

MAY 25 1976

Docket Nos. STN 50-528
STN 50-529
and STN 50-530

Distribution

Docket File ✓

NRC PDR

Local PDR

LWR #3 File

ELD

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IE (3)

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WPGammill, DSE
RHeineman, SS
RRMaccary, SS
DFRoss, SS
RLTedesco, SS
ATOalston, AIG
BScharf, OA (15)
DSkovholt
EHughes
RGilbert, EP
MDuncan, EP

Mr. E. E. Van Brunt, Jr.
Vice President, Nuclear Services

Arizona Public Service Company bcc: JRBuchanan, NSIC
P. O. Box 21666 TBAburnathy, TIC
Phoenix, Arizona 85036 ARosenthal, ASLAB
NHGoodrich, ASLBP

Dear Mr. Van Brunt:

The Nuclear Regulatory Commission has issued Construction Permits Nos. CPPR-141, CPPR-142 and CPPR-143 to you for construction of three pressurized water reactors to be known as the Palo Verde Nuclear Generating Station, Units 1, 2 and 3. The construction permits have been issued pursuant to an Initial Decision by the Atomic Safety and Licensing Board, a copy of which has already been sent to you.

Copies of the construction permits, and the related notice, which has been forwarded to the Office of the Federal Register for publication, are enclosed.

Sincerely,

Original Signed by

Olan D. Parr, Chief
Light Water Reactors
Branch No. 3
Division of Project Management

Enclosures:

1. Construction Permits Nos.
CPPR-141, CPPR-142 and CPPR-143
2. Federal Register Notice

cc: See page 2

OFFICE →	DPM:LWR #3	DPM:LWR #3	DPM:LWR #3			
SURNAME →	EIGoulbourne:mt	DAllison	ODParr			
DATE →	4/19/76	4/19/76	5/13/76			

Mr. E. E. Van Brunt, Jr.

- 2 -

cc: Arthur C. Gehr, Esq.
Snell & Wilmer
3100 Valley Center
Phoenix, Arizona 85073

Mr. Carmine F. Cardamone, Jr.
1415 North Third Avenue
Tucson, Arizona 85705

Mr. Donald C. Gilbert, Executive Director
Arizona Atomic Energy Commission
First Floor - Commerce Building
1601 Jefferson Street
Phoenix, Arizona 85007

Mr. Tom Jones, Region IX
Environmental Protection Agency
100 California Street
San Francisco, California 94111

Mr. Bob Corbin, Chairman
Maricopa County Board of Supervisors
111 South Third Avenue
Phoenix, Arizona 85003

Andrew W. Bettwy, Esq.
Assistant Attorney General
159 State Capitol
1700 West Washington
Phoenix, Arizona 85007

Arizona Clean Energy Coalition
745 East 5th Street
Tucson, Arizona 85715

David N. Barry, Esq., Senior Counsel
Charles R. Rocher, Esq., Assistant Counsel
Southern California Edison Company
P. O. Box 800
Rosemead, California 91770

Mr. Tres English
129 South Irving
Tucson, Arizona 85711

OFFICE ➤						
SURNAME ➤						
DATE ➤						

ARIZONA PUBLIC SERVICE COMPANY
SALT RIVER PROJECT AGRICULTURAL IMPROVEMENT AND POWER DISTRICT
EL PASO ELECTRIC COMPANY
SOUTHERN CALIFORNIA EDISON COMPANY
PUBLIC SERVICE COMPANY OF NEW MEXICO
AND ARIZONA ELECTRIC POWER COOPERATIVE, INCORPORATED*

DOCKET NO. STN 50-528

PALO VERDE NUCLEAR GENERATING STATION, UNIT 1

CONSTRUCTION PERMIT

Construction Permit No. CPPR-141

1. The Nuclear Regulatory Commission (the Commission) having found that:

- A. The application for construction permit complies with the requirements of the Atomic Energy Act of 1954, as amended, and the rules and regulations of the Commission, there is reasonable assurance that the activities authorized by the permit will be conducted in compliance with the rules and regulations of the Commission, and all required notifications to other agencies or bodies have been duly made;
- B. The applicants have described the proposed design of the Palo Verde Nuclear Generating Station, Unit 1 (the facility), including, but not limited to, the principal architectural and engineering criteria for the design and have identified the major features or components incorporated therein for the protection of the health and safety of the public;
- C. Such further technical or design information as may be required to complete the safety analysis, and which can reasonably be left for later consideration, will be supplied in the final safety analysis report;
- D. Safety features or components, if any, which require research and development have been described by the applicants and the applicants have identified, and there will be conducted, a research and development program reasonably designed to resolve any safety questions associated with such features or components;

*Hereafter referred to as applicants

- E. On the basis of the foregoing, there is reasonable assurance that (i) such safety questions will be satisfactorily resolved at or before the latest date stated in the application for completion of construction of the proposed facility and (ii) taking into consideration the site criteria contained in 10 CFR Part 100, the proposed facility can be constructed and operated at the proposed location without undue risk to the health and safety of the public;
 - F. The applicants are technically qualified to design and construct the proposed facility;
 - G. The applicants are financially qualified to design and construct the proposed facility;
 - H. The issuance of a permit for the construction of the facility will not be inimical to the common defense and security or to the health and safety of the public; and
 - I. After weighing the environmental, economic, technical and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of a construction permit subject to the conditions for protection of the environment set forth herein is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Pursuant to Section 103 of the Atomic Energy Act of 1954, as amended (the Act), and Title 10, Chapter I, Code of Federal Regulations, Part 50, "Licensing of Production and Utilization Facilities," and pursuant to the Initial Decision of the Atomic Safety and Licensing Board, dated **MAY 24 1976**, the Commission hereby issues a construction permit to the applicants for a utilization facility designed to operate at 3800 megawatts thermal as described in the application and amendments thereto (the application) filed in this matter by the applicants and as more fully described in the evidence received at the public hearing upon that application. The facility, known as the Palo Verde Nuclear Generating Station, Unit 1 will be located on the applicants' site in Maricopa County, Arizona.

