

SEP 12 1984

NOTE TO: Ronald L. Ballard, Chief, EHEB, DE
FROM: Robert B. Samworth, Section Leader, EES, EHEB, DE
SUBJECT: SOUTH TEXAS POLLUTION CONTROL BONDS

At the request of the LPM, Vic Nerses, I reviewed the request of Houston Lighting and Power Company (HLP) for NRC to certify that specified features of the South Texas Project are in furtherance of meeting pollution control requirements. Two of the features, the cooling lake and the boron recovery system gave me difficulty.

I had expected the value of the recovered boron to exceed the cost of constructing a recovery system and therefore felt that this system should not qualify as a pollution control investment. However the utility has subsequently advised that the value of the boron is not that great but that they have already reduced the "cost" of this system to reflect the value of the recovered boron. They further indicated they would send the PM a copy of an IRS ruling specific to boron recovery systems. Thus this problem has gone away.

I am not sure that the cooling lake question can be resolved so quickly. There is not enough fresh water in Texas to operate a large steam-electric power plant with once through cooling. Closed cycle cooling is necessary because water is a scarce commodity. Pollution control is of concern to Texans but that concern alone does not convert a condenser cooling system into a pollution control device.

I asked HLP whether they could breakout any fraction of the cooling lake cost which is clearly pollution control. I also asked that they check the IRS rulings to see whether IRS has already ruled on the condenser cooling system issue. They will get back to us through the PM.

Ronald L. Ballard

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My inclination is to say that the cooling lake is not totally in furtherance of pollution control objectives. The circulating water flow is around 4,000 cfs while the seven-day-ten-year low flow in the Colorado River is closer to 1 cfs. If you threw out all pollution control laws you couldn't do away with the lake.

I expect this may be elevated in the management chain by HLP and would welcome your help in resolving the issue.

~~Original Signed by Robert B. Samworth~~

Robert B. Samworth, Section Leader
Environmental Engineering Section
Environmental & Hydrologic
Engineering Branch
Division of Engineering

cc: V. Nerses

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DE:EHEB
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9/12/84

Houston Lighting & Power P.O. Box 1700 Houston, Texas 77001 (713) 228-9211

October 1, 1984
ST-HL-AE-1137
File Number: G25

Mr. Harold R. Denton
Director, Office of Nuclear
Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Denton:

South Texas Project
Units 1 & 2
Docket Nos. STN 50-498, STN 50-499
Pollution Control Bond In Furtherance Certificate
Matagorda County Navigation District Number 1
Pollution Control Revenue Bonds, Series 1984

On August 14, 1984 Houston Lighting & Power Company (HL&P) sent a letter to you requesting that the NRC issue an "In Furtherance" Certificate needed to facilitate the issuance, by HL&P, of pollution control revenue bonds to finance certain facilities at the South Texas Project (STP). The purpose of this letter is to clarify the cost allocation methods used for the Cooling Water Reservoir System and the Boron Recycle Systems described in the August 14, 1984 submittal.

The part of the total cost of these two systems attributable to controlling atmospheric or water pollutants will be determined in accordance with methods approved by the Internal Revenue Service (IRS) in prior rulings. These allocation methods have previously been accepted by the NRC in issuing "In Furtherance" Certificates for other nuclear power plants.

This supplementary information should allow the NRC staff to complete its review of our August 14, 1984 letter and issue the requested certificate. In order to allow HL&P to issue pollution control revenue bonds as planned, we request that such certificate be issued as soon as possible, but no later than October 8, 1984.

If you have any questions, please contact Mr. Michael E. Powell at (713) 993-1328.

