

Docket Nos. 50-445
and 50-446

DEC 19 1974

Distribution:

AEC PDR	ABraitman
Local PDR	SKari
Docket File	WMiller
LWR 1-1 File	DMuller
OGC	FMiraglia
RO (3)	RPollard
NDube	JLee (2)
MJinks (w/2 encls.)	BScharf (w/25 Encl. 1&2)
RCDeYoung	LWR1 Br. Chiefs

Mr. Perry G. Brittain
Executive Vice President
Texas Utilities Generating Company
1506 Commerce Street
Dallas, Texas 75201

Dear Mr. Brittain:

Construction Permits Nos. CPPR-126 and CPPR-127 are enclosed, together with a copy of a related notice which has been forwarded to the Office of the Federal Register for publication.

The construction permits authorize Texas Utilities Generating Company, et al to construct the pressurized water reactors, designated as Comanche Peak Steam Electric Station, Units 1 and 2, at the applicants' site in Somervell County, Texas.

Sincerely,

Original signed by
D. B. Vassallo

D. B. Vassallo, Chief
Light Water Reactors Project Branch 1-1
Directorate of Licensing

Enclosures:

1. Construction Permit No. CPPR-126
2. Construction Permit No. CPPR-127
3. Federal Register Notice

cc: See page 2

bcc: J. R. Buchanan, ORNL
T. B. Abernathy, DTIE
A. Rosenthal, ASLAB
N. H. Goodrich, ASLBP

(Note: Concurrence below indicates approval
of Construction Permits) LP

OFFICE	LWR 1-1	LWR 1-1	OGC	LWR 1-1	EP:AD	AD: LWR 1
SURNAME	JLee:ms	BPollard		DBVassallo	DMuller	RDeYoung
DATE	12/ /74	12/ /74	1 / /74	/ /	/ /	/ /

cc: Mr. Troy B. Conner, Jr.
Conner, Hadlock & Knotts
1747 Pennsylvania Avenue
Washington, D. C. 20006

Mr. Robert W. Caudle
Project Manager, Nuclear Plants
Texas Utilities Generating Company
1506 Commerce Street
Dallas, Texas 75201

Mr. R. E. Hersperger
Gibbs & Hill, Inc.
393 Seventh Avenue
New York, New York 10001

Mr. B. A. Maguire
Westinghouse Electric Corp.
P. O. Box 355
Pittsburgh, Pennsylvania 15230

Mr. Jim W. Mitchell
Dames & Moore
Suite 200
2020 North Loop West
Houston, Texas 77018

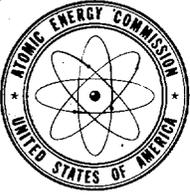
Honorable Robert L. Pendergraft
Assistant Attorney General
P. O. Box 12548, Capitol Station
Austin, Texas 78711

Mr. Walter Tibbits, Acting Director
Division of Planning Coordination
Office of the Governor
P. O. Box 12428, Capitol Station
Austin, Texas 78711

Honorable Temple Summers
County Judge
Somervell County
Glen Rose, Texas 76043

Mr. Clinton Spotts
Environmental Protection Agency
Region VI Office
1600 Patterson Street
Dallas, Texas

Chief, TIRB (2 copies)
Technology Assessment Division
Office of Radiation Programs
U. S. Environmental Protection
Agency
Room 647A East Tower
Waterside Mall
401 M Street, S. W.
Washington, D. C. 20460



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

TEXAS UTILITIES GENERATING COMPANY
DALLAS POWER AND LIGHT COMPANY
TEXAS ELECTRIC SERVICE COMPANY
TEXAS POWER AND LIGHT COMPANY

DOCKET NO. 50-445

COMANCHE PEAK STEAM ELECTRIC STATION, UNIT NO. 1

CONSTRUCTION PERMIT

Construction Permit No. CPPR-126

1. The Atomic Energy 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 (the Act), 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 Texas Utilities Generating Company, Dallas Power and Light Company, Texas Electric Service Company, and Texas Power and Light Company (the Applicants) have described the proposed design of the Comanche Peak Steam Electric Station, Unit No. 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;

