

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

EVALUATION & COMPLIANCE DIVISION
Energy BranchRESOLUTION: G-2665
March 5, 1986R E S O L U T I O N

APPROVES SAN DIEGO GAS AND ELECTRIC'S (SDG&E) REQUEST TO USE THERMAL ENERGY STORAGE (TES) INCENTIVE FUNDS TO HAVE A GAS AIR CONDITIONING SYSTEM INSTALLED AT THE PROPOSED CONVENTION CENTER IN SAN DIEGO AND TO ENTER AN AGREEMENT BETWEEN SDG&E AND THE CITY OF SAN DIEGO (CITY) PROVIDING FOR THE INSTALLATION OF NATURAL GAS AIR CONDITIONING TO AVOID 3 MEGAWATTS OF PEAK PERIOD LOAD.

By Advice Letter No. 564-G, filed February 14, 1986, SDG&E requests approval to use \$450,000 of its authorized TES incentive funds as an incentive to the City to install a gas air conditioning system rather than a conventional electric air conditioning system at the proposed Convention Center in San Diego and to enter an agreement with the City (Exhibit A) providing for the installation of a gas air conditioning system. The gas air conditioning system will add only 0.7 megawatts to SDG&E's peak load, while conventional air conditioning would have added 3.7 megawatts. Another alternative for keeping air conditioning from adding to peak load is thermal energy storage (TES); however, TES is not suitable for this project because there is no room for the thermal storage medium (ice or water).

THE FACTS ARE AS FOLLOWS:

1. TES is a cost effective means of shifting air conditioning electric load from peak to off-peak periods.
2. Decision No. 85-12-108, dated December 20, 1985, authorized \$2.5 million for the TES incentives component of SDG&E's 1986 load management programs.

3. The San Diego Unified Port District (Port) is currently constructing a \$125 million Convention Center near the water front.
 - a. The design is complete and bids for construction have been solicited.
 - b. Gas air conditioning is included as an Alternative Bid Item.
 - c. Opening of bids is scheduled for March 6, 1986.
 - d. Alternative Bid Items will be decided by March 19, 1986.
 - e. A construction contract is expected to be awarded sometime between March 5 and 25, 1986.
 - f. The facility is expected to be in operation in mid 1988.
4. Conventional air conditioning for the convention center would add 3.7 MW to SDG&E's peak load.
5. Direct fired natural gas air conditioning for the Convention Center would add 0.7 MW to SDG&E's summer peak load.
6. The San Diego Convention Center Corporation, an operating entity of the City, will be responsible for operating expenses including the cost of energy for air conditioning.
7. The City desires to minimize energy expenses for air conditioning.
8. SDG&E desires to minimize peak period load growth.
9. TES was considered to accomplish both ends; however, site constraints cause TES to be an impractical alternative to conventional air conditioning.
10. A more practical alternative to accomplish both desired results is the direct-fired natural gas air conditioning system described in Exhibit A.

11. The agreement (Exhibit A) stipulates that, among other things, the City will cause the installation of direct-fired, double-effect natural gas air conditioning chiller-heaters rated at approximately 3600 tons of air conditioning, for which SDG&E shall pay the City \$450,000, that is \$125 per ton of air conditioning or \$150 per avoided kW.
12. The City by Resolution R 86-1405 authorized the City Manager to sign the agreement after regular statutory notice.
13. The equivalent peak avoidance inducement of \$150 per kW is less than the peak shift inducement would have been for TES (SDG&E Revised Cal. P.U.C. Sheet No. 5505-E).
14. Staff has reviewed the agreement and concludes:
 - a. The natural air conditioning system described in Exhibit A is capable of avoiding 3 MW of peak load which would otherwise occur with conventional air conditioning.
 - b. The natural gas air conditioning incentive of \$450,000 is reasonable.
 - c. The natural gas air conditioning alternative is cost-effective with a benefit/cost ratio of 1.20 for SDG&E's non-participant customers.
 - d. Time is of the essence as Alternative Bid Items, including natural gas air conditioning, are to be decided by March 19, 1986.
 - e. SDG&E gave notice to interested parties of its intent to enter into an agreement by mailing copies of Advice letter 557-G filed November 4, 1985, and by mailing copies of Advice Letter 564-G.
 - f. No protests have been received by Staff.
15. This filing will not result in any increase to any rate or charge. It authorizes SDG&E to reallocate funds that have already been authorized by this Commission for TES and are included in SDG&E's 1986 load management budget.

