

UNITED STATES OF AMERICA

FEDERAL ENERGY REGULATORY COMMISSION

Guadalupe Blanco River Authority Project No. 3865;003

ORDER ISSUING LICENSE

(Issued December 4, 1986)

The Commission orders:

(A) This license is issued to the Guadalupe Blanco River Authority (licensee) for a period of 50 years, effective the first day of the month in which this order is issued, to construct, operate, and maintain the Canyon Dam Hydro Project. This license is subject to the terms and conditions of the Act, which is incorporated by reference as part of this license, and subject to the regulations the Commission issues under the provision or the Act.

(B) The project consists of:

(1) All lands, to the extent of the licensee's interests in those lands, enclosed by the project boundary shown by Exhibit G:

Exhibit G: FERC No. 3865 Showing

1 8 General Location Map

2 9 Project Boundaries and Features

3 10 Transmission Line Route

4 11 Spoil Area Location

(2) Project works consisting of: (a) a 9.5 ;foot ;diameter steel liner and a slide gate to be installed in the existing outlet conduit and diverting water into; (b) a penstock 460 feet long and 7 feet in diameter leading to; (c) a powerhouse 40 feet by 60 feet located approximately 500 feet downstream of the toe of the "a and containing two 3,035 ;kW generators for a total installed capacity of 6,070 kW operating at 144 feet of hydraulic head; (d) a tailrace channel 55 feet long and 26 feet wide; (e) 4.16 ;kV generator leads; I 4.16/34.5 ;kV, step ;up transformer; (g) a 12 ;mile ;long 34.5 ;kV transmission line; (h) 34.5/138 ;kV, GBRA Near Braunfels substation; and (i) appurtenant facilities.

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The project works generally described above are more specifically shown and described by those portions of Exhibits A and F recommended For approval in the attached Safety and Design Assessment.

(3) All of the structures, fixtures, equipment or facilities used to operate or maintain the project and located within the project boundary, all portable property that may be employed in connection with the project and located within or outside the project boundary, and all riparian or other rights that are necessary or appropriate in the operation or maintenance of the project.

(C) The Exhibit G described above and those, sections of Exhibits A and F recommended for approval in the attached Safety and Design Assessment are approved and made part of the license.

(D) This license is subject to the articles set forth in Form L ;6, (October 1975), entitled "Terms and Conditions of License for Unconstructed Major Project Affecting Navigable Waters and Lands of the United States," except the first sentence of Article 20. The license is also subject to the following additional articles:

Article 201. The licensee shall pay the United States the following annual charge, effective the first day of the month in which this license is issued:

a. For the purpose of reimbursing the United States for the cost of administration of Part I of the Act, a reasonable amount as determined in accordance with the provisions of the Commission's regulations in effect from time to time. The authorized installed capacity for that purpose is 8,100 horsepower.

b. For the purpose of recompensing the United States for utilization of surplus water or water power from a government dam as determined in accordance with the provisions of the Commission's regulations in effect from time to time.

Article 301. The licensee shall commence construction of project works within two years from the issuance date of the license and shall complete construction of the project within four years from the issuance date of the license.

Article 302. The licensee shall file, for app royal by the Commission, revised Exhibit F drawings showing the final design of project structures. The revised Exhibit F drawings shall be accompanied by a supporting design report and the licensee shall not commence construction of any project structure until the corresponding revised Exhibit F drawing has been approved.

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Article 303. The licensee shall at least 60 days prior to start of construction, submit one copy to the Commission's Regional Director and to the Corps of Engineers and two copies to the Director, Division of Inspections of the final contract drawings and specifications for pertinent features of the project, such as water retention structures, powerhouse, and water conveyance structures. The Director, Division of Inspections may require changes in the Plans and specifications to assure a safe and adequate project.

Article 304. The licensee shall within 90 days of completion of construction file, for approval by the Commission, revised Exhibits A,F and G to describe and show the project as built.

Article 305. The design and construction of those permanent and temporary facilities, including reservoir impounding cofferdams and deep excavations, that would be an integral part of, or that could affect the structural integrity or operation of the Government project shall be done in consultation with and subject to the review and approval of the Corps' District Engineer. Within 90 days from the issuance date of the license, the licensee shall furnish the Corps and the Commission's Regional Director for their information, a schedule for submission of design documents and plans and specifications for the project. If the schedule does not afford sufficient review and approval time, the licensee, upon request of the Corps, shall meet with the Corps and FERC staffs to revise the schedule accordingly.