3. This permit shall be deemed to contain and be subject to the conditions specified in Section 50.54 and 50.55, of said regulations; is subject to all applicable provisions of the Act, and rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the conditions specified or incorporated below:
 - A. The earliest date for the completion of the facility is June 1, 1981 and the latest date for completion is November 1, 1982.
 - B. The facility shall be constructed and located at the site as described in the application, in Maricopa County, Arizona.
 - C. This construction permit authorizes the applicants to construct the facility described in the application and the hearing record, in accordance with the principal architectural and engineering criteria and environmental protection commitments set forth therein.
 - D. This facility is subject to the following antitrust conditions:
 - (1) In connection with the antitrust conditions the following definitions are used herein:
 - (a) "Bulk Power" means the electric power, and any attendant energy, supplied or made available at transmission or subtransmission voltage by one entity to another.
 - (b) "Entity" means a person, private or public corporation, a municipality, a cooperative, an association, a joint stock association or business trust owning, operating or proposing in good faith to own or operate equipment or facilities for the generation, transmission or distribution of electricity to or for the public as a utility.
 - (c) "Joint Applicant(s)" means the Arizona Public Service Company and the Salt River Project Agricultural Improvement and Power District.

(2) (a) Each joint applicant will transmit Bulk Power over its transmission system, between or among two or more Entities with which it is interconnected, or will be interconnected in the future, without restrictions on use or resale of the power so transmitted, provided that such services can reasonably be accommodated from a technical standpoint without impairing each joint applicant's reliability or its own use of its facilities.

(2) (b) Each joint applicant is obligated under this condition to transmit Bulk Power on the terms stated above, and in connection with each joint applicant's plan to construct new transmission facilities for its own use, to include in its planning and construction program sufficient transmission capacity for such Bulk Power transactions, provided that such applicant has received sufficient advance notice as may be necessary from a technical standpoint to accommodate the requirements of any requesting entity, and further provided that such entity(ies) are obligated as may be agreed (i) to share the capital, operating and maintenance costs of such new transmission facilities to the extent that additional costs burdens would be imposed on such joint applicant or (ii) to compensate the joint applicant fully for the use of its system.

(3) The foregoing shall be implemented in a manner consistent with the provisions of the Federal Power Act as applicable and all rates, charges or practices in connection therewith are to be subject to the approval of regulatory agencies having jurisdiction over them.

E. This facility is subject to the following conditions for the protection of the environment:

- (1) The applicants shall take the necessary mitigating actions, including adherence to their commitments summarized in Section 4.5.1, and additional staff requirements summarized in Section 4.5.2 of the Final Environmental Statement, during construction of the Station and associated transmission lines to avoid unnecessary adverse environmental impacts from construction activities.

- (2) The applicants shall establish a control program which shall include written procedures and instructions to control all construction activities as prescribed in the Final Environmental Statement and shall provide for periodic management audits to determine the adequacy of implementation of environmental conditions. The applicants shall maintain sufficient records to furnish evidence of compliance with all the environmental conditions in the Final Environmental Statement.
 - (3) Before engaging in a construction activity not evaluated by the Commission, the applicants will prepare and record an environmental evaluation of such activity. When the evaluation indicates that such activity may result in a significant adverse environmental impact that was not evaluated, or that is significantly greater than that evaluated in the Final Environmental Statement, the applicants shall provide a written evaluation of such activities and obtain prior approval of the Director of Project Management for the activities.
 - (4) If unexpected harmful effects or evidence of serious damage are detected during facility construction, the applicants shall provide to the staff an acceptable analysis of the problem and a plan of action to eliminate or significantly reduce the harmful effects or damage.
 - (5) In addition to the monitoring procedures described in the Environmental Report, with amendments, the staff requirements and the suggested preoperational monitoring of the sewage plant effluent (Section 6.1.1.3) included in Section 6 of the Final Environmental Statement shall be followed.
 - (6) When final transmission line and water pipeline corridor alignments are chosen, the applicants will be required to provide detailed description and analysis of the routes, prior to the initiation of construction for staff review and approval relating to route acceptability.
- F. This facility is subject to the following condition for the protection of the public health and safety:
- (1) Neither construction of the water storage reservoir nor construction of the evaporation ponds shall be started until:

