

Mailed

JUL 5 1991

Decision 91-07-017 July 2, 1991

## BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of San Diego Gas & Electric Company (U 902-G) for an Ex Parte Order Granting Authority to Increase Revenue Requirements to Support a New Natural Gas Vehicles ("NGV") Program; to Implement Adjustment Clause Treatment for New NGV Program Expenditures; and to Recover Increased Revenue Requirements in Rates; or in the Alternative to Establish a Tracking Account for Such Expenditures.

Application 90-06-028 (Filed June 11, 1990)

(See Appendix A for appearances.)

0.01/0.01/0.01

OPINION 10-10-72 120-73-12 59101003

San Diego Gas & Electric Company (SDG&E) seeks authority to increase its gas revenue requirement by approximately \$3.8 million per year to implement and conduct a new natural gas vehicle (NGV) program; to create an adjustment clause (including a balancing account) to provide a mechanism for funding and reviewing NGV program costs; and to recover this increased revenue requirement in rate changes ordered coincident with other rate changes arising from SDG&E's future annual cost allocation proceedings. SDG&E proposes to fund the NGV program by allocating all costs to all customer classes on a uniform cents per therm basis.

The Division of Ratepayer Advocates (DRA), Toward Utility Rate Normalization (TURN), and the City of San Diego (the City) oppose, in varying degrees, parts of SDG&E's proposal. Pacific Gas and Electric Company (PG&E) supports the proposal. Public hearings were held and briefs filed.

## 1. SDG&E's NGV Program

SDG&E witnesses testified that SDG&E's NGV program has three primary elements: NGV marketing programs, infrastructure development, and SDG&E fleet use of NGVs. The NGV marketing programs are designed to serve as a bridge to NGV commercialization, with one primary focus being demonstrations with target fleet customers and introduction of new NGV technology. An effective communications and education program will accompany the demonstrations. A second focal point is provision of emissions data and technical information to air quality regulators and lawmakers as they adopt regulations and policies that will promote or require the use of low-emission fuels. Compressed natural gas (CNG) infrastructure development includes the establishment of CNG conversion/maintenance centers and working with conversion equipment manufacturers on complying with California Air Resources

Board (CARB) regulations for aftermarket conversion of vehicles. SDG&E proposes to facilitate, but not directly provide, these services. SDG&E will, however, design, construct, and maintain CNG refueling stations, to act as the bridge in CNG refueling station development. SDG&E will work directly with oil companies and large fleet customers to construct stations through 1995, at which time it plans to phase out CNG station construction. Lastly, SDG&E will expand its own fleet use of NGVs and its own CNG refueling station infrastructure. SDG&E will test new NGVs within its fleet prior to customer demonstrations, and will use CNG to reduce conventional transportation fuel expenses while improving air quality.

SDG&E's target market for NGVs fueled by CNG are transit buses, school buses, medium and light-duty commercial truck and van fleets, and government fleets. Emissions regulations that effectively limit the use of fuels such as diesel, or that require the use of alternate fuels, are the reasons why most of these vehicles are in the target market category. In addition, CNG engines are being produced for many of those categories of fleet vehicles and demonstration funds are available from state and federal agencies. SDG&E's fleet of pickup trucks and service vans is part of this target market.

Longer term markets are passenger automobiles and heavy-duty trucks. On-board storage of CNG currently poses a problem for both these market segments, but that can be overcome in the future if original equipment manufacturers (OEM) are required to produce alternate fuel vehicles. In addition, public CNG refueling stations must be widely available prior to CNG being used by these market segments. Thus, the focus of SDG&E's NGV program is fleet vehicles, school and public transit buses through the 1990's.

SDG&E's NGV marketing programs include demonstration of converted NGVs to fleet operators, administering a conversion incentive program, negotiating with automotive manufacturers to make NGVs commercially available, and coordinating efforts with

SDG&E's research department to demonstrate new NGV technology. Extensive market research will be undertaken to provide conversion funding and perform demonstrations for fleet customers that are most likely to permanently incorporate NGVs into their fleets. The conversion incentive program will provide prime NGV candidates with funding for 75% of a conversion or the incremental cost on an OEM NGV.