THEREFORE:

1. SDG&E is authorized to use \$450,000 TES funds for an incentive to the City to have a gas air conditioning system installed at the proposed Convention Center. This authorization is subject to the following:

a. Execution of the Gas Air Conditioning Agreement (Exhibit A), and

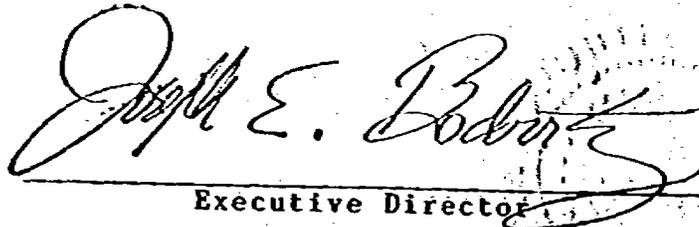
b. The Port's award of a construction contract including the natural gas air conditioning Alternative Bid Item.

2. The agreement shall be filed with SDG&E's tariff schedules.

3. The Advice Letter and Tariff Sheet shall be marked to show that they were authorized for filing by Resolution G-2665.

4. This resolution is effective today.

I certify that this resolution was adopted by the Public Utilities Commission at its regular meeting on March 5, 1986. The following Commissioners approved it:


Executive Director

DONALD VIAL
President
VICTOR CALVO
FRISCILLA C. GREW
FREDERICK R. DUDA
Commissioners

GAS AIR CONDITIONING AGREEMENT

THIS AGREEMENT is made and entered into this _____ day of _____, 1986, by and between THE CITY OF SAN DIEGO, a municipal corporation, herein called the "City," and SAN DIEGO GAS & ELECTRIC COMPANY, a California corporation, herein called "SDG&E."

WHEREAS, the City and the San Diego Unified Port District have entered into an agreement whereby the San Diego Unified Port District will construct the Convention Center Project, herein called "Facility," upon its property and the City will operate the Facility through its operating entity, the San Diego Convention Center Corporation, for a period of twenty (20) years; and

WHEREAS, the City desires to utilize gas air conditioning in said Facility, as opposed to a conventional air conditioning system, provided that SDG&E shares in the additional construction and equipment costs associated with a gas air conditioning system; and

WHEREAS, the San Diego Unified Port District at the City's request has directed its architect to include gas fired air conditioning as an alternative bid item; and

WHEREAS, SDG&E is desirous of fostering the use of gas air conditioning which will contribute to the reduction of peak period electrical demand, and to the increase of gas demand and consumption during off-peak seasons;

NOW, THEREFORE, in consideration of the mutual covenants contained herein and other good and valuable consideration, the

adequacy of which is hereby acknowledged, the parties agree as follows:

1. TERM

This Agreement shall commence on the date first shown above, and shall continue in force for fifteen (15) years from the date final payment, as provided in Section 5.1.b, is made to the City.

2. SCOPE

2.1 The City will cause to be included within the construction contract for the facility, provisions for the acquisition and installation of direct-fired, double-effect natural gas air conditioning chiller-heaters and all appurtenant and auxiliary condensers, pumps, air handlers, piping and related equipment required to provide for an operable gas air conditioning system with a rated capacity of approximately 3,600 tons.

2.2 The City will use its best efforts to cause the San Diego Unified Port District to commence installation of the gas air conditioning system on or before March 1, 1986, and complete installation of the gas air conditioning system, on or before December 31, 1988. If the December 31, 1988 date cannot be met, the City shall so notify SDG&E in writing as soon as such information is known, but in no event not less than ninety (90) days in advance of December 31, 1988. Following notification to SDG&E the parties agree to meet promptly to negotiate a date by which the payment set out in Section 5.1.b will be made.

2.3 It is understood by SDG&E that the City has the absolute right to terminate this Agreement in its sole discretion without the City incurring any liability to SDG&E at any time prior to the City accepting the payment provided for in Section 5.1.a.