- (a) the applicants have submitted and the Commission's staff has reviewed and approved an analysis documenting that the groundwater level at the location of the facility will not rise more than one foot above an elevation of 907 feet above mean sea level and describing any design changes to the water storage reservoir or evaporation ponds which may be necessary to maintain such groundwater level or, alternately,
 - (b) the applicants have submitted and the Commission's staff has reviewed and approved an analysis demonstrating that the groundwater level at the location of the facility will remain at or below some other elevation, to be defined, and furthermore the applicants have submitted and the Commission's staff has reviewed and approved an analysis documenting that:
 - (i) soil liquefaction effects will not pose a hazard in the event that a Safe Shutdown Earthquake should occur at the location of the facility in conjunction with a groundwater level at said other elevation, to be defined, and
 - (ii) all other effects of a groundwater level at said other elevation, to be defined, such as the effects of hydrostatic groundwater pressure on structures, have been properly accounted for in the design of the facility.
4. This permit is subject to the limitation that a license authorizing operation of the facility will not be issued by the Commission unless (a) the applicants submit to the Commission the complete Final Safety Analysis Report, portions of which may be submitted and evaluated from time to time; (b) the Commission finds that the final design provides reasonable assurance that the health and safety of the public will not be endangered by the operation of the facility in accordance with procedures approved by it in connection with the issuance of said

license; (c) the Commission finds that operation of the facility will be in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements are satisfied; and (d) the applicants submit proof of financial protection and execute an indemnity agreement as required by Section 170 of the Act.

5. This permit is effective as of its date of issuance and shall expire on the latest completion date indicated in paragraph 3.A above.

FOR THE NUCLEAR REGULATORY COMMISSION

Original Signed by

Roger S. Boyd, Director
Division of Project Management
Office of Nuclear Reactor Regulation

Date of Issuance: MAY 25 1976

Since the previous concurrences, only the following changes have been made:

- (1) On pages 5 and 7 "applicant" was changed to "applicants."*
- (2) Environmental Condition E.(5) was re worded to conform with the board's initial decision. ELD (Steve Lewis) and EP (Bob Gilbert) have concurred in this change by phone.*

D.P. Allison 5/25/76

SEE PREVIOUS YELLOW FOR PREVIOUS CONCURRENCES.

OFFICE ➤	DPM					
SURNAME ➤	RSBoyd:mt					
DATE ➤	5/25/76					

license; (c) the Commission finds that operation of the facility will be in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements are satisfied; and (d) the applicant submits proof of financial protection and executes an indemnity agreement as required by Section 170 of the Act.

5. This permit is effective as of its date of issuance and shall expire on the latest completion date indicated in paragraph 3.A above.

FOR THE NUCLEAR REGULATORY COMMISSION

Roger S. Boyd, Director
Division of Project Management
Office of Nuclear Reactor Regulation

Date of Issuance:

Make sure you get any additional SCE from anti-trust conditions re Counsel.
anti-trust
Antitrust
OELD Antitrust
5/4/76

OFFICE	DPM:LWR #3	DPM:LWR #3	ELD	EP	DPM:ADWR	DPM
SURNAME	EI Goudreau:mt	DAIllison/OParr	SH Lewis	RGilbert	RCDeYoung	RSBoyd
DATE	4/19/76	4/23/76	5/4/76	5/13/76	5/14/76	4/ /76

ARIZONA PUBLIC SERVICE COMPANY
SALT RIVER PROJECT AGRICULTURAL IMPROVEMENT AND POWER DISTRICT
EL PASO ELECTRIC COMPANY
SOUTHERN CALIFORNIA EDISON COMPANY
PUBLIC SERVICE COMPANY OF NEW MEXICO
AND ARIZONA ELECTRIC POWER COOPERATIVE, INCORPORATED*

DOCKET NO. STN 50-529

PALO VERDE NUCLEAR GENERATING STATION, UNIT 2

CONSTRUCTION PERMIT

Construction Permit No. CPPR-142

1. The Nuclear Regulatory Commission (the Commission) having found that:

- A. The application for construction permit complies with the requirements of the Atomic Energy Act of 1954, as amended, and the rules and regulations of the Commission, there is reasonable assurance that the activities authorized by the permit will be conducted in compliance with the rules and regulations of the Commission, and all required notifications to other agencies or bodies have been duly made;
- B. The applicants have described the proposed design of the Palo Verde Nuclear Generating Station, Unit 2 (the facility), including, but not limited to, the principal architectural and engineering criteria for the design and have identified the major features or components incorporated therein for the protection of the health and safety of the public;
- C. Such further technical or design information as may be required to complete the safety analysis, and which can reasonably be left for later consideration, will be supplied in the final safety analysis report;
- D. Safety features or components, if any, which require research and development have been described by the applicants and the applicants have identified, and there will be conducted, a research and development program reasonably designed to resolve any safety questions associated with such features or components;

*hereafter referred to as applicants

- E. On the basis of the foregoing, there is reasonable assurance that (i) such safety questions will be satisfactorily resolved at or before the latest date stated in the application for completion of construction of the proposed facility and (ii) taking into consideration the site criteria contained in 10 CFR Part 100, the proposed facility can be constructed and operated at the proposed location without undue risk to the health and safety of the public;
 - F. The applicants are technically qualified to design and construct the proposed facility;
 - G. The applicants are financially qualified to design and construct the proposed facility;
 - H. The issuance of a permit for the construction of the facility will not be inimical to the common defense and security or to the health and safety of the public; and
 - I. After weighing the environmental, economic, technical and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of a construction permit subject to the conditions for protection of the environment set forth herein is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Pursuant to Section 103 of the Atomic Energy Act of 1954, as amended (the Act), and Title 10, Chapter I, Code of Federal Regulations, Part 50, "Licensing of Production and Utilization Facilities," and pursuant to the Initial Decision of the Atomic Safety and Licensing Board, dated **MAY 24 1976**, the Commission hereby issues a construction permit to the applicants for a utilization facility designed to operate at 3800 megawatts thermal as described in the application and amendments thereto (the application) filed in this matter by the applicants and as more fully described in the evidence received at the public hearing upon that application. The facility, known as the Palo Verde Nuclear Generating Station, Unit 2 will be located on the applicants' site in Maricopa County, Arizona.