SDG&E will also work closely with state and federal agencies that are funding demonstrations of NGVs, such as the California Energy Commission (CEC). By 1992, SDG&E plans to provide CNG refueling for those local government and school bus fleets that receive CEC funding for the purchase of natural gas-powered trucks, vans, and school buses. Extensive communications and educational efforts will be undertaken to ensure that fleet operators throughout SDG&E service territory are aware of demonstration programs available to them, and that they learn about the air quality and economic benefits of CNG use.

The budget for a two-year NGV program is estimated at \$6,761,000. Anticipated revenue from CNG sales for the two years is estimated at \$1,357,000 by the end of 1992, with \$515,500 from transit and school buses and \$819,350 from fleet vehicles. The estimates for all NGVs assume that customers will not convert to CNG use without financial assistance from the utility and/or a state or federal agency. Thus, CNG revenues are low due to limited funds for demonstration vehicles. However, by the mid to late 1990's when regulations require fleet operators to use clean fuels, CNG revenues are anticipated to increase substantially, with many local fleets choosing to use CNG after participating in demonstration NGV programs.

The witnesses testified that the City does not currently have a CNG conversion/maintenance facility, and SDG&E does not propose to provide these services. However, SDG&E plans to introduce the conversion concept to local service establishments

and facilitate the opening of two CNG conversion/maintenance centers by the end of 1991. Through the California NGV Coalition (Coalition), SDG&E will also work with conversion equipment manufacturers that want to serve the California market. The Coalition will assist those manufacturers in understanding and meeting the standards that CARB sets for CNG conversion equipment. Although the conversion market will be replaced over time by NGVs produced directly by the automotive industry, the conversion and maintenance infrastructure is part of the bridge to widespread use of low-emission NGVs. This portion of the CNG infrastructure establishment is anticipated to cost no more than \$400,000 over a two-year period.

The witnesses stated that SDG&E currently has two CNG refueling stations (one in operation and one under construction) for its own fleet use. SDG&E proposes to build five more stations that will be primarily for SDG&E fleet use, but also be available to other fleet operators for the purpose of testing the use of CNG. Funding for these seven stations is included in SDG&E's capital budget as part of corporate plant additions. SDG&E proposes to build 27 additional CNG stations on customer property by the end of 1995, including six that will be placed at retail gasoline service stations.

SDG&E will design, engineer, and install all CNG refueling stations and will provide maintenance for these stations. CNG stations located on customers' or gasoline service station property will be operated by customers, and in many cases SDG&E expects customers or oil companies to provide co-funding for the station costs. SDG&E's portion of the cost for building these 27 stations (through 1995) is expected to total \$3,558,000, with approximately half of that total used prior to 1992 to build 11 stations on customers' properties. SDG&E's gas engineering and gas operations departments will provide design, engineering, and maintenance for these stations, plus SDG&E's own stations; these

operating and maintenance expenses (O&M) will total approximately \$1,998,000 through 1992.

SDG&E is not proposing any CNG refueling station construction after 1995; it believes that market forces will take over by that time, with oil companies and fleet operators building additional CNG stations to economically respond to clean fuel vehicle regulations. However, SDG&E will continue to provide maintenance for its 34 company-owned stations, unless a customer chooses to purchase a station.

The witnesses said that SDG&E will increase its own fleet of NGVs to improve air quality, respond to anticipated forthcoming regulations, and improve transportation fuel economics. Demonstration of new technology NGVs within SDG&E's fleet is appropriate prior to demonstrating them to customers. Economic benefits of NGVs within SDG&E's fleet are estimated to be at least \$1,000 per year per vehicle, due to fuel-cost differentials. These O&M savings are projected to total \$175,000 by the end of 1992. Longer engine life and decreased maintenance are also anticipated but not yet directly quantified.

Costs for mechanics dedicated to SDG&E's fleet NGVs, plus CNG conversion equipment total \$570,000 through 1992. Costs for conversion equipment are assumed to be eliminated after 1993, due to the availability of factory direct NGVs from the automotive industry.

