactor during the April 1970 refueling outage and have performed satisfactorily to date.

It was originally planned that one of these assemblies would be removed for destructive analysis after one irradiation cycle and a third new JNC assembly would replace it. It is now intended to perform destructive analysis after the assemblies have reached design exposure.

II. Proposed Operation

The proposed plan of operation for the three Jersey Nuclear assemblies during Cycle 7 is as follows:

- 1) JN-1 and JN-2 (the two JNC assemblies presently in the core) will be dry sipped and visually inspected by boroscope during the May 1971 outage to confirm the cladding and mechanical integrity of the fuel.
- 2) JN-1 presently operating in peripheral core position 62-13, will at the May outage, be moved to an interior core position of approximately equal power to that occurring in core position 57-02.

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- 3) JN-2, presently operating in interior core position 57-02, will remain in that position (or a similar position) for irradiation to design exposure.
- 4) JN-3, (the new JNC assembly), at the forthcoming outage will be loaded into an interior core position of approximately equal power to that occurring in core position 57-02.

The three Jersey Nuclear assemblies will be located at least two lattice cells apart, each from the others. All will then be irradiated approximately to design exposure of 18,750 MWD/ton.

Destructive analysis of one or more of these bundles will be performed after they reach design exposure.

### III. Proposed Changes to the Technical Specifications

The JNC qualification fuel is designed to be compatible with and closely match the mechanical, nuclear and thermal hydraulic characteristics of the General Electric (GE) Type III fuel which is currently operating in the Humboldt Bay reactor. For this reason, the only required change to the Technical Specifications is the revision of note (C) of Table V-1 (Page V-10) to indicate that a maximum of three of these fuel assemblies can be used in place of the GE Type III fuel.

### IV. Safety Analysis

A. As noted in Addendum B to Proposed Change No. 29 dated April 13, 1970, prior to loading of the first two JNC fuel assemblies in May 1970, Pacific Gas and Electric Company conducted a technical review of the design of the fuel with satisfactory results and General Electric made a finding of compatibility between fuel supplied by General Electric and that of Jersey Nuclear.

B. In our opinion (1) this proposed change does not involve an unreviewed safety question as defined in 10 CFR 50.59 nor does it present significant hazards considerations not described or implicit in the Hazards Summary Report, and (2) there is reasonable assurance that the health and safety of the public will not be endangered by this proposed change.

### V. Schedule for Changes

The loading of a third Jersey Nuclear assembly is expected to occur during the outage presently scheduled for May 1971. The addition of the third

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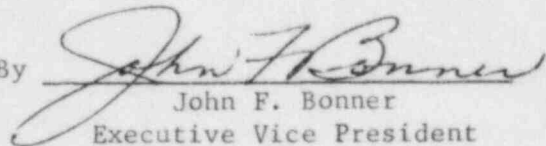
Jersey Nuclear assembly will not, in the opinion of Pacific Gas and Electric, introduce any additional risk to reactor operation.

Subscribed in San Francisco, California, this 4th day of March 1971.

Respectfully submitted,

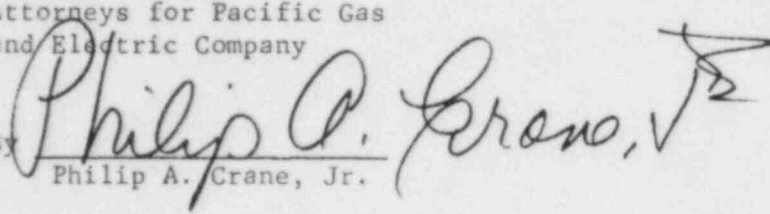
PACIFIC GAS AND ELECTRIC COMPANY

By

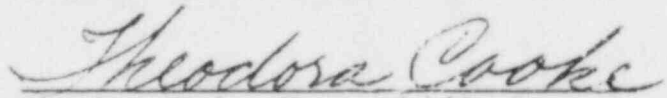
  
John F. Bonner  
Executive Vice President

RICHARD H. PETERSON  
PHILIP A. CRANE, JR.  
Attorneys for Pacific Gas  
and Electric Company

By

  
Philip A. Crane, Jr.

Subscribed and sworn to before me  
this 4th day of March, 1971

  
Theodora Cooke, Notary Public in  
and for the City and County of San  
Francisco, State of California

My Commission expires January 28, 1973