3. This permit shall be deemed to contain and be subject to the conditions specified in Section 50.54 and 50.55, of said regulations; is subject to all applicable provisions of the Act, and rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the conditions specified or incorporated below:
 - A. The earliest date for the completion of the facility is February 1, 1983 and the latest date for completion is November 1, 1984.
 - B. The facility shall be constructed and located at the site as described in the application, in Maricopa County, Arizona.
 - C. This construction permit authorizes the applicants to construct the facility described in the application and the hearing record, in accordance with the principal architectural and engineering criteria and environmental protection commitments set forth therein.
 - D. This facility is subject to the following antitrust conditions:
 - (1) In connection with the antitrust conditions the following definitions are used herein:
 - (a) "Bulk Power" means the electric power, and any attendant energy, supplied or made available at transmission or subtransmission voltage by one entity to another.
 - (b) "Entity" means a person, private or public corporation, a municipality, a cooperative, an association, a joint stock association or business trust owning, operating or proposing in good faith to own or operate equipment or facilities for the generation, transmission or distribution of electricity to or for the public as a utility.
 - (c) "Joint Applicant(s)" means the Arizona Public Service Company and the Salt River Project Agricultural Improvement and Power District.

(2) (a) Each joint applicant will transmit Bulk Power over its transmission system, between or among two or more Entities with which it is interconnected, or will be interconnected in the future, without restrictions on use or resale of the power so transmitted, provided that such services can reasonably be accommodated from a technical standpoint without impairing each joint applicant's reliability or its own use of its facilities.

(2) (b) Each joint applicant is obligated under this condition to transmit Bulk Power on the terms stated above, and in connection with each joint applicant's plan to construct new transmission facilities for its own use, to include in its planning and construction program sufficient transmission capacity for such Bulk Power transactions, provided that such applicant has received sufficient advance notice as may be necessary from a technical standpoint to accommodate the requirements of any requesting entity, and further provided that such entity(ies) are obligated as may be agreed (i) to share the capital, operating and maintenance costs of such new transmission facilities to the extent that additional costs burdens would be imposed on such joint applicant or (ii) to compensate the joint applicant fully for the use of its system.

(3) The foregoing shall be implemented in a manner consistent with the provisions of the Federal Power Act as applicable and all rates, charges or practices in connection therewith are to be subject to the approval of regulatory agencies having jurisdiction over them.

E. This facility is subject to the following conditions for the protection of the environment:

- (1) The applicants shall take the necessary mitigating actions, including adherence to their commitments summarized in Section 4.5.1, and additional staff requirements summarized in Section 4.5.2 of the Final Environmental Statement, during construction of the Station and associated transmission lines to avoid unnecessary adverse environmental impacts from construction activities.

- (2) The applicants shall establish a control program which shall include written procedures and instructions to control all construction activities as prescribed in the Final Environmental Statement and shall provide for periodic management audits to determine the adequacy of implementation of environmental conditions. The applicants shall maintain sufficient records to furnish evidence of compliance with all the environmental conditions in the Final Environmental Statement.
 - (3) Before engaging in a construction activity not evaluated by the Commission, the applicants will prepare and record an environmental evaluation of such activity. When the evaluation indicates that such activity may result in a significant adverse environmental impact that was not evaluated, or that is significantly greater than that evaluated in the Final Environmental Statement, the applicants shall provide a written evaluation of such activities and obtain prior approval of the Director of Project Management for the activities.
 - (4) If unexpected harmful effects or evidence of serious damage are detected during facility construction, the applicants shall provide to the staff an acceptable analysis of the problem and a plan of action to eliminate or significantly reduce the harmful effects or damage.
 - (5) In addition to the monitoring procedures described in the Environmental Report, with amendments, the staff requirements and the suggested preoperational monitoring of the sewage plant effluent (Section 6.1.1.3) included in Section 6 of the Final Environmental Statement shall be followed.
 - (6) When final transmission line and water pipeline corridor alignments are chosen, the applicants will be required to provide detailed description and analysis of the routes, prior to the initiation of construction for staff review and approval relating to route acceptability.
- F. This facility is subject to the following condition for the protection of the public health and safety:
- (1) Neither construction of the water storage reservoir nor construction of the evaporation ponds shall be started until:

- (a) the applicants have submitted and the Commission's staff has reviewed and approved an analysis documenting that the groundwater level at the location of the facility will not rise more than one foot above an elevation of 920 feet above mean sea level and describing any design changes to the water storage reservoir or evaporation ponds which may be necessary to maintain such groundwater level or, alternately,
 - (b) the applicants have submitted and the Commission's staff has reviewed and approved an analysis demonstrating that the groundwater level at the location of the facility will remain at or below some other elevation, to be defined, and furthermore the applicants have submitted and the Commission's staff has reviewed and approved an analysis documenting that:
 - (i) soil liquefaction effects will not pose a hazard in the event that a Safe Shutdown Earthquake should occur at the location of the facility in conjunction with a groundwater level at said other elevation, to be defined, and
 - (ii) all other effects of a groundwater level at said other elevation, to be defined, such as the effects of hydrostatic groundwater pressure on structures, have been properly accounted for in the design of the facility.
4. This permit is subject to the limitation that a license authorizing operation of the facility will not be issued by the Commission unless (a) the applicants submit to the Commission the complete Final Safety Analysis Report, portions of which may be submitted and evaluated from time to time; (b) the Commission finds that the final design provides reasonable assurance that the health and safety of the public will not be endangered by the operation of the facility in accordance with procedures approved by it in connection with the issuance of said

license; (c) the Commission finds that operation of the facility will be in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements are satisfied; and (d) the applicants submit proof of financial protection and execute an indemnity agreement as required by Section 170 of the Act.

5. This permit is effective as of its date of issuance and shall expire on the latest completion date indicated in paragraph 3.A above.

FOR THE NUCLEAR REGULATORY COMMISSION

Original Signed by

Roger S. Boyd, Director
Division of Project Management
Office of Nuclear Reactor Regulation

Date of Issuance: MAY 25 1976

Since the previous concurrences, only the following changes have been made:
(1) *On pages 5 and 7, "applicant" was changed to "applicants."*
(2) *Environmental condition E.(5) was re-worded to conform to the board's initial decision. ELD (Steve Lewis) and EP (Bob Gilbert) have concurred in this change by phone.*
DP Allison 5/25/76

SEE PREVIOUS YELLOW FOR PREVIOUS CONCURRENCES

OFFICE ➤	DPM					
SURNAME ➤	RSBoyd:mt					
DATE ➤	5/25/76					

license; (c) the Commission finds that operation of the facility will be in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements are satisfied; and (d) the applicant submits proof of financial protection and executes an indemnity agreement as required by Section 170 of the Act.

5. This permit is effective as of its date of issuance and shall expire on the latest completion date indicated in paragraph 3.A above.

FOR THE NUCLEAR REGULATORY COMMISSION

Roger S. Boyd, Director
Division of Project Management
Office of Nuclear Reactor Regulation

Date of Issuance:

OELD Antitrust

4/4/76 JR

OFFICE ➤	DPM:LWR #3	DPM:LWR #3	ELD	EP	DPM:LWR/AD	DPM
SURNAME ➤	EI Goussourne:mt	DAI Fison/OParr	S H Lewis	RGilbert	RCD Simpson	RSBoyd
DATE ➤	4/19/76	4/22/76	5/4/76	5/13/76	5/19/76	4/ /76

ARIZONA PUBLIC SERVICE COMPANY
SALT RIVER PROJECT AGRICULTURAL IMPROVEMENT AND POWER DISTRICT
EL PASO ELECTRIC COMPANY
SOUTHERN CALIFORNIA EDISON COMPANY
PUBLIC SERVICE COMPANY OF NEW MEXICO
AND ARIZONA ELECTRIC POWER COOPERATIVE, INCORPORATED*

DOCKET NO. STN 50-530

PALO VERDE NUCLEAR GENERATING STATION, UNIT 3

CONSTRUCTION PERMIT

Construction Permit No. CPPR-143

1. The Nuclear Regulatory Commission (the Commission) having found that:
 - A. The application for construction permit complies with the requirements of the Atomic Energy Act of 1954, as amended, and the rules and regulations of the Commission, there is reasonable assurance that the activities authorized by the permit will be conducted in compliance with the rules and regulations of the Commission, and all required notifications to other agencies or bodies have been duly made;
 - B. The applicants have described the proposed design of the Palo Verde Nuclear Generating Station, Unit 3 (the facility), including, but not limited to, the principal architectural and engineering criteria for the design and have identified the major features or components incorporated therein for the protection of the health and safety of the public;
 - C. Such further technical or design information as may be required to complete the safety analysis, and which can reasonably be left for later consideration, will be supplied in the final safety analysis report;
 - D. Safety features or components, if any, which require research and development have been described by the applicants and the applicants have identified, and there will be conducted, a research and development program reasonably designed to resolve any safety questions associated with such features or components;

*Hereafter referred to as applicants

- E. On the basis of the foregoing, there is reasonable assurance that (i) such safety questions will be satisfactorily resolved at or before the latest date stated in the application for completion of construction of the proposed facility and (ii) taking into consideration the site criteria contained in 10 CFR Part 100, the proposed facility can be constructed and operated at the proposed location without undue risk to the health and safety of the public;
 - F. The applicants are technically qualified to design and construct the proposed facility;
 - G. The applicants are financially qualified to design and construct the proposed facility;
 - H. The issuance of a permit for the construction of the facility will not be inimical to the common defense and security or to the health and safety of the public; and
 - I. After weighing the environmental, economic, technical and other benefits of the facility against environmental and other costs and considering available alternatives, the issuance of a construction permit subject to the conditions for protection of the environment set forth herein is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Pursuant to Section 103 of the Atomic Energy Act of 1954, as amended (the Act), and Title 10, Chapter I, Code of Federal Regulations, Part 50, "Licensing of Production and Utilization Facilities," and pursuant to the Initial Decision of the Atomic Safety and Licensing Board, dated MAY 24 1976, the Commission hereby issues a construction permit to the applicants for a utilization facility designed to operate at 3800 megawatts thermal as described in the application and amendments thereto (the application) filed in this matter by the applicants and as more fully described in the evidence received at the public hearing upon that application. The facility, known as the Palo Verde Nuclear Generating Station, Unit 3 will be located on the applicants' site in Maricopa County, Arizona.