Very truly yours,

J. D. Eldredge

J. H. Goldberg
Vice-President
Nuclear Engineering & Construction

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cc:

Darrell G. Eisenhut, Director
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U.S. Nuclear Regulatory Commission
Washington, DC 20555

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Resident Inspector/South Texas Project
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Director, Office of Inspection
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Citizens for Equitable Utilities, Inc.
c/o Ms. Peggy Buchorn
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Revised 09/10/84

CALIFORNIA POLLUTION
CONTROL FINANCING AUTHORITY

915 CAPITOL MALL, ROOM 280

SACRAMENTO 95814

(916) 445-597



MEMBERS

Jesse M. Unruh, Chairman
State TreasurerKenneth Cory
State ControllerJesse R. Huff
Director of Finance

October 22, 1984

Mr. Robert Thomas - Material Reactor
Protection & Licensing Section
Nuclear Regulatory Commission
1450 Maria Lane, Suite 210
Walnut Creek, California 94596

Dear Mr. Thomas:

Re: SOUTHERN CALIFORNIA EDISON COMPANY - Application No. 421

The California Pollution Control Financing Authority is required by Health and Safety Code Section 44533(b) to obtain certificates from various pollution control agencies before it sells Bonds to assist companies with financing their projects.

Section 44533(b) reads:

"No project relating to the improvement of air or water quality or solid waste control shall be eligible for financing under this division unless, prior to the issuance of bonds or notes, a local, regional, state, or federal environmental authority exercising jurisdiction over the project certifies that the project, as designed, will further compliance with federal, state or local pollution control standards and requirements..."

The Authority has received the enclosed supplemental application for financing. Thus, in accordance with the provisions of the law, we are asking your agency to review the description of the proposed project and to provide us with any comments or reservations you may have. The Authority met on September 19, 1984, and approved the supplement to the Initial Resolution for the project.

Section 44533(c) reads:

"No certification issued pursuant to subdivision (b) shall be admissible in evidence, constitute an admission, or bind any certifying authority in any proceeding in which the compliance of a participating party's facilities with any applicable pollution control, land use, zoning or other similar law is an issue or in any application or proceeding for a permit to locate or construct facilities."

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I have enclosed a copy of the certificate you signed in connection with our earlier financing for this facility. We require a similar signed certificate prior to approval of a Final Resolution to proceed with additional financing.

Thank you for your attention to these matters.

Sincerely,

A handwritten signature in dark ink, appearing to read "Douglas E. Chandler". The signature is fluid and cursive, with a long horizontal stroke at the beginning.

DOUGLAS E. CHANDLER
EXECUTIVE SECRETARY

Attachment



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

Docket Nos.: STN 50-498/499

Mr. G. W. Oprea, Jr.
Executive vice President
Houston Lighting and Power Company
P. O. Box 1700
Houston, Texas 77001

In the Matter of
Houston Lighting and Power Company
(South Texas Project Units 1 and 2) et al.
Docket Nos. STN 50-498/499

Dear Mr. Oprea:

By letter dated August 14, 1984, your Mr. J. H. Goldberg requested on behalf of the Houston Lighting and Power Company, Central Power and Light Company, the City of Austin, Texas, and the City of San Antonio, Texas, that our office issue a Certification of Pollution Control Facilities for the South Texas Project, Units 1 and 2 for certain facilities which are described in Exhibit A to the request.

The staff has reviewed the request. Based on the review, we are satisfied that the portions of South Texas Project for which NRC certification was requested are "pollution control facilities." Accordingly, the attached certificate has been executed.

Copies of the request and this response will be available for inspection at the Local Public Document Room (Bay City Library, 1900 5th Street, Bay City, Texas 77414) and at the Commission's Public Document Room at 1717 H Street, N.W., Washington, D. C.

Sincerely,

Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Enclosure: As stated

cc: See next page

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2: Ron - We had told the Diablo representative that we could not certify the cooling water system as a pollution control device. This is their proposed letter to "clarify" that aspect of the bond application. February 1985. We would refer to this letter in our certification. Do you have any comment?
Gentlemen: B.A.

You have requested additional information concerning certain systems at the Diablo Canyon Nuclear Generating Station that are used for pollution control or solid-waste disposal purposes. All of these systems were identified in materials submitted by the California Pollution Control Financing Authority to the NRC on October 30, 1984.

1. The Cooling Water System controls thermal pollution by diffusing heat that is released into the Pacific Ocean. In the early stages of plant conceptual design, a design for the main circulating water system was considered which would have increased the temperature of water across the condensers by approximately 30°F during normal operations. To reduce the potential adverse effects on the environment, a larger, more expensive cooling water system has been built that will increase the temperature of water across the condensers by only approximately 18°F during normal operations. The difference in cost between a 30°F system and an 18°F system is being financed as a pollution control facility. Because the cooling water system design was not based upon Federal requirements, your "In Furtherance Certificate" is not requested in connection with the cooling water system.