- 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 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 Appendix D of 10 CFR Part 50 of the Commission's regulations and all applicable requirements of said Appendix D have been satisfied.
2. Pursuant to Section 103 of the Atomic Energy Act of 1954, as amended, and Title 10, Chapter I, Code of Federal Regulations, Part 50, "Licensing of Production and Utilization Facilities," and pursuant to the Initial Decisions of the Atomic Safety and Licensing Board, dated October 11, 1974, and December 12, 1974, the Atomic Energy Commission hereby issues a construction permit to the Applicants for a utilization facility designed to operate at 3411 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 Comanche Peak Steam Electric Station, Unit No. 1, will be located on the Applicants' site in Somervell County, Texas.
3. This permit shall be deemed to contain and be subject to the conditions specified in Sections 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 August 1, 1979, and the latest date for completion is August 1, 1981.

- B. The facility shall be constructed and located at the site as described in the application, in Somervell County, Texas.
- 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. (1) The following definitions apply to this paragraph 3.D:
- (a) "Applicants" means severally and jointly Texas Utilities Generating Company, Dallas Power and Light Company, Texas Electric Service Company, Texas Power and Light Company, Texas Utilities Company and each other subsidiary, affiliate or successor company engaged in the generation, transmission and/or the distribution of electric power in the State of Texas.
 - (b) "North Texas Area" means the following Texas counties: Anderson, Andrews, Angelina, Archer, Bastrop, Baylor, Bell, Borden, Bosque, Brown, Burnet, Cherokee, Clay, Coke, Collin, Comanche, Cooke, Coryell, Crane, Culberson, Dallas, Dawson, Delta, Denton, Eastland, Ector, Ellis, Erath, Falls, Fannin, Fisher, Freestone, Gaines, Glasscock, Grayson, Henderson, Hill, Hood, Hopkins, Houston, Howard, Hunt, Jack, Johnson, Kaufman, Kent, Lamar, Lampasas, Leon, Limestone, Loving, Lynn, Martin, McLennan, Midland, Milam, Mitchell, Montague, Nacogdoches, Navarro, Nolan, Palo Pinto, Parker, Pecos, Rains, Reagan, Red River, Reeves, Rockwall, Rusk, Scurry, Schackelford, Smith, Somervell, Stephens, Sterling, Tarrant, Terry, Tom Green, Travis, Upton, Van Zandt, Ward, Wichita, Wilbarger, Williamson, Winkler, Wise, Wood, and Young.
 - (c) "Entity" means a person, a private or public corporation, a governmental agency or authority, a municipality, a cooperative, or an association owning or operating or proposing in good faith to own or operate facilities for generation of electric power and energy: Provided, however, that as used in paragraphs 3.D.(2)(i) and 3.D.(2)(j), "entity" means a person, a private or public corporation, a governmental agency or authority, a municipality, a cooperative, or an association owning or operating or proposing in good faith to own or operate facilities for generation, transmission and/or distribution of electric power and energy.
 - (d) "Entity in the North Texas Area" means an entity which owns or operates facilities for the generation, transmission and/or

distribution of electric power in any area within the North Texas Area.

