

NRC PUBLIC DOCUMENT ROOM

UNITED STATES OF AMERICA

NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)	
)	
ARIZONA PUBLIC SERVICE)	Docket Nos. STN 50-592
COMPANY, ET AL.)	
)	STN 50-593
(Palo Verde Nuclear Generating)	
Station, Units 4 and 5))	
)	
)	

STATEMENT OF ISSUES

The California Energy Resources Conservation and Development Commission ("California Energy Commission") submits this Statement of Issues, as an interested state in the pending hearings to be held before the United States Nuclear Regulatory Commission pertaining to the Arizona Public Service Company, et al., application for construction permits for the Palo Verde Nuclear Generating Station Units 4 and 5. This statement is submitted pursuant to the assigned Atomic Safety and Licensing Board's Order dated March 6, 1979, directing the California Energy Commission to file a statement of issues indicating with reasonable specificity, the subject matters on which it desires to participate.

As an "interested state", not a party, the California Energy Commission is entitled to a reasonable opportunity to participate in the hearings and advise the Commission without taking a posi-

349 201

7907190479

G

tion on any of the issues. (10 CFR § 2.715(c).) Accordingly, the California Energy Commission's Statement of Issues has been framed with sufficient detail and preciseness to define concrete issues, pursuant to the ASLB's March 6, 1979, Order, but does not set forth any specific position of the California Energy Commission with respect to any of the issues in this proceeding. Rather, the California Energy Commission's statement raises those issues which neither the Applicants nor the NRC staff have thus far adequately addressed. Of particular concern is the failure to assess fully the need for and alternatives to Palo Verde Units 4 and 5 for the California participants. Since the Applicants retain the burden of demonstrating that the matters raised by the California Energy Commission are adequately addressed and have been satisfactorily resolved prior to Board action on the permit, the California Energy Commission anticipates that additional information will be presented in these areas by the Applicant, subject to cross-examination by participants in the proceeding. In addition, the California Energy Commission may provide testimony in a number of areas of interest during this proceeding.

The California Energy Commission has successfully used statements of issues similar to this filing in its own licensing proceedings. These issue statements have provided adequate notice to all parties of the issues in dispute without unduly restricting the parties in presenting their case. If the Applicant, NRC Staff or any other party has questions about this filing, the California Energy Commission counsel would be happy to discuss the matter informally and attempt to resolve any differences without the need for ASLB intervention.

California Energy Commission
Statement of Issues

1. What forecast of capacity and energy demand through 1995 should be used in this proceeding to determine the need for each California participant for Palo Verde Units 4 & 5?
2. To what extent do California's mandatory building and appliance conservation standards (Pub. Res. Code § 25402; 20 Cal. Admin. Code §§ 1400, et seq.) reduce the need of each California participant for Palo Verde Units 4 & 5?
3. To what extent do federal, state, and local programs and incentives to promote the use of solar energy (e.g., tax credits and low interest loans) reduce the need of each California participant for Palo Verde Units 4 & 5?
4. To what extent does California's mandatory load management program (Pub. Res. Code § 25403.5) reduce the need of California participants in Palo Verde Units 4 & 5?
5. To what extent do other feasible and cost effective conservation activities reduce the need of each California participant for Palo Verde Units 4 & 5?
6. What electrical energy resources are needed by each California participants to meet forecasted energy needs through 1995?
7. What capacity resources are needed by each California participant to meet forecasted capacity needs through 1995?
8. Are Palo Verde Units 4 & 5 necessary to meet the forecasted energy and capacity needs of the California participants?
9. Do the California participants need at least a 15% reserve margin to ensure reliable supplies of electricity?

10. What electric generating facilities are reasonably likely to be available to each California participant by the time Palo Verde Units 4 & 5 are planned to come on line?

11. If Palo Verde Units 4 & 5 are not needed to meet forecasted demand, would operation of Palo Verde Units 4 & 5 reduce oil and natural gas use in each of the California participants' systems?

12. What benefits, if any, would necessarily result from any such reduction in oil and gas use?

13. Is construction of the proposed project the most cost effective and environmentally benign method of producing these benefits from reduced oil use?

14. Are there any other benefits, other than reduced oil use, which justify participation in Palo Verde Units 4 & 5 by California utilities, if it is not needed to meet projected capacity and energy requirements?