3. GAS AIR CONDITIONING SYSTEM SELECTION AND OWNERSHIP

Selection of the gas air conditioning system described in Section 2.1, is the sole responsibility of the San Diego Unified Port District and the City. Ownership of all equipment associated with the gas air conditioning system shall be as provided in the agreements between the City and the San Diego Unified Port District. While it has evaluated the sizing of the gas air conditioning system for the sole purpose of determining the City's eligibility for this program, SDG&E makes no representations as to the sizing of the gas air conditioning system for any other purposes of the City. Furthermore, SDG&E makes no representations as to the performance, reliability and/or efficiency of the gas air conditioning system selected, or any components thereof. Any system which fulfills the specifications in Section 2.1, whether installed in conjunction with the initial construction of the Facility or installed at a later time as a substitute or replacement system, shall satisfy the requirements of this Agreement.

4. INDUCEMENT PAYMENT

A payment to induce the City to install and operate the gas air conditioning system for a fifteen (15) year period shall be calculated as provided in Attachment A to this Agreement and which is made a part of this Agreement but is attached solely to

establish the method of calculating the total payment to be made to the City pursuant to Section 5. herein.

5. PAYMENT

5.1 SDG&E shall pay to the City four hundred fifty thousand dollars (\$450,000.00), calculated at the rate of one hundred twenty-five dollars (\$125.00) per ton for 3,600 tons of cooling load, as follows:

5.1.a Forty percent (40%) of the total payment due under Section 5.1, one hundred eighty thousand dollars (\$180,000.00), upon delivery to the job site of the chiller heater gas air conditioning equipment and receipt from the San Diego Unified Port District or the City of a billing for the cost of said unit.

5.1.b Balance of the total payment due under Section 5.1, two hundred seventy thousand dollars (\$270,000.00), upon completion of the gas air conditioning system and all associated components and verification by SDG&E to its satisfaction that the gas air conditioning system has been installed and is operable.

5.2 Requests for each of said payments, together with supporting documentation, shall be submitted by the City to SDG&E. Payment shall be made by SDG&E within thirty (30) days of approval by SDG&E of the payment request.

6. OPERATION

The City shall operate the gas air conditioning system for a period of fifteen (15) years from the date final payment is made to the City as provided in Section 5.1.b. The City further agrees to document its operation of the gas air conditioning system and to provide documentation to SDG&E upon request.

7. INSPECTION

SDG&E reserves the right to inspect the gas air conditioning system at reasonable times for the sole purpose of verifying the City's compliance with its operation obligations under this Agreement. This provision shall not impose upon SDG&E any obligation to perform any inspection and is not intended to relieve any party from its responsibility to properly design, install, operate, or maintain the system.

8. COMPLIANCE WITH LAWS

The City and any subcontractor retained by the City or the San Diego Unified Port District shall be deemed to be familiar with, and at all times, shall comply with and observe all applicable federal, state and local laws, ordinances, rules, regulations, executive orders, all applicable safety orders and all orders or decrees of administrative agencies, courts or other legally constituted authorities having jurisdiction or authority over the City, SDG&E, or the Facility which may now or hereafter exist.

9. TRANSFER OF OWNERSHIP OR OPERATION RESPONSIBILITY

9.1 The City shall provide written notice to SDG&E at least sixty (60) days in advance of any contemplated change either in the ownership of the Facility or in the

agreements between the City and the San Diego Unified Port District which would result in the City being no longer responsible for operating either the Facility or the gas air conditioning system. SDG&E will negotiate with the prospective transferee with regard to transferee's assuming the obligations under this Agreement.

9.2 If SDG&E is unable to negotiate a transfer of obligations of this Agreement, the City agrees to pay liquidated damage to SDG&E as provided in Section 10.

10. LIQUIDATED DAMAGES

The extent and amount of actual damages which would be suffered by SDG&E as a result of the City's failure to perform in accordance with this Agreement are impractical or extremely difficult to determine or estimate. The City will pay SDG&E the following amount as liquidated damages (and not as a penalty) for each month (or any part thereof) during which the City fails to perform in accordance with this Agreement:

$$\text{Amount} = \frac{\$P}{180},$$

Where P = four hundred fifty thousand dollars (\$450,000.00) which is the total payment made by SDG&E to the City pursuant to Section 5., and one hundred eighty (180) = the number of months this Agreement is in effect.

This amount reflects a recapture of SDG&E's monthly investment under the Agreement for each month within the fifteen (15) year period specified in Section 1. that customer fails to perform in accordance with this Agreement.

11. INDEMNITY

The City will defend, indemnify, and save harmless, SDG&E, together with any and all of its agents and employees, from and against any and all claims, losses, liabilities, damages, and expenses (including attorneys fees) of any kind whatsoever arising out of or in any way pertaining to the design, installation, operation or maintenance of the gas air conditioning system which is the subject of this Agreement.