## 2. DRA's Proposal

DRA supports an NGV program for SDG&E, but not in the manner proposed by the utility. DRA recommends that the Commission reject SDG&E's financing scheme which relies on 100% ratepayer funding and, instead, adopt DRA's proposal, which places NGV program financing on 50/50 sharing of investment, profits, and losses between ratepayers and stockholders. As an alternative, should the Commission decide on 100% ratepayer funding, DRA

recommends that the NGV program be reduced significantly to where the ratepayers' burden is approximately \$0.9 million annually.

DRA's witnesses testified that DRA's 50/50 equitable-shared incentive proposal apportions the risks and benefits of the NGV program equally between ratepayers and shareholders. The mechanism for sharing expenses and revenues is the Natural Gas Vehicle Tracking Account (NGVTA). The program would end after two years. If SDG&E wishes to continue some form of NGV program, it would file a report which describes in detail the program costs, revenues, sales, infrastructure, etc. With that information, the Commission could determine whether the program should be continued, and if so, could develop appropriately updated forecasts upon which rates would be based. After several years of experience with the program, all parties will be better able to evaluate its usefulness and accurately forecast program revenues and expenses.

The NGVTA will track program expenses and revenues, and will allocate them equally between ratepayer and shareholder subaccounts. Sharing the losses should provide a strong incentive to SDG&E to minimize program expenses and to carefully target its investment of funds and personnel. There is also a corresponding incentive to maximize program revenues in order to decrease the shortfall between expenses and revenues. If the program is successful, both parties benefit equally: shareholders are allowed to retain some of the earnings generated by their investment, and ratepayers' rates are reduced by their share of the NGV profits and by the contribution to margin from the increased throughput. Everyone benefits from improved air quality.

With the exception of the 50/50 sharing calculation, DRA's NGVTA functions very similarly to the SDG&E proposed NGV adjustment clause. Both proposals capture the same costs and allocate the delivery costs the same way. The primary differences are the 50/50 sharing proposal, the lack of a ceiling on

expenditures, the incentive to sell and/or lease the refueling stations, and the duration of the program itself.

In both the DRA and SDG&E proposals, NGV revenues are generated by the "adder," which is the difference between the delivery costs and the actual rate charged to NGV customers. DRA has no objection to SDG&E's proposal to expense the non-SDG&E-fleet CNG refueling stations, but recommends that these stations be sold (at net book value or above) as soon as possible. Alternatively, the utility could negotiate lease or lease/buy arrangements with station users. The proceeds from any sales or leases should be returned to the NGVTA. Since the proceeds would be split with the shareholders, SDG&E would have an incentive not only to sell the stations for the maximum price, but also to negotiate leases that will generate additional revenue. Any legal expenses incurred as a result of the NGV program are not to be included in the NGVTA; the utility already receives an allowance for legal expenses through its general rate case.

Under DRA's proposal the NGVTA will contain two subaccounts to allocate over or under collections to the ratepayers and shareholders. The ending balance in the NGVTA each month will be booked 50% to the ratepayer subaccount and 50% to the shareholder subaccount, except for SDG&E fleet costs, which will be booked entirely to the ratepayer subaccount. The ratepayers normally absorb the capital and operational costs of SDG&E's own fleet, so it is appropriate for the ratepayers subaccount to absorb all of the incremental costs for SDG&E fleet NGVs.

Unlike the 50/50 equitable-sharing proposal, the DRA's alternate 100% ratepayer subsidy proposal does not contain any sharing of program costs between ratepayers and shareholders. It follows a more traditional ratemaking treatment in which all of the financial burden falls upon the ratepayers and all program costs are recovered through rates. It contains no performance incentives to SDG&E management, since the shareholders do not assume



responsibility for any program costs. This is the same ratemaking mechanism as that proposed by SDG&E in its application, although the DRA proposal calls for a smaller and less costly program than that requested by the utility. DRA's witnesses assert that if the ratepayers absorb 100% of the NGV program, SDG&E has no incentive to minimize program expenditures. Therefore, they recommend a stringent paring down of SDG&E's request.