- (e) "Bulk Power" means the electric power and attendant energy supplied or made available at transmission or subtransmission voltage.
 - (f) "Costs" mean all appropriate operating and maintenance expenses and all ownership costs where applicable.
- (2) The Applicants are subject to the following antitrust conditions:
- (a) The Applicants shall afford an opportunity to participate in the Comanche Peak Steam Electric Station, Units 1 and 2 for the term of the instant license, or any extension or renewal thereof, to any entity(ies) in the North Texas Area making a timely request therefor, through a reasonable ownership interest in such unit(s) on reasonable terms and conditions and on a basis that will fully compensate the Applicants for their costs. It is understood that any request received prior to December 1, 1973, shall be deemed to be timely. In connection with such participation, the Applicants also will interconnect with and offer transmission service as may be required for delivery of such power to such entity(ies) at a point or points on the Applicants' system on a basis that will fully compensate the Applicants for their costs, including a reasonable return on investment.
 - (b) The Applicants will support requests by entities in the North Texas Area for membership in the Texas Interconnected System (TIS), including requests by any such entity having a smaller peak load than any of the present TIS members so long as such entity has sufficient generation capacity to make a reasonable contribution to the reliability of bulk power supply. The Applicants will also support requests by qualified entities in the North Texas Area for membership in any other electric utility planning organization or power pool of which the Applicants are members (other than one involving only the Applicants).
 - (c) The Applicants will interconnect with and coordinate reserves through the sale and purchase of emergency and/or scheduled maintenance bulk power with any entity(ies) in the North Texas Area on terms that will provide for the Applicants' costs, including a reasonable return on investment, in connection therewith and allow such entity(ies) full access to the benefits of such reserve coordination.

- (d) Emergency service and/or scheduled maintenance service to be provided by each party shall be furnished to the fullest extent available from the supplying party and desired by the party in need. The Applicants and each entity(ies) shall provide to the other emergency service and/or scheduled maintenance service if and when available to the extent they can do so without impairing service to their customers including other electric systems to whom they have firm commitments.
- (e) The Applicants and the other party(ies) to a reserve sharing arrangement shall from time to time jointly establish the minimum reserves to be installed and/or provided under contractual arrangements as necessary to maintain in total a reserve margin sufficient to provide adequate reliability of power supply to the interconnected systems of the parties in accordance with good industry practice as developed in the area. Unless otherwise agreed upon, minimum reserve requirements shall be calculated as a percentage of each party's estimated net peak load demand (taking into account firm sales and firm purchases). No party to the arrangement shall be required to maintain greater reserves than the percentage which results from the aforesaid calculation.
- (f) The parties to such a reserve sharing arrangement shall provide such amounts of spinning reserves as may be equitable and adequate to avoid the imposition of unreasonable demands on the other party(ies) in meeting the normal contingencies of operating its (their) system(s). However, in no circumstances shall such reserve requirement exceed the installed reserve requirement.
- (g) Interconnections will not be limited to low voltages when higher voltages are available from the Applicants' installed facilities in the area where interconnection is desired, when the proposed arrangement is found to be technically and economically feasible. Control and telemetering facilities shall be provided as required for safe and prudent operation of the interconnected systems.
- (h) Interconnection and coordination agreements shall not embody any restrictive provisions pertaining to intersystem coordination. Good industry practice as developed in the area from time to time (if not unreasonably restrictive) will satisfy this provision.

- (i) The Applicants shall work with other entities to facilitate the exchange of bulk power by transmission over the Applicants' transmission facilities between or among two or more entities in the North Texas Area with which the Applicants are interconnected; and between any such entity(ies) and any entity(ies) engaging in bulk power supply outside the North Texas Area between whose facilities the Applicants' transmission lines and other transmission lines would form a continuous electrical path, provided that (i) permission to utilize such other transmission lines has been obtained by the proponent of the arrangement, and (ii) the arrangements reasonably can be accommodated from a functional and technical standpoint. Such transmission shall be on terms that fully compensate the Applicants for their costs including a reasonable return on investment. Any entity(ies) requesting such transmission arrangements shall give reasonable advance notice of its (their) schedule and requirements. The Applicants shall not be required to enter into any arrangement which would impair system reliability or emergency transmission capacity, it being recognized that while some transmission may be operated fully loaded, other transmission may be for emergency use and operated either unloaded or partially loaded. (The foregoing applies to any entity(ies) to which the Applicants may be interconnected in the future as well as those to which they are now interconnected.)
- (j) The Applicants shall include in their planning and construction programs sufficient transmission capacity as required for the transactions referred to in paragraph (i), provided any entity(ies) in the North Texas Area gives the Applicants sufficient advance notice as may be necessary to accommodate its (their) requirements from a functional and technical standpoint and that such entity(ies) fully compensates the Applicants for their costs including a reasonable return on investment. The Applicants shall not be required to construct transmission facilities if they find construction of such facilities infeasible, or if their costs in connection therewith would exceed their benefits therefrom, or if they find such would impair system reliability or emergency transmission capacity.
- (k) The foregoing conditions shall be implemented in a manner consistent with applicable Federal, state and local statutes and regulations. The obligations hereunder shall not require the Applicants to alter their established policy of conducting their operations exclusively on an intra-state basis (except to the extent permitted by exemptions