Article 306. The licensee shall review and approve the design of contractor ;designed cofferdams and deep excavations other than those approved according to article 305 prior to the start of construction and shall ensure that construction of cofferdams and deep excavations is consistent with the approved design. At least 30 days prior to start of construction of the cofferdam, the licensee shall submit to the Commission's

Regional Director and the Director, Division of Inspections and the Corps of Engineers one copy each of the approved cofferdam construction drawings and specifications and letter(s) of approval.

Article 307. The licensee shall within 90 days from the issuance date of the license, enter into an agreement with the Corps of Engineers to coordinate its plans for access to and site activities on lands and property administered by the Corps so that the authorized purposes, including operation of the Federal facilities, are protected. In general, the agreement shall not be redundant with the Commission's requirements contained in this license, and shall identify the facility, the study and construction activities, as applicable, and terms and conditions under which studies and construction will be conducted. The agreement shall be mainly composed of the following items: (1) reasonable arrangements for access to the Corps site to conduct studies and construction activities, such access rights to

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be conditioned by the Corps as may be necessary to protect the federally authorized project purposes and operations; (2) charges to be paid by licensee to the Corps (a) for technical studies by the Corps that relate solely to the structural integrity or operation of the Corps facility associated with power plant development, (b) for review of design including plans and specifications, and for construction inspections based on personnel costs, where such review and inspections are directly related to the structural integrity or operation of the Corps project, and (c) for construction costs that may be incurred by the Corps for the specific and sole purpose of accommodating the installation of power facilities at the existing Corps Project; and (3) charges to be paid by licensee to the Corps for copies of reports, drawings and similar data based on printing and mailing costs, provided that charges shall not be assessed for information, services, or relationships that would normally be provided to the public. Should licensee and the Corps fail to reach an access agreement, the licensee shall refer the matter to the Commission for resolution.

Article 308. The construction, operation and maintenance of the project works that, in the judgment of the Corps of Engineers may affect the structural integrity or operation of the Corps project shall be subject to periodic or continuous inspections by the Corps. Any construction, operation and maintenance deficiencies or difficulties detected by the Corps inspection shall be immediately reported to the Regional Director. Upon review, the Regional Director shall refer the matter to the licensee for appropriate action. In cases when construction, operation or maintenance practices or deficiencies may create a situation posing imminent danger to the structural integrity and safety of the Corps project, the Corps inspector has the authority to stop construction or maintenance while awaiting the resolution of the problem.

Article 309. The licensee shall at least 60 days prior to start of construction, submit for approval a regulating plan to the U.S. Army Corps of Engineers, describing (a) the designed mode of hydropower operation, and (b) reservoir flow diversion and regulation requirements for operation of the Corps project during construction as established by the Corps. In addition, the licensee, prior to start of Power plant operation shall enter into an operating Memorandum of Agreement (MOA) with the Corps describing the detailed operation of the powerhouse acceptable to the Corps. The MOA shall specify any restrictions needed to protect the Primary purposes of the Corps project for navigation, recreation, water quality, and flood control and to preserve the existing pattern of releases. The Regional Director shall be invited to attend meetings regarding the agreement. The MOA shall be subject to revision by mutual consent of the Corps and licensee as experience is gained by actual project operation. Should the licensee, and the Corps fail to reach an agreement the matter will be referred to the Director, office of

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Hydropower Licensing for resolution. Copies of the regulating plan and signed MOA between the Corps and the licensee and any revision thereof shall be furnished to the Director, Office of Hydropower Licensing and the Regional Director.

Article 310. The licensee shall have no claim under this license against the United States arising from the effect of any changes made in the operation or reservoir levels of the Corps of Engineers' project.

Article 311. The licensee shall provide the Regional Director two copies of all correspondence between the licensee and the U.S. Army Corps of Engineers. The Regional Director shall not authorize construction of any project work until the Corps of Engineers' written approval of construction plans and specifications has been received by the Regional Director.

Article 401. The licensee, after consultation with the Department of the Army, Fort Worth District Corps of Engineers, the U. S. Fish and Wildlife Service, and the Texas Parks and Wildlife Department, shall file with the Commission, within 1 year from the date of issuance of this license, a comprehensive plan to control erosion and dust and to minimize the quantity of sediment or other potential water pollutants resulting from project construction, spoil disposal, and project operation. The plan also shall include: descriptions of control measures; descriptions of channel and river bank protection measures; topographic map locations of control and bank protection measures; an implementation schedule; monitoring and maintenance programs for project construction and operation; and provisions for periodic review of the plan and for making any necessary revisions to the plan. The licensee shall include in the filing documentation of agency consultations with these agencies on the plan and copies of any agency comments or recommendations. If the licensee disagrees with any recommendations, the licensee shall provide a discussion of the reasons for disagreeing, based on actual site geological soil, and groundwater conditions. The Commission reserves the right to require changes to the plan. Unless the Director of the Office of Hydropower Licensing directs otherwise, the licensee may commence ground disturbing or spoil producing activities at the project 90 days after filing this plan.