3. This permit shall be deemed to contain and be subject to the conditions specified in Section 50.54 and 50.55, of said regulations; is subject to all applicable provisions of the Act, and rules, regulations, and orders of the Commission now or hereafter in effect; and is subject to the conditions specified or incorporated below:
 - A. The earliest date for the completion of the facility is November 1, 1984 and the latest date for completion is November 1, 1986.
 - B. The facility shall be constructed and located at the site as described in the application, in Maricopa County, Arizona.
 - C. This construction permit authorizes the applicants to construct the facility described in the application and the hearing record, in accordance with the principal architectural and engineering criteria and environmental protection commitments set forth therein.
 - D. This facility is subject to the following antitrust conditions:
 - (1) In connection with the antitrust conditions the following definitions are used herein:
 - (a) "Bulk Power" means the electric power, and any attendant energy, supplied or made available at transmission or subtransmission voltage by one entity to another.
 - (b) "Entity" means a person, private or public corporation, a municipality, a cooperative, an association, a joint stock association or business trust owning, operating or proposing in good faith to own or operate equipment or facilities for the generation, transmission or distribution of electricity to or for the public as a utility.
 - (c) "Joint Applicant(s)" means the Arizona Public Service Company and the Salt River Project Agricultural Improvement and Power District.

(2) (a) Each joint applicant will transmit Bulk Power over its transmission system, between or among two or more Entities with which it is interconnected, or will be interconnected in the future, without restrictions on use or resale of the power so transmitted, provided that such services can reasonably be accommodated from a technical standpoint without impairing each joint applicant's reliability or its own use of its facilities.

(2) (b) Each joint applicant is obligated under this condition to transmit Bulk Power on the terms stated above, and in connection with each joint applicant's plan to construct new transmission facilities for its own use, to include in its planning and construction program sufficient transmission capacity for such Bulk Power transactions, provided that such applicant has received sufficient advance notice as may be necessary from a technical standpoint to accommodate the requirements of any requesting entity, and further provided that such entity(ies) are obligated as may be agreed (i) to share the capital, operating and maintenance costs of such new transmission facilities to the extent that additional costs burdens would be imposed on such joint applicant or (ii) to compensate the joint applicant fully for the use of its system.

(3) The foregoing shall be implemented in a manner consistent with the provisions of the Federal Power Act as applicable and all rates, charges or practices in connection therewith are to be subject to the approval of regulatory agencies having jurisdiction over them.

E. This facility is subject to the following conditions for the protection of the environment:

- (1) The applicants shall take the necessary mitigating actions, including adherence to their commitments summarized in Section 4.5.1, and additional staff requirements summarized in Section 4.5.2 of the Final Environmental Statement, during construction of the Station and associated transmission lines to avoid unnecessary adverse environmental impacts from construction activities.

- (2) The applicants shall establish a control program which shall include written procedures and instructions to control all construction activities as prescribed in the Final Environmental Statement and shall provide for periodic management audits to determine the adequacy of implementation of environmental conditions. The applicants shall maintain sufficient records to furnish evidence of compliance with all the environmental conditions in the Final Environmental Statement.
- (3) Before engaging in a construction activity not evaluated by the Commission, the applicants will prepare and record an environmental evaluation of such activity. When the evaluation indicates that such activity may result in a significant adverse environmental impact that was not evaluated, or that is significantly greater than that evaluated in the Final Environmental Statement, the applicants shall provide a written evaluation of such activities and obtain prior approval of the Director of Project Management for the activities.
- (4) If unexpected harmful effects or evidence of serious damage are detected during facility construction, the applicants shall provide to the staff an acceptable analysis of the problem and a plan of action to eliminate or significantly reduce the harmful effects or damage.
- (5) In addition to the monitoring procedures described in the Environmental Report, with amendments, the staff requirements and the suggested preoperational monitoring of the sewage plant effluent (Section 6.1.1.3) included in Section 6 of the Final Environmental Statement shall be followed.
- (6) When final transmission line and water pipeline corridor alignments are chosen, the applicants will be required to provide detailed description and analysis of the routes, prior to the initiation of construction for staff review and approval relating to route acceptability.

F. This facility is subject to the following condition for the protection of the public health and safety:

- (1) Neither construction of the water storage reservoir nor construction of the evaporation ponds shall be started until:

- (a) the applicants have submitted and the Commission's staff has reviewed and approved an analysis documenting that the groundwater level at the location of the facility will not rise more than one foot above an elevation of 920 feet above mean sea level and describing any design changes to the water storage reservoir or evaporation ponds which may be necessary to maintain such groundwater level or, alternately,
 - (b) the applicants have submitted and the Commission's staff has reviewed and approved an analysis demonstrating that the groundwater level at the location of the facility will remain at or below some other elevation, to be defined, and furthermore the applicants have submitted and the Commission's staff has reviewed and approved an analysis documenting that:
 - (i) soil liquefaction effects will not pose a hazard in the event that a Safe Shutdown Earthquake should occur at the location of the facility in conjunction with a groundwater level at said other elevation, to be defined, and
 - (ii) all other effects of a groundwater level at said other elevation, to be defined, such as the effects of hydrostatic groundwater pressure on structures, have been properly accounted for in the design of the facility.
4. This permit is subject to the limitation that a license authorizing operation of the facility will not be issued by the Commission unless (a) the applicants submit to the Commission the complete Final Safety Analysis Report, portions of which may be submitted and evaluated from time to time; (b) the Commission finds that the final design provides reasonable assurance that the health and safety of the public will not be endangered by the operation of the facility in accordance with procedures approved by it in connection with the issuance of said

license; (c) the Commission finds that operation of the facility will be in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements are satisfied; and (d) the applicants submit proof of financial protection and execute an indemnity agreement as required by Section 170 of the Act.