contained in the Federal Power Act), nor shall they be interpreted to reflect any view on the part of the governmental agencies involved in the licensing process as to the legality or propriety of said policy.

- 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 those summarized in Section 4.5 of the Final Environmental Statement, during construction of the facility and associated transmission lines to avoid unnecessary adverse environmental impacts from construction activities.
 - (2) A control program shall be established by the Applicants to provide for a periodic review of all construction activities to assure that those activities conform to the environmental conditions set forth in this permit;
 - (3) Before engaging in a construction activity which 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 written notification to the Director of Licensing.
 - (4) If unexpected harmful effects or evidence of irreversible damage are detected during facility construction, the Applicants shall provide to the Regulatory staff an acceptable analysis of the problem and a plan of action to eliminate or significantly reduce the harmful effects or damage.
 - (5) The Applicants shall modify their monitoring programs in accordance with Regulatory staff recommendations given in Section 6 of the Final Environmental Statement and complete the preoperational environmental studies. The results of these monitoring programs shall be submitted as part of the Applicants' Environmental Report - Operating License Stage.
 - (6) During the design phase of the facility, the Applicants shall evaluate alternative measures that will mitigate the potential adverse effects of high intake velocities at the Squaw Creek Reservoir (SCR) intake structures. These measures shall include, but not be limited to, (a) an evaluation of fish diversion facilities and fish return mechanisms; and (b) provisions for adding such devices to the SCR intakes structures if operational monitoring programs indicate adverse impingement effects are occurring. The results of these evaluations shall be submitted

as part of the Applicants' Environmental Report - Operating License Stage.

- (7) The Applicants shall design the facility to control the addition of chlorine to the circulating water system such that the concentration of total residual chlorine at the point of discharge to Squaw Creek Reservoir is 0.1 ppm or the minimum practicable level demonstrated by the Applicants as being necessary. The minimum practicable level of chlorination necessary shall be determined by the Applicants, prior to the initiation of power operation, through a study program. This study shall include an evaluation of the effects of residual chlorine releases on Squaw Creek Reservoir; a demonstration of the minimum total residual chlorine level necessary for efficient operation of the station and an evaluation of the monitoring program to be used to determine total residual chlorine and its effects. Alternative methods of reducing chlorine residuals shall also be investigated and these shall include but not be limited to optimizing chlorine dosage, modifying condenser design to permit sequential treatment of sections of the condensers, and optimizing the chlorination schedule to coincide with periods of low condenser flow. The results of this study program shall be submitted as part of the Applicants' Environmental Report - Operating License Stage.
 - (8) The rate of groundwater withdrawal during construction of the Comanche Peak Steam Electric Station, Units 1 and 2 shall not exceed 250 gpm. Withdrawal of groundwater shall be reduced to an annual average of 30 gpm at the end of five years. During this period, the Applicants shall evaluate alternative actions that will mitigate potential adverse effects resulting from the facility's groundwater use. Such actions or measures shall include but not be limited to using an alternate source of water for facility operation, monitoring neighboring wells to determine effects of the facility's use of groundwater during construction and further analysis of regional data to determine whether groundwater mining is occurring in the vicinity of the site. The results of these evaluations by the Applicants shall be submitted as part of the Applicants' Environmental Report - Operating License Stage.
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 of said Part 51 were satisfied; and (d) the Applicants submit proof of financial protection and the execution of 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 ATOMIC ENERGY COMMISSION

