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STN-50-530 Palo Verde Nuclear Station, Unit 3, Arizona Publi 05000530
AUTH.NAME AUTHOR AFFILIATION
VAN BRUNT,E.E. Arizona Public Service Co.
RECIP.NAME RECIPIENT AFFILIATION
KERRIGAN,J. NRC - No Detailed Affiliation Given

SUBJECT: Forwards nonproprietary info re open items in FSAR.Also forwards Bechtel proprietary calculations.Proprietary calculations withheld (ref 10CFR2.790).

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ARIZONA PUBLIC SERVICE COMPANY

STA. _____

P.O. BOX 21666 - PHOENIX, ARIZONA 85036

August 26, 1981
ANPP-18763 - JMA/WFQ

Ms. Janis Kerrigan
Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: Palo Verde Nuclear Generating Station (PVNGS) Units 1, 2 and 3
Docket Nos. STN-50-528/529/530
File: 81-056-026; G.1.10; D.4.02.10

Reference: ANPP-18697 - JMA/WFQ dated August 19, 1981

Dear Janis:

Responses to those open items identified in Enclosure 2 of my letter of August 19, 1981 (ANPP-18697 - JMA/WFQ) as to be furnished on August 24, 1981 (i.e., Open Items Nos. 1, 3, 5, 8-12, 14, 17, 18, 21-24, 26, 28, 33, 34, 36 and 37) are submitted herewith as Enclosures 1 and 2. For the most part, such responses provide data, information and calculations requested by the NRC staff for its review and audit of certain matters reported in the Palo Verde Nuclear Generating Station, Units 1, 2 and 3, Final Safety Analysis Report (FSAR).

Enclosure 1 consists of calculations which have been provided by Bechtel Power Corporation (Bechtel) and, as set forth in the affidavit attached to Enclosure 1, contain trade secrets or privileged or confidential commercial information which Bechtel requests be withheld from public disclosure pursuant to 10 CFR 2.790. A formal application for withholding such information from public disclosure will be filed in the near future. Pending receipt and action by the Commission upon such application, it is requested that Enclosure 1 be withheld from public disclosure.

Enclosure 2 consists of non-proprietary information responsive to the identified open items.

Responses to the balance of the open items identified in Enclosure 2 of my letter of August 19, 1981 (ANPP-18697 - JMA/WFQ) will be furnished on or before the dates indicated in such enclosure.

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A copy of (i) this letter, a copy of (ii) the affidavit attached to Enclosure 1 and (iii) Enclosure 2 have been furnished to intervenor Patricia Lee Hourihan. Further, upon request and execution of a non-disclosure agreement, a copy of Enclosure 1 will be made available for examination by intervenor Patricia Lee Hourihan at the offices of Arizona Public Service Company.

Very truly yours,

E. E. Van Brunt

E. E. Van Brunt, Jr.
APS Vice President,
Nuclear Projects
ANPP Project Director

EEVBJr/WFQ/av
Enclosures

cc: A. C. Gehr
R. L. Tedesco
S. Chan (w/e)
P. Hourihan

STATE OF ARIZONA)
) ss.
COUNTY OF MARICOPA)

I, Edwin E. Van Brunt, Jr., represent that I am Vice President Nuclear Projects of Arizona Public Service Company, that the foregoing document has been signed by me on behalf of Arizona Public Service Company with full authority so to do, that I have read such document and know its contents, and that to the best of my knowledge and belief, the statements made therein are true.

Edwin E. Van Brunt

Edwin E. Van Brunt, Jr.

Sworn to before me this 26th day of AUGUST, 1981.

Connie Lou Armstrong

Notary Public

My Commission expires:

June 24, 1983

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

MEMORANDUM FOR: TERA CORPORATION

FROM: US NRC/TIDC/DOCUMENT MANAGEMENT BRANCH

SUBJECT: Special Document Handling Requirements

☐ 1.. Please use the following special distribution list for the attached document.

☐ 2. The attached document requires the following special considerations:

- ☐ Do not send oversize enclosures to the NRC PDR.
- ☐ Only one oversize enclosure was received - please return for Regulatory File storage.
- ☒ Proprietary information - send only non-proprietary portions to the NRC PDR, LPDR, NSIC, NTIS
- ☐ Other: (specify)

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NUCLEAR REGULATORY COMMISSION

APPLICATION FOR OPERATING LICENSE at PALO VERDE NUCLEAR GENERATING STATION UNITS NO. 1, 2 and 3 by ARIZONA PUBLIC SERVICE COMPANY as Project Manager and Operating Agent of the Palo Verde Nuclear Generating Station	)	DOCKET NO.'s STN-50-528 529 530 AFFIDAVIT IN SUPPORT OF NON-DISCLOSURE APPLICATION (10 C.F.R. 2.790-b)
State of California County of Los Angeles	)	ss.

Comes now the affiant, Loren G. Hinkelman, and, being first duly sworn, deposes and says:

1. That I am a Vice President of Bechtel Power Corporation and Deputy General Manager of the Los Angeles Power Division of Bechtel Power Corporation.