Article 402. The licensee, in cooperation with the Department of the Army, Fort Worth District Corps of Engineers, the U.S. Fish and Wildlife Service, the Texas Department of Water Resources and the Texas Parks and Wildlife Department, shall develop a plan for continuous monitoring of dissolved oxygen (DO), temperature, and total dissolved gas at the Canyon Dam Project. Within 1 year from the date of issuance of this license, the licensee shall

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file the plan, and comments from the agencies consulted, with the Commission for approval. The plan shall include measures for rapidly altering project operation to maintain the state DO standard. These measures must ensure that downstream water temperatures are adequately maintained to support the existing coldwater fishery, and that total dissolved gas saturation levels are maintained downstream of the project below 110 percent. The plan shall also include provisions for regularly submitting the results of the continuous monitoring of DO, temperature and total dissolved gas to the U.S. Fish and Wildlife Service and the Texas Parks and Wildlife Department.

Article 403. The licensee, during modification of the outlet works shall discharge from the Canyon Dam Project a continuous minimum flow of 75 Cubic feet per second, as measured immediately downstream from the project dam, for the protection of fish and wildlife resources in the Guadalupe River. The 75 cfs minimum flow may be temporarily modified if required by emergencies beyond the control of the licensee and for short periods upon mutual agreement between the Texas Department of Water Resources, the Texas Parks and Wildlife Department, and the U.S. Fish and Wildlife Service.

Article 404. The licensee shall, in cooperation with Department of Army, Fort Worth District Corps of Engineers, the Texas Department of Parks and Wildlife and the Texas Department of Water Resources prepare a construction schedule to minimize construction related impacts to water quality and fish and wildlife, within 1 year from the date of issuance of this license, the licensee shall file this schedule with the Director, Office of Hydropower Licensing along with comments from the above agencies on the adequacy of the schedule. The Director may require modification to the schedule.

Article 405. The licensee shall discharge from the Canyon Dam Project a continuous minimum flow of 90 cubic feet per second, as measured immediately downstream from the project powerhouse, to protect and to enhance fish and wildlife resources in the Guadalupe River. This flow may be temporarily modified if required by operating emergencies beyond the control of the licensee and for short periods upon mutual agreement among the licensee, the Texas Department of water Resources, the Texas Parks and Wildlife Department, and the U.S. Fish and Wildlife Service.

[Amended January 28, 1988] Article 405. The licensee shall discharge from the Canyon Dam Project a continuous minimum flow of 90 cubic feet per second, as measured immediately downstream from the project powerhouse to protect and to enhance fish and wildlife resources In the Guadalupe River. This flow may be temporarily modified if required by operating emergencies beyond the control of the licensee. The flow may also be reduced to not less than the Inflow to the reservoir during periods of drought. For the purposes of this article, a "drought" begins the day after any period of forty ;five consecutive days during which the inflow to Canyon Reservoir averages less than 90 (cfs), and shall continue until the reservoir level returns to 909 feet above mean sea level.

Additionally, at times other than during periods of drought when the inflow to the reservoir is greater than 90 cfs, the licensee shall, at a minimum, discharge from the project whichever is least (a) the inflow to the reservoir or (b) a continuous minimum flow in accordance with the following schedule:

Month Continuous minimum

Flow (cubic feet per second)

January	100
February	120
March	120
April	120
May	120
June	100
July	100
August	100
September	100
October	100
November	100
December	100

For the purposes of this article, inflows to the reservoir are as measured at the Spring Branch gauge and discharges are as measured immediately downstream from the project powerhouse. The flow from Canyon Dam also may be reduced temporarily:

(a) If required by operating emergencies and requirements beyond the control of the licensee not to exceed seven working days and

(b) for short periods upon mutual agreement among the licensee, the Texas Water Commission, the Texas Parks and Wildlife Department, and the U.S. Fish and wildlife Service.