DRA's expense projection reduces the number of subsidized refueling stations to be constructed from 12 to 9, with a corresponding decrease in station labor and O&M expenses. It provides the full amount requested for conversion of SDG&E's own fleet as DRA believes that this is an appropriate use of ratepayer funds. It deletes the full requested amount for conversion subsidies because Senate Bill 2600 provides for a tax credit of 55% of the conversion costs for NGVs (and other alternative-fuel vehicles), up to a maximum of \$1,000 per automobile and \$3,500 per truck or other vehicle. There is no need for both a conversion subsidy and a conversion tax credit, in DRA's opinion.

DRA believes that a short-term transitional program such as it proposes should not require the hiring of 20 full-time additional employees. DRA recommends a staffing level of 9 positions, rather than the 20 requested by SDG&E. This program also reduces the very large amount of money and staffing requested for marketing. The marketing staff levels have been adjusted as follows: (1) market research: 1/2 a program planner, no change; (2) communications and education: 1/2 a program planner instead of one senior program planner; (3) demonstration programs: one fleet specialist and one program planner instead of two fleet specialists, one program planner, and one economic analyst; (4) regulatory proceedings: one environmental analyst instead of one environmental analyst and 1/2 a program planner.

### 3. TURN'S Proposal

TURN's witness testified that TURN is opposed to an on-going ratepayer funding of the NGV program. TURN believes that the NGV program is completely inappropriate and perhaps illegal. Ratepayer funding should be limited only to that required to convert SDG&E's own vehicle fleet to CNG. In no event should residential gas and/or electric ratepayers pay any portion of the revenue requirement for any NGV program that this Commission may approve. He said that the rates proposed for CNG service by SDG&E and DRA understate the incremental cost of providing such service and therefore overstate any benefits that would result in future sales of CNG.

He observed that should the CNG market develop as a new major use for natural gas it will only serve to increase the overall market price of the gas commodity itself. Increased demand means higher prices. He believes that the only current industry participant who stand to lose from the development of the new natural gas market is the consumer. Those who will profit are the producers and pipelines. He contends that if the gas utilities want to further promote NGV development they should undertake such activity through unregulated nonutility affiliates, so that the costs and risks of the program are borne by those who stand to benefit in the long run, the owners of the affiliates. He said that the costs of the NGV program, if approved by the Commission, should not be borne by residential gas customers. Not only does the Public Utilities (PU) Code 745(c) prohibit a subsidy by residential customers for NGV programs but also the only beneficiaries of the SDG&E program are the commercial and the industrial classes. Those classes, therefore, should pay.

In regard to the rates that should be initially charged for CNG, it was his opinion that the rates proposed by SDG&E and DRA are too low. He recommends that the average noncore commercial/industrial rate (approximately 15.4 cents per therm) be used as an absolute minimum. In addition, the SDG&E and DRA

proposal to cost electricity for compression purposes using only the Energy Cost Adjustment Clause/Annual Energy Rate rate of 3.445 cents per kilowatt hour drastically understates the costs of providing the service. He recommends the price for special electric service contracts as established in Ordering Paragraph 1 of Decision (D.) 88-03-008. He recommends that the rate for uncompressed natural gas be at least five cents per therm above the average noncore commercial/industry gas rate. Finally, he warns that should SDG&E be merged with Southern California Edison Company, the NGV program could be cancelled. In that case, he recommends that all costs of the program charged to the ratepayers should be paid back to the ratepayers.

#### 4. Discussion

This SDG&E application for an NGV program raises the same issues as were raised in the application of PG&E for an NGV program (Application 90-07-067), decided today in D.91-07-018. We believe it is superfluous to repeat here the arguments on each issue and our resolution of the issues since the arguments in the PG&E application were essentially the same as the arguments in this SDG&E application.

In D.91-07-018, we found that an NGV program is in the public interest. That to achieve substantial market penetration for the use of CNG fuel vehicles, a subsidized program is required to develop the equipment and infrastructure needed to encourage the use of natural gas to fuel low-emission vehicles (LEVs). We were of the opinion that PG&E's proposal was reasonable and after reviewing the evidence in this SDG&E application we are of the opinion that SDG&E's proposal, with minor modifications, is reasonable. In the PG&E application, we found that the fixed infrastructure costs should be allocated among all customer classes based on air quality benefits realized and enjoyed by all Californians in their capacity as ratepayers. This is consistent with the intent of Public Utilities Code § 740.3(c).