A. Giambusso

A. Giambusso, Deputy Director
for Reactor Projects
Directorate of Licensing -
Regulation

Date of Issuance: December 19, 1974



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

TEXAS UTILITIES GENERATING COMPANY
DALLAS POWER AND LIGHT COMPANY
TEXAS ELECTRIC SERVICE COMPANY
TEXAS POWER AND LIGHT COMPANY

DOCKET NO. 50-446

COMANCHE PEAK STEAM ELECTRIC STATION, UNIT NO. 2

CONSTRUCTION PERMIT

Construction Permit No. CPPR-127

1. The Atomic Energy 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 (the Act), 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 Texas Utilities Generating Company, Dallas Power and Light Company, Texas Electric Service Company, and Texas Power and Light Company (the Applicants) have described the proposed design of the Comanche Peak Steam Electric Station, Unit No. 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;

- 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 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 Appendix D of 10 CFR Part 50 of the Commission's regulations and all applicable requirements of said Appendix D have been satisfied.
2. Pursuant to Section 103 of the Atomic Energy Act of 1954, as amended, and Title 10, Chapter I, Code of Federal Regulations, Part 50, "Licensing of Production and Utilization Facilities," and pursuant to the Initial Decisions of the Atomic Safety and Licensing Board, dated October 11, 1974, and December 12, 1974, the Atomic Energy Commission hereby issues a construction permit to the Applicants for a utilization facility designed to operate at 3411 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 Comanche Peak Steam Electric Station, Unit No. 2, will be located on the Applicants' site in Somervell County, Texas.
3. This permit shall be deemed to contain and be subject to the conditions specified in Sections 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 August 1, 1981, and the latest date for completion is August 1, 1983.

- B. The facility shall be constructed and located at the site as described in the application, in Somervell County, Texas.
- 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. (1) The following definitions apply to this paragraph 3.D:
- (a) "Applicants" means severally and jointly Texas Utilities Generating Company, Dallas Power and Light Company, Texas Electric Service Company, Texas Power and Light Company, Texas Utilities Company and each other subsidiary, affiliate or successor company engaged in the generation, transmission and/or the distribution of electric power in the State of Texas.
 - (b) "North Texas Area" means the following Texas counties: Anderson, Andrews, Angelina, Archer, Bastrop, Baylor, Bell, Borden, Bosque, Brown, Burnet, Cherokee, Clay, Coke, Collin, Comanche, Cooke, Coryell, Crane, Culberson, Dallas, Dawson, Delta, Denton, Eastland, Ector, Ellis, Erath, Falls, Fannin, Fisher, Freestone, Gaines, Glasscock, Grayson, Henderson, Hill, Hood, Hopkins, Houston, Howard, Hunt, Jack, Johnson, Kaufman, Kent, Lamar, Lampasas, Leon, Limestone, Loving, Lynn, Martin, McLennan, Midland, Milam, Mitchell, Montague, Nacogdoches, Navarro, Nolan, Palo Pinto, Parker, Pecos, Rains, Reagan, Red River, Reeves, Rockwall, Rusk, Scurry, Schackelford, Smith, Somervell, Stephens, Sterling, Tarrant, Terry, Tom Green, Travis, Upton, Van Zandt, Ward, Wichita, Wilbarger, Williamson, Winkler, Wise, Wood, and Young.
 - (c) "Entity" means a person, a private or public corporation, a governmental agency or authority, a municipality, a cooperative, or an association owning or operating or proposing in good faith to own or operate facilities for generation of electric power and energy: Provided, however, that as used in paragraphs 3.D.(2)(i) and 3.D.(2)(j), "entity" means a person, a private or public corporation, a governmental agency or authority, a municipality, a cooperative, or an association owning or operating or proposing in good faith to own or operate facilities for generation, transmission and/or distribution of electric power and energy.
 - (d) "Entity in the North Texas Area" means an entity which owns or operates facilities for the generation, transmission and/or

distribution of electric power in any area within the North Texas Area.