15. Are there alternate fuels, such as methanol, biomass derived from fuel, shale oil, and oil from tar sands, which are reasonably likely to be available in the 1990's for use in California's oil-fire power plants whose use would be a better method to displace existing oil use than Palo Verde Units 4 & 5?

16. To what extent can increased power pooling among California utilities reduce the need for Palo Verde Units 4 & 5?

17. To the extent increased power pooling can reduce the need for Palo Verde Units 4 & 5, is it a better option (i.e., more economical, reliable, and environmentally sound) than the proposed facilities?

18. To what extent can cogeneration reduce the need for Palo Verde Units 4 & 5?

19. To the extent cogeneration can reduce the need for Palo Verde Units 4 & 5, is it a better option (i.e., more economical, reliable, and environmentally sound) than the proposed facilities?

20. To what extent can geothermal electric generation reduce the need for Palo Verde Units 4 & 5?

21. To the extent geothermal electric generation can reduce the need for Palo Verde Units 4 & 5, is it a better option (i.e., more economical, reliable, and environmentally sound) than the proposed facilities?

22. To what extent can repowering of Silvergate for San Diego Gas & Electric reduce the need for Palo Verde Units 4 & 5?

23. To the extent repowering of Silvergate for San Diego Gas & Electric can reduce the need for Palo Verde Units 4 & 5, is it a better option (i.e., more economical, reliable, and environmentally sound) than the proposed facilities?

24. To what extent can power purchases from Mexico reduce the need for Palo Verde Units 4 & 5?

25. To the extent power purchases from Mexico can reduce the need for Palo Verde Units 4 & 5, is it a better option (i.e., more economical, reliable, and environmentally sound) than the proposed facilities?

26. To what extent can a coal-fired power plant reduce the need for Palo Verde Units 4 & 5?

27. To the extent a coal-fired power plant can reduce the need for Palo Verde Units 4 & 5, is it a better option (i.e., more economical, reliable, and environmentally sound) than the proposed facilities?

28. Does the NRC health impact analysis for a coal alternative to Palo Verde Units 4 & 5 accurately account for the following:

a. Health impacts from a facility sited in a remote, unpopulated area in California.

b. Health impacts from a facility complying with Clean Air Act New Source Review requirements, including attainment of ambient air quality standards by 1992.

c. Health impacts from a facility using scrubbers, electrostatic precipitators or baghouses, and selective catalytic reduction to reduce SO_x, NO_x, TSP, and hydrocarbon emissions.

29. What are the comparative financial risks to California participants of Palo Verde Units 4 & 5 and a coal-fired alternative?

30. What is the comparative energy consumption in constructing and fueling Palo Verde Units 4 & 5 and a coal-fired alternative?

31. What cost estimates (capital, fuel, operations, maintenance, etc.) for Palo Verde Units 4 & 5 should be used in this proceeding?

32. What cost estimates (capital, fuel, operations, maintenance, etc.) of a coal-fired alternative should be used in this proceeding?

33. Except as already provided in NRC Rules (Table S-3 and S-4), what is a reasonable assessment of the health and safety risk and impacts from the proposed facility, including its complete fuel cycle for comparison with alternatives?

34. Do the Applicants' capital cost estimates include a reserve for possible required design changes in nuclear facilities as a result of studies of the Three Mile Island Unit II accident?

35. To what extent will Applicants' estimated capital costs be increased as a result of the Three Mile Island Unit II accident?

36. Have the Applicants reasonably estimated the costs of spent fuel storage and disposal for Palo Verde Units 4 & 5?

37. Have the Applicants reasonably estimated the costs of decommissioning Palo Verde Units 4 & 5?

38. What are the economic and reliability consequences to the California participants if no off-site storage of Palo Verde Units 4 & 5 spent fuel is available when needed?

39. Do the California participants have an adequate and acceptable method of financing decommissioning costs?

40. Is there a sufficiently assured uranium supply at a reasonable cost, taking into account mining, milling, enrichment, and fabrication, for Palo Verde Units 4 & 5?

41. Are the Applicants' estimates of Palo Verde Units 4 & 5 plant reliability (annual capacity factor) reasonable given recent nuclear power plant operating facilities?

42. Would the California participants be able to provide reliable service in the event of a simultaneous outage of all five Palo Verde units?

43. What is the financial obligation of California participants in the event of a nuclear accident at Palo Verde Units 4 & 5?

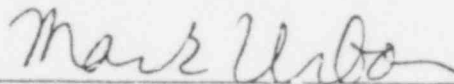
44. What is the financial obligation of the California utilities for Arizona Public Services' activities?