Bob - They don't need us here. Why don't we defer to the State and their requirements to determine whether it represents pollution control. - J.R.

Hang X 27100
Schilling

control facility by reducing releases of radioactive liquids to the environment. Only the boric acid recycle portions of the chemical and volume control system is treated as a pollution control facility.

- c. Steam Generator Blowdown System. This system includes demineralizers and equipment that treats steam generator blowdown. Only this effluent treatment equipment is treated as a pollution control facility.
- d. Nuclear Plant Sampling System. This system samples and verifies proper operation of the plant's pollution control facilities, including the liquid radwaste system, the gaseous radwaste system, and the boric acid recycle system. To the extent the Nuclear Plant Sampling System samples and verifies proper operation of these facilities, it is functionally related and subordinate to pollution control facilities.

CERTIFICATE
SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
UNITS 1 AND 2

POLLUTION CONTROL FACILITIES

*This is becoming
urgent.*
10/1/68
10/1/68

The Nuclear Regulatory Commission (the NRC) hereby certifies as follows:

(a) that it has examined Exhibit A attached hereto which is entitled "General Description of the Facilities" and which describes certain facilities which have been constructed, are under construction or are to be constructed at the South Texas Project Electric Generating Station - Units 1 and 2, a nuclear electric power generating plant located in Matagorda County, Texas, owned by Houston Lighting & Power Company, Central Power and Light Company, the City of Austin, Texas and the City of San Antonio, Texas, acting by and through the City Public Service Board of San Antonio, Texas.

except as noted under (c) below

(b) that facilities described in Exhibit A, as designed, are in furtherance of the purpose of abating or controlling atmospheric pollutants resulting from the generation of electricity at the South Texas Project Electric Generating Station - Units 1 and 2.

For the Nuclear Regulatory Commission

Harold R. Denton, Director
Office of Nuclear Reactor Regulation

(c) That facility 4 (Cooling Water Reservoir system) and facility 8 (Carbon Recovery Systems) described in Exhibit A are partially in furtherance of the purpose of abating or controlling pollutants resulting from the generation of electricity at the South Texas Project Electric Generating Station - Units 1 and 2.



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

- YAMWORTH -

CERTIFICATE
SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
UNITS 1 AND 2
POLLUTION CONTROL FACILITIES

The Nuclear Regulatory Commission (the NRC) hereby certifies as follows:

(a) that it has examined Exhibit A attached hereto which is entitled "General Description of the Facilities" and which describes certain facilities which have been constructed, are under construction or are to be constructed at the South Texas Project Electric Generating Station - Units 1 and 2, a nuclear electric power generating plant located in Matagorda County, Texas, owned by Houston Lighting & Power Company, Central Power and Light Company, the City of Austin, Texas and the City of San Antonio, Texas, acting by and through the City Public Service Board of San Antonio, Texas ("the Owners").

(b) that except as noted under (c) below, facilities described in Exhibit A, as designed, are in furtherance of the purpose of abating or controlling atmospheric pollutants or contaminants or water pollution resulting from the generation of electricity at the South Texas Project Electric Generating Station - Units 1 and 2.

(c) that with respect to the Cooling Water Reservoir System and the Boron Recycle Systems in Exhibit A, it has been represented to the NRC by the Owners that ~~the cost of alternative systems and the economic benefits respectively have been taken into consideration~~ in establishing the cost to be financed through pollution control revenue bonds.

For the Nuclear Regulatory Commission

The part of the total cost attributable to controlling atmospheric and water pollutants will be determined in accordance with methods approved by the IRS

Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Dated at Bethesda, Maryland,
this day of October, 1984.

EXHIBIT A

General Description of the Facilities

The facilities consist of the following systems at the South Texas Project Electric Generating Station - Units 1 and 2 (the "Project") and, in each case, include functionally related and subordinate machinery and equipment.