- (e) "Bulk Power" means the electric power and attendant energy supplied or made available at transmission or subtransmission voltage.
- (f) "Costs" mean all appropriate operating and maintenance expenses and all ownership costs where applicable.

(2) The Applicants are subject to the following antitrust conditions:

- (a) The Applicants shall afford an opportunity to participate in the Comanche Peak Steam Electric Station, Units 1 and 2 for the term of the instant license, or any extension or renewal thereof, to any entity(ies) in the North Texas Area making a timely request therefor, through a reasonable ownership interest in such unit(s) on reasonable terms and conditions and on a basis that will fully compensate the Applicants for their costs. It is understood that any request received prior to December 1, 1973, shall be deemed to be timely. In connection with such participation, the Applicants also will interconnect with and offer transmission service as may be required for delivery of such power to such entity(ies) at a point or points on the Applicants' system on a basis that will fully compensate the Applicants for their costs, including a reasonable return on investment.
- (b) The Applicants will support requests by entities in the North Texas Area for membership in the Texas Interconnected System (TIS), including requests by any such entity having a smaller peak load than any of the present TIS members so long as such entity has sufficient generation capacity to make a reasonable contribution to the reliability of bulk power supply. The Applicants will also support requests by qualified entities in the North Texas Area for membership in any other electric utility planning organization or power pool of which the Applicants are members (other than one involving only the Applicants).
- (c) The Applicants will interconnect with and coordinate reserves through the sale and purchase of emergency and/or scheduled maintenance bulk power with any entity(ies) in the North Texas Area on terms that will provide for the Applicants' costs, including a reasonable return on investment, in connection therewith and allow such entity(ies) full access to the benefits of such reserve coordination.

- (d) Emergency service and/or scheduled maintenance service to be provided by each party shall be furnished to the fullest extent available from the supplying party and desired by the party in need. The Applicants and each entity(ies) shall provide to the other emergency service and/or scheduled maintenance service if and when available to the extent they can do so without impairing service to their customers including other electric systems to whom they have firm commitments.
- (e) The Applicants and the other party(ies) to a reserve sharing arrangement shall from time to time jointly establish the minimum reserves to be installed and/or provided under contractual arrangements as necessary to maintain in total a reserve margin sufficient to provide adequate reliability of power supply to the interconnected systems of the parties in accordance with good industry practice as developed in the area. Unless otherwise agreed upon, minimum reserve requirements shall be calculated as a percentage of each party's estimated net peak load demand (taking into account firm sales and firm purchases). No party to the arrangement shall be required to maintain greater reserves than the percentage which results from the aforesaid calculation.
- (f) The parties to such a reserve sharing arrangement shall provide such amounts of spinning reserves as may be equitable and adequate to avoid the imposition of unreasonable demands on the other party(ies) in meeting the normal contingencies of operating its (their) system(s). However, in no circumstances shall such reserve requirement exceed the installed reserve requirement.
- (g) Interconnections will not be limited to low voltages when higher voltages are available from the Applicants' installed facilities in the area where interconnection is desired, when the proposed arrangement is found to be technically and economically feasible. Control and telemetering facilities shall be provided as required for safe and prudent operation of the interconnected systems.
- (h) Interconnection and coordination agreements shall not embody any restrictive provisions pertaining to intersystem coordination. Good industry practice as developed in the area from time to time (if not unreasonably restrictive) will satisfy this provision.