5. This permit is effective as of its date of issuance and shall expire on the latest completion date indicated in paragraph 3.A above.

FOR THE NUCLEAR REGULATORY COMMISSION

Original Signed by

Roger S. Boyd, Director
Division of Project Management
Office of Nuclear Reactor Regulation

Date of Issuance: MAY 25 1976

Since the previous concurrences, only the following changes have been made:

- (1) *On pages 5 and 7, "applicant" was changed to "applicants."*
- (2) *Environmental condition E.(5) has been re-worded to conform to the board's initial decision. ELD (Steve Lewis) and EP (Bob Gilbert) have concurred in this change by phone.*
- DP Allison 5/25/76*

SEE PREVIOUS YELLOW FOR PREVIOUS CONCURRENCES

OFFICE ➤	DPM					
SURNAME ➤	RSBoyd:mt					
DATE ➤	5/25/76					

license; (c) the Commission finds that operation of the facility will be in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements are satisfied; and (d) the applicant submits proof of financial protection and executes an indemnity agreement as required by Section 170 of the Act.

5. This permit is effective as of its date of issuance and shall expire on the latest completion date indicated in paragraph 3.A above.

FOR THE NUCLEAR REGULATORY COMMISSION

Roger S. Boyd, Director
Division of Project Management
Office of Nuclear Reactor Regulation

Date of Issuance:

OELD Antitrust

5/4/76 JR

OFFICE	DPM:LWR #3	DPM:LWR #3	ELD	EP	DPM:AD/LWR	DPM
SURNAME	ICoult	DA111son/OParr	5/4/76	RGilbert	RCD	RSBoyd
DATE	4/19/76	4/23/76	5/4/76	5/13/76	5/19/76	4/ /76

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NOS. STN 50-528; STN 50-529; STN 50-530

ARIZONA PUBLIC SERVICE COMPANY
SALT RIVER PROJECT AGRICULTURAL IMPROVEMENT AND POWER DISTRICT
EL PASO ELECTRIC COMPANY
SOUTHERN CALIFORNIA EDISON COMPANY
PUBLIC SERVICE COMPANY OF NEW MEXICO
AND ARIZONA ELECTRIC POWER COOPERATIVE, INCORPORATED

PALO VERDE NUCLEAR GENERATING STATION, UNITS 1, 2 AND 3

NOTICE OF ISSUANCE OF CONSTRUCTION PERMIT(S)

Notice is hereby given that, pursuant to the Initial Decision of the Atomic Safety and Licensing Board, dated May 24, 1976, the Nuclear Regulatory Commission (the Commission) has issued Construction Permits Nos. CPPR-141; CPPR-142 and CPPR-143 to the Arizona Public Service Company, Salt River Project Agricultural Improvement and Power District, El Paso Electric Company, Southern California Edison Company, Public Service Company of New Mexico and Arizona Electric Power Cooperative, Incorporated for construction of three pressurized-water nuclear reactors at the applicants' site in Maricopa County, Arizona. The proposed reactors which are known as the Palo Verde Nuclear Generating Station, Units 1, 2 and 3, are each designed for a rated power of 3800 megawatts thermal with a net electrical output of 1270 megawatts.

The Initial Decision is subject to review by an Atomic Safety and Licensing Appeal Board prior to its becoming final. Any decision or action taken by an Atomic Safety and Licensing Appeal Board in connection with the Initial Decision may be reviewed by the Commission.

The Commission has made appropriate findings as required by the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the construction permits. The application for the construction permits complies with the standards and requirements of the Act and the Commission's rules and regulations.

The construction permits are effective as of their date of issuance. The earliest date for the completion of Unit 1 is June 1, 1981 and the latest date for completion is November 1, 1982; the earliest date for completion of Unit 2 is February 1, 1983 and the latest date for completion is November 1, 1984; the earliest date for completion of Unit 3 is November 1, 1984 and the latest date for completion is November 1, 1986. Each permit shall expire on the latest date for completion of the respective facility for which it is issued.

A copy of (1) the Initial Decision, dated May 24, 1976; (2) Construction Permits Nos. CPPR-141; CPPR-142; CPPR-143; (3) the report of the Advisory Committee on Reactor Safeguards, dated November 12, 1975; (4) the Office of Nuclear Reactor Regulation's Safety Evaluation dated October 1975 and supplements thereto; (5) the Preliminary Safety Analysis Report and amendments thereto; (6) the applicant's Environmental Report dated July 1974 and supplements thereto; (7) the Draft Environmental Statement dated April 1975; and (8) the Final Environmental Statement dated September 1975 and Final Supplement dated February 1976, are

available for public inspection at the Commission's Public Document Room at 1717 H Street, N. W., Washington, D. C. and at the Phoenix Public Library, Science & Industry Section, 12 East McDowell Road, Phoenix, Arizona. A copy of the construction permits may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Project Management.