The only differences between the SDG&E program and the PG&E program in terms of its methods (other than the difference in the amounts to be spent) are that SDG&E is prepared to spend up to 75% of the costs of the conversion of nonutility vehicles to CNG where PG&E proposed to spend up to 50% of the costs of such conversion, and that SDG&E would expense costs that usually are capitalized and ratebased. We believe that PG&E's 50% figure is more reasonable and will adopt it for SDG&E. This will permit SDG&E to convert more vehicles. In D.91-07-018 at p. 36, we discussed the reasons why ratebasing capital costs was preferable. SDG&E and PG&E should not differ in this respect. We also believe that this is a pilot program which should be limited to two years, as we did with the PG&E program. The findings of fact and conclusions of law that we make in this decision are comparable to those made in the PG&E decision.

#### Comments

This decision was issued as a Proposed Decision and comments were received from SDG&E, DRA, and TURN. We have reviewed the comments and have revised this decision to adopt some of them. The only comment that requires further explanation is SDG&E's request that its decision should be complete in itself and not refer to PG&E's decision. We do not agree. The issues were, for the most part, the same for both utilities and to the extent SDG&E presented different issues, those issues are discussed in this decision. The PG&E decision is 47 pages; the SDG&E decision is 17. To us, that is a worthwhile saving of paper, time, and effort.

#### Findings of Fact

1. To achieve substantial market penetration for the use of CNG fuel vehicles a ratepayer-funded program is required to develop the equipment and infrastructure needed to encourage the use of natural gas to fuel LEVs.

2. Impediments to the use of NGVs include: (1) lack of customer acceptance, (2) lack of participation by automobile

manufacturers, (3) unfavorable fuel economics, (4) lack of refueling stations, (5) lack of trained mechanics, and (6) safety perceptions that gas in its gaseous form is less safe than gas in its liquid form. An NGV industry requires initial public assistance to establish itself.

3. To provide an opportunity for potential users to become knowledgeable about the benefits of NGVs, a program must be established which does more than merely convert utility facilities and vehicles, but reaches out to the public in a way that makes it convenient and economical for the public to participate.

4. SDG&E's program over the next two years which will increase access to CNG refueling stations by 12 stations; construct 2 conversion installation/maintenance centers; offer CNG vehicles incentives to pay part of the conversion costs; to fleet vehicle owners to convert their existing vehicles to use CNG; begin a marketing program to communicate and demonstrate the benefits of CNG; develop an after-sale support capability for converted vehicles; and provide technical support of those vehicles, is a reasonable effort to create a CNG infrastructure and stimulate the CNG market.

5. DRA's primary proposal that ratepayers be responsible for 100% of SDG&E's fleet costs, but all additional costs should be shared 50/50 between the ratepayers and the shareholders is not in the public interest.

6. DRA's alternative proposal to provide only \$1.3 million dollars to support SDG&E's program over the next two years is inadequate and not in the public interest.

7. The revenues to be generated under the proposed tariffs of SDG&E are estimated to be \$1.357 million over the two-year period authorized by this decision.

8. The costs to be incurred over the authorized two-year period of SDG&E's NGV program are at least \$6.761 million.

(Exhibit 4.)



17. Any funds derived from the sale or transfer of assets devoted to SDG&E's NGV program shall be accounted for to offset losses from the program.

18. Persons operating service stations for the sale of CNG for use solely as a motor vehicle fuel, other than those who are public utilities by reason of operations other than operating a service station, are not subject to regulation by this Commission. Those persons may sell CNG as a motor vehicle fuel at prices they deem appropriate.

19. Our jurisdiction on CNG sales is limited to SDG&E's side of the meter and the connection to the service stations' side of the meter.

20. SDG&E's program at this time has no anticompetitive effects. Should the NGV market expand to a point where nonregulated entities are prepared to enter the market without subsidy we should review SDG&E's continued presence in that market.