Article 406. The licensee shall construct and operate streamflow gages in the Guadalupe River immediately below Canyon Dam in a manner to allow continuous monitoring of the Canyon Dam minimum flows required in articles 403 and 405. Further, licensee shall annually make available to the Texas Department of Water Resources, the Texas Parks and Wildlife Department and the Atlanta, Regional Director, the record of minimum flows obtained from these gages.

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Article 407. The licensee, within 1 year from the date of this license, shall file for Commission approval a plan to minimize the disturbance of vegetation during project construction and operation. The plan shall include details of proposed methodologies for controlling vegetation and a map showing the specific areas for control.

Article 408. The licensee, after consultation with the U.S. Fish and Wildlife Service and the Texas Parks and Wildlife Department, and within 1 year from the date of this license, shall file for Commission approval a transmission line design plan, prepared in accordance with guidelines in the publication, Suggested Practices for Raptor Protection on Power Lines, Raptor Research Report No. 4, issued by the Raptor Research Foundation, Inc., in 1981. The plan shall include detailed design drawings of the transmission line, clearly showing phase spacing, configuration, and grounding practices, a construction schedule, and the consulted agencies' comments on the adequacy of the design plan. The licensee shall not conduct any ground disturbing activities until the plan is approved by the Commission.

Article 409. The licensee, before beginning any construction in the project area other than that specifically authorized in this license, shall consult the Texas State Historic Preservation Officer (SHPO) about the need for any cultural resource survey and salvage work. The licensee shall file with the Commission documentation of the nature and extent of consultation, including a cultural resources management plan and a schedule to conduct any necessary investigation, together with a copy of a letter from the SHPO ;accepting the plan, 6 months before undertaking any construction activity. Any plan and investigation shall be of sufficient scope to identify and to protect any sites eligible for inclusion in the National Register of Historic Places. The licensee shall make available funds in a reasonable amount for any required work. If the licensee discovers any previously unrecorded archeological or historic sites during the course of the construction or development of any project works or other facilities at the project, the licensee shall stop construction in the vicinity of the sites and shall consult a qualified archeologist and the SHPO concerning the eligibility of the sites for inclusion in the National Register and any measures needed to avoid the sites or to mitigate effects to the sites. If the licensee and the SHPO cannot agree on the amount of money to be expended on archeological or historical work related to the project, the Commission reserves the right to require the licensee, at its own expense, to conduct any necessary work.

Article 410. The licensee, after consultation with the Department of the Army, Fort Worth District Corps of Engineers, the National Park Service, and the Texas Parks and Wildlife Department, and before beginning project construction, shall designate an appropriate

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alternative public access to the outlet works channel and fishing and canoe ;launching area for use during the construction period. Within 1 year from the date of issue of this license, and 6 months before starting project construction, the licensee shall file a plan describing the alternative public access and documentation consultation with these agencies.

Article 411. The licensee, after consultation with the Department of the Army, Fort Worth District Corps of Engineers, the National Park Service, and the Texas Parks and Wildlife Department, and before commencing project operation, shall provide for recreational development in the project vicinity that shall include but shall not be limited to a parking area, an improved access trail to the existing fishing platform, a second fishing platform, and retention of the unimproved road that is used for canoe launching and trout

stocking. Within 3 months after beginning project operation, the licensee shall file with the Commission as-built drawings, showing the location and type of all recreational facilities at the project, and documentation of consultation with these agencies.

Article 412. The licensee, after consultation with the Texas Parks and Wildlife Department, and within 1 year from the date of this license, shall file a plan for providing the Texas Park and Wildlife Department each month with a projection of daily releases from Canyon Dam for the next month. Comments of the Texas Park and Wildlife Department shall be included when the plan is filed with the Commission.

Article 413. (a) In accordance with the provisions of this article, the licensee shall have the authority to grant permission for certain types of use and occupancy of project lands and waters and to convey certain interests in project lands and waters for certain other types of use and occupancy, without prior Commission approval. The licensee may exercise the authority only if the proposed use and occupancy is consistent with the purposes of protecting and enhancing the scenic, recreational, and other environmental values of the project. For those purposes, the licensee shall also have continuing responsibility to supervise and control the uses and occupancies for which it grants permission, and to monitor the use of, and ensure compliance with the covenants of the instrument of conveyance for, any interests that it has conveyed, under this article. If a permitted use and occupancy violates any condition of this article or any other condition imposed by the licensee for protection and enhancement of the project's scenic, recreational, or other environmental values, or if a covenant of a conveyance made under the authority of this article is violated, the licensee shall take any lawful action necessary to correct the violation. For a permitted use or occupancy, that action includes, if necessary, cancelling the permission to use and occupy the project lands and waters and requiring the removal of any non-complying structures and facilities.