45. What impacts would delays in operation of Palo Verde Units 4 & 5 have on California participants' ability to finance the project and provide reliable electrical service?

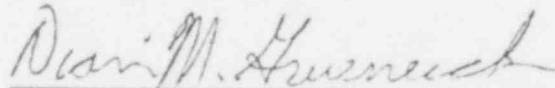
46. What is the ability of the California participants to attract adequate and acceptable financing given the events at Three Mile Island Unit II?

Dated: June 20, 1979.

Respectfully submitted,



MARK J. URBAN
Deputy General Counsel



DIAN M. GRUENEICH
Legal Counsel

Attorneys for the
California Energy Commission

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of:)

ARIZONA PUBLIC SERVICE)
COMPANY, et al.)

(Palo Verde Nuclear Generating)
Station, Units 4 and 5).)
)
)

Docket Nos. STN-50-592
STN-50-593

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing California Energy Commission Statement of Issues have been mailed, postage prepaid, or hand delivered this June 20, 1979 to the following:

Robert M. Lazo, Esq., Chairman
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Victor Gilinsky
Commissioner
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dr. Quentin J. Stober
Research Associate Professor
Fisheries Research Institute
University of Washington
400 Northeast 15th Avenue
Seattle, Washington 98195

George Campbell, Chairman
Maricopa County Board of Supervisors
111 South Third Avenue
Phoenix, Arizona 85004

Michael M. Grant, Esq.
Assistant Attorney General
200 State Capitol
1700 West Washington
Phoenix, Arizona 85007

James D. Woodburn, Chief
Engineer
Public Service Department
P.O. Box 631
Burbank, CA 91503

Samuel Gorlick
City Attorney
P.O. Box 6459
Burbank, CA 91510

James L. Mulloy, Chief Electrical
Engineer & Assistant Manager
Edward C. Farrell, Chief
Assistant City Attorney for
Water and Power
P.O. Box 111
Los Angeles, CA 90051

R.E. York
Senior Vice President
El Paso Electric Company
P.O. Box 982
El Paso, Texas 79999

David N. Barry III, Esq.
James A. Beoletto, Esq.
Southern California Edison Company
P.O. Box 800
Rosemead, CA 91770

Byron L. Miller
Assistant Vice President
Nevada Power Company
P.O. Box 230
Las Vegas, Nevada 89151

Gary E. Craythorn, Engineer
City of Glendale
119 North Glendale Avenue
Glendale, CA 91206

Ronald V. Stassi, Engineer
City of Pasadena
100 North Garfield Avenue
Pasadena, CA 91109

Everett C. Ross
Public Utilities Director
City of Riverside
3900 Main Street
Riverside, CA 92501

Atomic Safety and Licensing
Appeal Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Docketing and Service Section
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Tom Diamond, Esq.
1208 First City National
Bank Building
El Paso, Texas 79901

Gordon W. Hoyt
Utilities Director
City of Anaheim
P.O. Box 3222
Anaheim, CA 92803

Jack E. Thomas
Vice President
San Diego Gas & Electric Co.
P.O. Box 1831
San Diego, CA 92112

Arthur C. Gehr, Esq.
Snell & Willmer
3100 Valley Center
Phoenix, Arizona 85073

Janice E. Kerr
J. Calvin Simpson, Esq.
Vincent V. MacKenzie, Esq.
California Public Utilities
Commission
5066 State Building
San Francisco, CA 94102

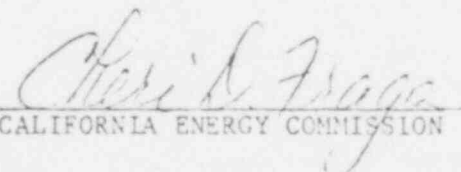
Mr. Larry Bard
P.O. Box 793
Tempe, Arizona 85281

Atomic Safety and Licensing
Board Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dr. Stanley L. Dollins
Assistant Director Energy Programs
(OEPAD)
Office of the Governor
1700 West Washington
Executive Tower - Room 507
Phoenix, Arizona 85007

Stephen M. Sohinki
Counsel for NRC Staff
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Kathryn Burkett Dickson, Esq.
Mark J. Urban, Esq.
Counsel for the California
Energy Commission
1111 Howe Avenue, Suite 610
Sacramento, CA 95825


CALIFORNIA ENERGY COMMISSION