12. INSURANCE

The City will, during the term of this Agreement, either self-insure or carry a standard insurance policy for comprehensive general liability insurance, including contractual liability coverage. The decision as to the monetary limits or the method of providing insurance coverage will be solely at the discretion of the City.

13. GOVERNING LAW

Interpretation of this Agreement and performance thereof will be determined by California law. No action may be brought under this Agreement unless brought in a court located in San Diego County.

14. REMEDIES

SDG&E expressly retains all of its rights and remedies provided by law or equity in the case of breach, and neither any action by SDG&E nor any reservation by SDG&E in this Agreement of any specific legal or equitable remedy shall constitute a waiver of any other legal or equitable rights or remedies.

15. SURVIVAL

The obligations imposed on the City and pursuant to Section 10, shall survive termination of this Agreement.

16. VALIDITY

The invalidity, in whole or in part, of any provisions hereof shall not affect the validity of any other provisions hereof.

17. COMPLETE AGREEMENT

This Agreement contains the complete and entire Agreement between the parties and supersedes any previous communications, representations, or agreements, whether verbal or written, with respect to the subject matter. No change, addition or modification of any of the terms or conditions shall be valid or binding on SDG&E or the City unless in writing, signed by an authorized representative of SDG&E and the City. As between the parties, the City agrees that SDG&E's sole obligation under this Agreement is to make the inducement payment to the City as provided in Section 5. herein.

18. APPROVAL OF AGREEMENT OR MODIFICATION OF AGREEMENT BY CALIFORNIA PUBLIC UTILITIES COMMISSION

18.1 This Agreement shall not be effective unless Advice Letter 564-G submitted by SDG&E on or about February 1986, is approved by the Public Utilities Commission of the State of California.

18.2 It is understood by SDG&E and the City that the Public Utilities Commission of the State of California must approve this Agreement after execution by the parties hereto. If the Public Utilities Commission does not unconditionally approve this Agreement the

City, through its City Manager and at its sole discretion, can terminate this Agreement without incurring any obligations pursuant to the terms hereof.

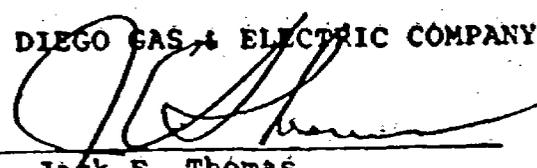
IN WITNESS WHEREOF, this agreement is executed by The City of San Diego, acting by and through its City Manager, pursuant to Ordinance No. O-_____ (New Series), authorizing such execution, and by SDG&E.

Dated this _____ day of _____, 1986.

THE CITY OF SAN DIEGO

By _____
City Manager

SAN DIEGO GAS & ELECTRIC COMPANY

By 
Jack E. Thomas
Exec V. P., Utility Operations

I HEREBY APPROVE the form and legality of the foregoing Agreement this _____ day of _____ 1986.

JOHN W. WITT, City Attorney

By _____
Thomas F. Steinke
Deputy City Attorney

TFS:ta:715.8
01/23/86

ATTACHMENT A
INDUCEMENT PAYMENT

CALCULATION

A one time financial contribution to be paid by San Diego Gas & Electric Company ("SDG&E") to a customer toward the added costs of installing a direct fired gas air conditioning system in lieu of, or to replace, a conventional air conditioning system, refrigeration system, or process cooling system, shall be calculated as follows:

A. For new installations, the cooling load used below shall be the design cooling load in tons used to size a conventional cooling system for the customer's application. The utility may require the customer to provide a cooling load estimate certified by an engineer licensed in the State of California.

Total Cooling Load In Tons	0-200 Tons	201-1200 Tons	> 1200 Tons
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Funding Levels Not To Be Exceeded:	280 \$/Tons	150 \$/Tons	125 \$/Tons
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B. For retrofit installations, the cooling load used below shall be the electric load displaced in kilowatts (kW) by gas air conditioning components as determined from instrumentation, equipment specifications, log books or bills.

Total Cooling Load In kW	0-200 kW	201-1200 kW	> 1200 kW
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Funding Levels Not To Be Exceeded:			
ALTOU Customers	250 \$/kW	225 \$/kW	200 \$/kW

AD Customer	350 \$/kW	325 \$/kW	
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