2. That Arizona Public Service Company, as Project Manager and Operating Agent of the Palo Verde Nuclear Generating Station, and Bechtel Power Corporation executed a contract for, inter alia, the engineering and design services for Units No. 1, 2 and 3 of the Palo Verde Nuclear Generating Station.

3. That such engineering and design services are being performed by the Los Angeles Power Division of Bechtel Power Corporation.

4. That, based on my information and belief, Arizona Public Service Company, as Project Manager and Operating Agent of the Palo Verde Nuclear Generating Station has applied for an operating license for Units No. 1, 2 and 3 of the Palo Verde Nuclear Generating Station.

5. That, based on my information and belief, the staff of the Nuclear Regulatory Commission, as part of their review of the operating license application, has been conducting an audit of certain structural calculations performed by Bechtel Power Corporation for selected structural components of Units No. 1, 2 and 3.

6. That the staff of the Nuclear Regulatory Commission has requested a copy of the following structural calculations for their audit:

A. Containment Structure

1) Calculations showing that the liner system design satisfies all the loading requirements resulting from a negative pressure of 4 psig.

2) Calculations showing the technical basis for deciding boundary and extent of the soils included in the "FINEL" analysis.

3) Calculations for: the angle of rotation for the Containment Building basemat, the actual factor of safety (FS) against overturning, and the FS against overturning using conventional methods.

4) Calculations determining the fictitious temperature drop accounting for the effect of prestressing tendon (both orthogonal and draped tendons).

5) Calculation package for the equipment hatch (Subsection NE).

6) Calculations for radial reinforcement to account for the delamination effect in the dome.

7) Calculations for the steam generator upper support lever arm and snubbers (Bechtel scope of work).

B. Main Steam Support Structure (MSSS)

1) Calculations for the development of story stiffness parameters for MSSS.

C. Auxiliary Building

1) Calculations for conventional stability analysis against overturning of the Auxiliary Building.

2) Calculations for the concrete column at elevation 88'-0" in the Auxiliary Building. The column has an axial force of 1981K and a moment of 203ft-K.

D. Fuel Building

1) Calculations developing the hydrodynamic aspects of the Fuel Building seismic analysis model.

2) Calculations for the west wall of the spent fuel pool to withstand the impact from a fuel cask drop.

E. Diesel Generator Building

1) Calculations showing an approximate sum of the participation factors of 3 modes considered in the Diesel Generator Building seismic analysis as a percent of total response.

F. Category I Tanks

1) Pages 1-53 and Appendix pages F1-F18 of calculation package for Category I tanks, 13-CC-CT-015.

G. Essential Spray Ponds

1) Calculations justifying not considering the soil structure interaction effects in the seismic analysis of the spray pond pump house.

2) Calculations determining the loads used in the design of both the spray pond and pump house walls.

3) Calculations showing that the natural frequency of the floor/structure support is at least twice the frequency of the pump/motor unit.

H. All Category I Structures

1) Calculations which verify compliance with the intent of SRP 3.7.3.2 on the number of OBE events used in design.

7. That Bechtel Power Corporation hereby proposes that all documents identified in Paragraph 6 above shall not be disclosed in whole or in part for the following reasons:

a. The documents contain trade secrets of Bechtel Power Corporation.

b. The documents contain proprietary and confidential commercial information and data of Bechtel Power Corporation.

c. The documents contain proprietary and confidential discoveries and records of Bechtel Power Corporation.

d. The calculations, which are highly technical and interrelated with other calculations, are subject to being taken out of context, misinterpreted, or misconstrued.

8. That the following considerations are applicable to the reasons set forth in Paragraph 7 above:

a. The information has been held in confidence by Bechtel Power Corporation.

b. The information is of a type customarily held in confidence by Bechtel Power Corporation and there are rational bases therefor as set forth in Paragraph 7 above and in this Paragraph.

c. The information has been and is being transmitted to the Nuclear Regulatory Commission in confidence.

d. The information is not available in public sources.

e. Public disclosure of the information is likely to cause substantial harm to the competitive position of Bechtel Power Corporation for the following reasons:

1) The information is valuable to Bechtel Power Corporation because it represents unique approaches and capabilities for resolving complex safety, technical, commercial and industry factors to comply with applicable laws, statutes and regulations.

2) Substantial and significant effort and money has been and is being, expended by Bechtel Power Corporation to develop, acquire and maintain the necessary expertise and capability in these highly specialized areas.

3) Others would have difficulty in properly acquiring or duplicating the information which represents special applications of theoretical principles, complex analytical procedures and sophisticated design techniques.

BECHTEL POWER CORPORATION

By: Loren G. Hinkelman
Loren G. Hinkelman
Title: Vice President

Subscribed and sworn to before me this 18 day of August, 1981.

OFFICIAL SEAL
NANCY A. GETMAN
NOTARY PUBLIC - CALIFORNIA
LOS ANGELES COUNTY
My comm. expires OCT 1, 1982

Nancy A. Getman
Notary Public