1. CHEMICAL WASTE SYSTEM. The chemical waste system collects nonradioactive chemical wastes from various areas of the plant which are treated in an equalization basin and/or neutralization basins. The system includes collection piping, sumps, storage tanks for acid and caustic, pumps, controls and related mechanical and electrical equipment.
2. METAL CLEANING WASTE SYSTEM. The metal cleaning waste water system collects nonradioactive waste water from start-up flushes, chemical cleaning, backwashes and blowdown. The waste water is retained in organic, inorganic and neutralization basins. The system includes equipment to feed chemicals and coagulate, precipitate, clarify, thicken, filter and dewater the waste and sludge. The system also includes collection piping, sumps, storage tanks for lime, acid and polymer, pumps, controls and other related mechanical and electrical equipment.
3. OILY WASTE SYSTEM. The oily waste system collects for processing and offsite disposal, nonradioactive waste oil from nonradioactive areas where oil may be present. The system includes drains, sumps, collection piping, oil/water separators, storage tanks, chemical feed equipment and related mechanical and electrical equipment.
4. COOLING WATER RESERVOIR SYSTEM. The cooling water reservoir includes a 7,000 acre closed cycle reservoir to dissipate waste heat to the atmosphere. The system includes a river make-up water facility, pipelines to the reservoir, the reservoir, blowdown pipeline to the river and a spillway blowdown structure. The system also includes related mechanical and electrical equipment.
5. GASEOUS WASTE PROCESSING SYSTEMS. The gaseous waste processing systems provide collection, processing and control of the release of potentially radioactive gases generated within each unit so that offsite exposure is kept as low as reasonably achievable (ALARA). High activity gases containing primarily krypton and xenon are contained in hydrogen, nitrogen and hydrogen/nitrogen vent gases from various sources. The gases are cooled and passed through a moisture separator, charcoal delay tank and a particulate air filter before being released. The systems also include related monitoring, mechanical and electrical equipment.

6. REACTOR HEAD DEGASSING SYSTEMS. The reactor head degassing systems remove radioactive gases, released into each reactor coolant system free space from the primary coolant, prior to reactor head removal during refueling operations. The purged gases pass through a moisture separator prior to being compressed and stored for six months to allow for decay of short-lived isotopes. The stored gases may then be passed through the gaseous waste processing system. The reactor head degassing systems include separators, compressors, monitors, piping and related mechanical, electrical equipment and instrumentation.

7. LIQUID RADWASTE PROCESSING SYSTEMS. The liquid radwaste processing systems of each unit will collect low level radioactive liquid waste from various floor and equipment drains, liquid discharged from the boron recycle system and radioactive liquid wastes from the regeneration of condensate polishing demineralizer resins. The liquid waste is passed through filters, demineralizers and evaporators before being transferred to other systems for further processing. The systems include feed and monitor tanks, sampling and monitoring equipment, collection piping and related mechanical and electrical equipment.

8. BORON RECYCLE SYSTEMS. The boron recycle system of each unit treats radioactive boron from the reactor coolant systems. The processed liquid is then either returned to the reactor make-up water storage tanks or processed further in the liquid radwaste processing system for disposal. Each units' boron recycle system contains pumps, tanks, filters, demineralizers, evaporators, drains, piping and related mechanical and electrical equipment.

9. SOLID-WASTE PROCESSING SYSTEMS. The solid waste processing system of each unit provides for the solidification and packaging of radioactive waste generated by many sources including spent demineralizer resins, evaporator concentrates, exhausted liquid and air filter elements, miscellaneous dry wastes and various sludges and slurries. The waste is mixed with cement and fed into steel containers or drums. The systems include collection, treatment, storage, mixing, transfer and container filling equipment as well as equipment for the mechanical handling of the filled containers. The system will also include related controls, instruments and mechanical and electrical equipment.

10. SANITARY WASTE SYSTEM. The sanitary waste system provides for the collection and treatment of sanitary waste. The sewage waste water undergoes extended aeration, clarification, and chlorination. The sanitary waste system consists of collection piping, pump, sumps, activated sludge sewage treatment unit and related mechanical and electrical equipment.