Copies of the Safety Evaluation and Supplements 1 and 2 thereto (Document No. NUREG-75/098; NUREG-75/098, Supplement No. 1; and NUREG-0059, Supplement No. 2) and the Final Environmental Statement and Final Supplement (Document No. NUREG-75/078 and NUREG-0036) may be purchased, at current rates, from the National Technical Information Service, Springfield, Virginia 22161.

Dated at Bethesda, Maryland, this **25** day of May, 1976.

FOR THE NUCLEAR REGULATORY COMMISSION

Original Signed by

Olan D. Parr, Chief
Light Water Reactors
Branch No. 3
Division of Project Management

MAY 25 1976

Docket Nos. STN 50-528
STN 50-529
and STN 50-530

Distribution

Docket File

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LWR #3 File

ELD

RCDeYoung

ODParr

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EIGoulbourne (2)

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NDube, MIPC

JSaltzman, AIG

MJinks, OA (8)

WMiller, ADM

ACRS (16)

HDenton, DSE

VAMoore, DSE

RHVollmer, DSE

MErnst, DSE

WPGammill, DSE

RHeineman, SS

RRMaccary, SS

DFRoss, SS

RLTedesco, SS

ATOalston, AIG

BScharf, OA (15)

DSkovholt

EHughes

RGilbert, EP

MDuncan, EP

Mr. E. E. Van Brunt, Jr.
Vice President, Nuclear Services
Arizona Public Service Company
P. O. Box 21666
Phoenix, Arizona 85036

bcc: JRBuchanan, NSIC
TRABernathy, TIC
ARosenthal, ASLAB
NHGoodrich, ASLBP

Dear Mr. Van Brunt:

The Nuclear Regulatory Commission has issued Construction Permits Nos. CPPR-141, CPPR-142 and CPPR-143 to you for construction of three pressurized water reactors to be known as the Palo Verde Nuclear Generating Station, Units 1, 2 and 3. The construction permits have been issued pursuant to an Initial Decision by the Atomic Safety and Licensing Board, a copy of which has already been sent to you.

Copies of the construction permits, and the related notice, which has been forwarded to the Office of the Federal Register for publication, are enclosed.

Sincerely,

Original Signed by

Olan D. Parr, Chief
Light Water Reactors
Branch No. 3
Division of Project Management

Enclosures:

1. Construction Permits Nos.
CPPR-141, CPPR-142 and CPPR-143
2. Federal Register Notice

cc: See page 2

OFFICE ➤	DPM:LWR #3	DPM:LWR #3	DPM:LWR #3			
SURNAME	EIGoulbourne:mt	Dallison	ODParr			
DATE ➤	4/ /76	4/ /76	4/ /76			

Mr. E. E. Van Brunt, Jr.

- 2 -

cc: Arthur C. Cehr, Esq.
Snell & Wilmer
3100 Valley Center
Phoenix, Arizona 85073

Mr. Carmine F. Cardamone, Jr.
1415 North Third Avenue
Tucson, Arizona 85705

Mr. Donald C. Gilbert, Executive Director
Arizona Atomic Energy Commission
First Floor - Commerce Building
1601 Jefferson Street
Phoenix, Arizona 85007

Mr. Tom Jones, Region IX
Environmental Protection Agency
100 California Street
San Francisco, California 94111

Mr. Bob Corbin, Chairman
Maricopa County Board of Supervisors
111 South Third Avenue
Phoenix, Arizona 85003

Andrew W. Bettwy, Esq.
Assistant Attorney General
159 State Capitol
1700 West Washington
Phoenix, Arizona 85007

Arizona Clean Energy Coalition
745 East 5th Street
Tucson, Arizona 85715

David N. Barry, Esq., Senior Counsel
Charles R. Rocher, Esq., Assistant Counsel
Southern California Edison Company
P. O. Box 800
Rosemead, California 91770

Mr. Tres English
129 South Irving
Tucson, Arizona 85711

OFFICE ➤						
SURNAME ➤						
DATE ➤						

MAY 25 1976

Docket Nos. STN 50-528
STN 50-529
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MDuncan, EP

Mr. E. E. Van Brunt, Jr.

Vice President, Nuclear Services

Arizona Public Service Company bcc: JRBuchanan, NSIC

P. O. Box 21666

Phoenix, Arizona 85036

TBAbernathy, TIC

ARosenthal, ASLAB

NHGoodrich, ASLBP

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Copies of the construction permits, and the related notice, which has been forwarded to the Office of the Federal Register for publication, are enclosed.

Sincerely,

Original Signed by

Olan D. Parr, Chief
Light Water Reactors

Branch No. 3
Division of Project Management

Enclosures:

1. Construction Permits Nos.
CPPR-141, CPPR-142 and CPPR-143
2. Federal Register Notice

cc: See page 2

OFFICE ➤	DPM:LWR #3	DPM:LWR #3	DPM:LWR #3			
SURNAME ➤	EIGoulbourne:mt	Dallison	ODParr			
DATE ➤	4/ /76	4/ /76	4/ /76			

Mr. E. E. Van Brunt, Jr.

- 2 -

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3100 Valley Center
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1415 North Third Avenue
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