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(b) The types of use and occupancy of project lands And waters for which the licensee may grant permission without Commission approval are: (1) landscape plantings; (2) noncommercial piers, landings, boat docks, or similar structures and facilities that can accommodate no more than 10 water craft at a time and where said facility is intended to serve single family type dwellings; and (3) embankments, bulkheads, retaining walls, or similar structures for erosion control to protect the existing shoreline. To the extent feasible and desirable to protect and enhance the project's scenic, recreational, and other environmental values, the licensee shall require multiple use and occupancy of facilities for access to project lands or waters. The licensee shall also ensure, to the satisfaction of the Commission's authorized representative, that the uses and occupancies for which it grants permission are maintained in good repair and comply with applicable state and local health and safety requirements. Before granting permission for construction of bulkheads or retaining walls, the licensee shall: (1) inspect the site of the proposed construction, (2) consider whether the planting of vegetation or the use of riprap would be adequate to control erosion at the site, and (3) determine that the proposed construction is needed and would not change the basic contour of the reservoir shoreline. To implement this paragraph (b), the licensee may, among other things, establish a program for issuing permits for the specified types of use and occupancy of project lands and waters, which may be subject to the payment of a reasonable fee to cover the licensee's costs of administering the permit program. The Commission reserves the right to require the licensee to file a description of its standards, guidelines, and procedures for implementing this paragraph (b) and to require modification of those standards, guidelines, or procedures.

(c) The licensee may convey easements or rights of way across, or leases of, project lands for: (1) replacement, expansion, realignment, or maintenance of bridges and roads for which all necessary state and federal approvals have been obtained; (2) storm drains and water mains; (3) sewers that do not discharge into project waters; (4) minor access roads; (5) telephone, gas, and electric utility distribution lines; (6) non-project overhead electric transmission lines that do not require erection of support structures within the project boundary; (7) submarine, overhead, or underground major telephone distribution cables or major electric distribution lines (69 kv or less); and (8) water intake or pumping facilities that do not extract more than one million gallons per day from a project reservoir. No later than January 31 of each year, the licensee shall file three copies of a report briefly describing for each conveyance made under this paragraph

(c) during the prior calendar year, the type of interest conveyed, the location of the lands subject to the conveyance, and the nature of the use for which the interest was conveyed.

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(d) The licensee may convey fee title to, easements or rights ;of ;way across, or leases of project lands For: (1) construction of new bridges or roads for which all necessary state and federal Approvals have been obtained; (2) sewer or effluent lines that discharge into project for which all necessary federal and state water quality certificates or permits have been obtained (3) other pipelines that cross project lands), waters but do not discharge into project waters; (4) non ;project overhead electric transmission lines that require erection of support structures within the project boundary, for which all necessary federal and state approvals have been obtained; (5) private or public marinas that can accommodate no more than 10 watercraft at a time and are at least one ;half mile from any other private or public marina; (6) recreational development consistent with an approved Exhibit R or approved report on recreational resources of an Exhibit F; and (7) other uses, it: (i) the amount, of land conveyed for a particular use is five acres or less; (ii) all of the land conveyed is located at least 75 feet, measured horizontally, from the edge of the project reservoir at normal maximum surface elevation; and (iii) no more than 50 total acres of project lands for each project development are conveyed under this clause (d)(7) in any calendar year. At least 45 days before conveying any interest in project lands under this paragraph (d), the licensee must submit a letter to the Director, Office of Hydropower Licensing, stating its intent to convey the interest and briefly describing the type of interest and location of the lands to be conveyed (a marked Exhibit G or K map may be used), the nature of the oposed use, the identity of any federal or state agency official consulted, and any federal or state approvals required for the proposed use. Unless the Director, within 45 days from the filing date, requires the licensee to file an application for prior approval, the licensee may convey the intended interest at the end of that period.

(e) The following additional conditions apply to any intended conveyance under paragraphs (c) or (d) of this article:

(1) Before conveying the interest, the licensee shall consult with federal and state fish and wildlife or recreation agencies, as appropriate, and the State Historic Preservation Officer.

(2) Before conveying the interest, the licensee shall determine that the proposed use of the lands to be conveyed is not inconsistent with any approved Exhibit R or approved report on recreational resources of an Exhibit E; or, if the project does not have an approved Exhibit R or approved report on recreational resources, that the lands to be conveyed do not have recreational value.