- (i) The Applicants shall work with other entities to facilitate the exchange of bulk power by transmission over the Applicants' transmission facilities between or among two or more entities in the North Texas Area with which the Applicants are interconnected; and between any such entity(ies) and any entity(ies) engaging in bulk power supply outside the North Texas Area between whose facilities the Applicants' transmission lines and other transmission lines would form a continuous electrical path, provided that (i) permission to utilize such other transmission lines has been obtained by the proponent of the arrangement, and (ii) the arrangements reasonably can be accommodated from a functional and technical standpoint. Such transmission shall be on terms that fully compensate the Applicants for their costs including a reasonable return on investment. Any entity(ies) requesting such transmission arrangements shall give reasonable advance notice of its (their) schedule and requirements. The Applicants shall not be required to enter into any arrangement which would impair system reliability or emergency transmission capacity, it being recognized that while some transmission may be operated fully loaded, other transmission may be for emergency use and operated either unloaded or partially loaded. (The foregoing applies to any entity(ies) to which the Applicants may be interconnected in the future as well as those to which they are now interconnected.)
- (j) The Applicants shall include in their planning and construction programs sufficient transmission capacity as required for the transactions referred to in paragraph (i), provided any entity(ies) in the North Texas Area gives the Applicants sufficient advance notice as may be necessary to accommodate its (their) requirements from a functional and technical standpoint and that such entity(ies) fully compensates the Applicants for their costs including a reasonable return on investment. The Applicants shall not be required to construct transmission facilities if they find construction of such facilities infeasible, or if their costs in connection therewith would exceed their benefits therefrom, or if they find such would impair system reliability or emergency transmission capacity.
- (k) The foregoing conditions shall be implemented in a manner consistent with applicable Federal, state and local statutes and regulations. The obligations hereunder shall not require the Applicants to alter their established policy of conducting their operations exclusively on an intra-state basis (except to the extent permitted by exemptions

contained in the Federal Power Act), nor shall they be interpreted to reflect any view on the part of the governmental agencies involved in the licensing process as to the legality or propriety of said policy.

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 those summarized in Section 4.5 of the Final Environmental Statement, during construction of the facility and associated transmission lines to avoid unnecessary adverse environmental impacts from construction activities.
- (2) A control program shall be established by the Applicants to provide for a periodic review of all construction activities to assure that those activities conform to the environmental conditions set forth in this permit.
- (3) Before engaging in a construction activity which 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 written notification to the Director of Licensing.
- (4) If unexpected harmful effects or evidence of irreversible damage are detected during facility construction, the Applicants shall provide to the Regulatory staff an acceptable analysis of the problem and a plan of action to eliminate or significantly reduce the harmful effects or damage.
- (5) The Applicants shall modify their monitoring programs in accordance with Regulatory staff recommendations given in Section 6 of the Final Environmental Statement and complete the preoperational environmental studies. The results of these monitoring programs shall be submitted as part of the Applicants' Environmental Report - Operating License Stage.
- (6) During the design phase of the facility, the Applicants shall evaluate alternative measures that will mitigate the potential adverse effects of high intake velocities at the Squaw Creek Reservoir (SCR) intake structures. These measures shall include, but not be limited to, (a) an evaluation of fish diversion facilities and fish return mechanisms; and (b) provisions for adding such devices to the SCR intakes structures if operational monitoring programs indicate adverse impingement effects are occurring. The results of these evaluations shall be submitted

as part of the Applicants' Environmental Report - Operating License Stage.

(7) The Applicants shall design the facility to control the addition of chlorine to the circulating water system such that the concentration of total residual chlorine at the point of discharge to Squaw Creek Reservoir is 0.1 ppm or the minimum practicable level demonstrated by the Applicants as being necessary. The minimum practicable level of chlorination necessary shall be determined by the Applicants, prior to the initiation of power operation, through a study program. This study shall include an evaluation of the effects of residual chlorine releases on Squaw Creek Reservoir; a demonstration of the minimum total residual chlorine level necessary for efficient operation of the station and an evaluation of the monitoring program to be used to determine total residual chlorine and its effects. Alternative methods of reducing chlorine residuals shall also be investigated and these shall include but not be limited to optimizing chlorine dosage, modifying condenser design to permit sequential treatment of sections of the condensers, and optimizing the chlorination schedule to coincide with periods of low condenser flow. The results of this study program shall be submitted as part of the Applicants' Environmental Report - Operating License Stage.