21. SDG&E's program should begin on the effective date of this order and should terminate two years from that date unless modified by further order of the Commission. No additional funding will be granted until the completion of the two-year program.

22. TURN is found eligible for compensation in this proceeding.

### Conclusions of Law

1. The SDG&E NGV program as set forth in this application and modified by this decision should be adopted.

2. The SDG&E program for recovering variable costs included as part of its tariffs will be reviewed annually to ensure they do not result in any direct or indirect subsidy from residential gas or electric customers to persons using gas or electricity to refuel vehicles in violation of Public Utilities Code § 745(c).

3. SDG&E's NGV program should be permitted to be in effect for two years from the effective date of this decision unless

further modified by the Commission. No additional funding will be granted until the completion of the two-year program.

4. Persons and corporations operating service stations for the sale of CNG, other than those who are public utilities by reason of operations other than operating a service station, are not subject to regulation by this Commission. No additional funding will be granted until the completion of the two-year program.

5. The allocation of fixed infrastructure costs over all customer classes is consistent with the intent of Public Utilities Code § 740.3(c) given the finding of air quality benefits that will be enjoyed by all Californians in their capacity as ratepayers.

#### ORDER

#### IT IS ORDERED that:

1. San Diego Gas & Electric Company (SDG&E) is authorized to implement its natural gas vehicle (NGV) program as set forth in its application and as modified by this decision.

2. SDG&E shall establish an NGV balancing account to record the revenue and expenses related to the NGV program. The balancing account shall accrue interest at the 3-month commercial paper rate.

3. SDG&E is authorized to spend no more than \$6,761,000 plus interest in the initial two years of its program as costs to be charged to the ratepayers.

4. SDG&E NGV program shall terminate two years from the effective date of this decision unless further modified by the Commission. No additional funding will be granted until the completion of the two-year program.

5. SDG&E may file on three days' notice to the Commission and the public tariffs setting forth the rates for the sale of CNG and natural gas for compression proposed in its NGV program.



6. SDG&E may seek recovery of the balance in its balancing account during its next cost allocation proceeding.

7. The costs of the NGV program shall be allocated over all customer classes. These costs shall be recovered on an equal cents-per-therm basis over all volumes sold by SDG&E to all customer classes.

8. SDG&E shall capitalize and place into ratebase those facilities which are normal capital items, such as station construction and the conversion costs of new utility vehicles.

This order becomes effective 5 days from today.

Dated July 2, 1991, at San Francisco, California.

PATRICIA M. ECKERT  
President  
G. MITCHELL WILK  
JOHN B. OHANIAN  
DANIEL Wm. FESSLER  
NORMAN D. SHUMWAY  
Commissioners

I CERTIFY THAT THIS DECISION  
WAS APPROVED BY THE ABOVE  
COMMISSIONERS TODAY

  
NEAL J. SHULMAN, Executive Director

APPENDIX A

List of Appearances

Applicant: Keith W. Melville and Judy Anderson, Attorneys at Law,  
for San Diego Gas & Electric Company.

Interested Parties: Jefferson C. Bagby, Attorney at Law, for  
Pacific Gas and Electric Company; Regina De Angelis, Attorney at  
Law, for Armour, Goodin, Schlotz & Mac Bride; Phyllis Huckabee,  
Attorney at Law, for El Paso Natural Gas Company; E. R. Island,  
J. E. Jackson, and David B. Follett, Attorneys at Law, for  
Southern California Gas Company; Gene Everett Rodrigues,  
Attorney at Law, for Southern California Edison Company; Michael  
Shames, Attorney at Law, for Utility Consumers Action Network;  
Joel R. Singer, Attorney at Law, for Toward Utility Rate  
Normalization; Patrick J. Power, Attorney at Law, for City of  
Long Beach; Karen Edson, for Chevron; and William S. Shaffran,  
for City of San Diego.

Division of Ratepayer Advocates: Patrick Gileau, Attorney at Law,  
Kathy Auriemma, Natalie Billingsley, Robert M. Pocha, and  
Richard Dobson.

Commission Advisory and Compliance Division: William R. Edmonds.

(END OF APPENDIX A)