(8) The rate of groundwater withdrawal during construction of the Comanche Peak Steam Electric Station, Units 1 and 2 shall not exceed 250 gpm. Withdrawal of groundwater shall be reduced to an annual average of 30 gpm at the end of five years. During this period, the Applicants shall evaluate alternative actions that will mitigate potential adverse effects resulting from the facility's groundwater use. Such actions or measures shall include but not be limited to using an alternate source of water for facility operation, monitoring neighboring wells to determine effects of the facility's use of groundwater during construction and further analysis of regional data to determine whether groundwater mining is occurring in the vicinity of the site. The results of these evaluations by the Applicants shall be submitted as part of the Applicants' Environmental Report - Operating License Stage.

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 of said Part 51 were satisfied; and (d) the Applicants submit proof of financial protection and the execution of 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 ATOMIC ENERGY COMMISSION

A Giambusso

A. Giambusso, Deputy Director
for Reactor Projects
Directorate of Licensing -
Regulation

Date of Issuance: December 19, 1974

UNITED STATES ATOMIC ENERGY COMMISSION

DOCKET NOS. 50-445 AND 50-446

TEXAS UTILITIES GENERATING COMPANY, ET AL.

COMANCHE PEAK STEAM ELECTRIC STATION, UNITS 1 AND 2

NOTICE OF ISSUANCE OF CONSTRUCTION PERMITS

Notice is hereby given that, pursuant to the Initial Decisions of the Atomic Safety and Licensing Board, dated October 11, 1974, and December 12, 1974, the Atomic Energy Commission (the Commission) has issued Construction Permits No. CPPR-126 and No. CPPR-127 to the Texas Utilities Generating Company, Dallas Power and Light Company, Texas Electric Service Company, and Texas Power and Light Company for construction of two pressurized water nuclear reactors at the applicants' site in Somervell County, Texas. The proposed reactors, known as the Comanche Peak Steam Electric Station, Units 1 and 2, are each designed for a rated power of approximately 3411 megawatts thermal with a net electrical output of approximately 1159 megawatts.

The Initial Decisions are subject to review by an Atomic Safety and Licensing Appeal Board prior to their becoming final. Any decision or action taken by an Atomic Safety and Licensing Appeal Board in connection with the Initial Decisions 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 dates for the completion of the facilities are August 1, 1979 and August 1, 1981, for Units 1 and 2 respectively, and the latest dates for completion are August 1, 1981 and August 1, 1983, for Units 1 and 2 respectively. Each permit shall expire on the latest date for completion of the facility for which it is issued.

A copy of (1) the Initial Decisions, dated October 11, 1974, and December 12, 1974 ; (2) Construction Permits Nos. CPPR-126 and CPPR-127; (3) the report of the Advisory Committee on Reactor Safeguards, dated October 18, 1974; (4) the Directorate of Licensing's Safety Evaluation Report, dated September 3, 1974, and Supplement No. 1 to the Safety Evaluation Report, dated November 15, 1974; (5) the Preliminary Safety Analysis Report and amendments thereto; (6) the applicants' Environmental Report dated June 5, 1973, and supplements thereto; (7) the Draft Environmental Statement dated February 1974; and (8) the Final Environmental Statement dated June 1974 are available for public inspection at the Commission's Public Document Room at 1717 H Street, N.W., Washington, D. C. and at the Somervell County Public Library, On the Square, P.O. Box 417, Glen Rose, Texas. A copy of the construction permits, the Safety Evaluation Report,

and its Supplement No. 1 may be obtained upon request addressed to the
U. S. Atomic Energy Commission, Washington, D. C. 20545, Attention:
Deputy Director for Reactor Projects, Directorate of Licensing.

Dated at Bethesda, Maryland, this 19th day of December, 1974.

FOR THE ATOMIC ENERGY COMMISSION

A handwritten signature in cursive script, appearing to read "D. B. Vassallo".

D. B. Vassallo, Chief
Light Water Reactors Project Branch 1-1
Directorate of Licensing - Regulation