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Decision 91-07-018 July 2, 1991

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of PACIFIC GAS AND ELECTRIC COMPANY for Authority to Increase Gas Rates and Recover Costs for Implementation of a Natural Gas Vehicle Program.	ORIGINAL Application 90-07-067 (Filed July 26, 1990)

(See Appendix A for appearances.)

I N D E X

O P I N I O N

Pacific Gas and Electric Company (PG&E) seeks authority to increase its gas rates by $5,235,000 annually starting in 1991, and by an additional $2,019,000 annually starting in 1992 to support an expanded natural gas vehicle (NGV) program. The Division of Ratepayer Advocates (DRA) and Toward Utility Rate Normalization (TURN) oppose the expanded program. Public hearings were held and the matter submitted.

Growing concerns over air quality problems and energy imports are focusing public attention on vehicles capable of operating on fuels that have low-emission characteristics and can be produced from domestic resources. One such attractive and feasible alternative to gasoline-powered vehicles is an NGV. NGVs are expected to be cleaner than vehicles powered by gasoline or diesel, or by methanol, ethanol or propane (the leading alternative fuel options). Moreover, NGVs can be fueled by a vast domestic energy resource base. The Legislature has directed the Commission, in Section 740.2 of the Public Utilities (PU) Code, to encourage activities to achieve "substantial market penetration of electric and compressed natural gas fueled vehicles," and PG&E has responded.

To fully understand the issues involved in this application one must have a firm grasp of the federal and state statutes which affect low-emission vehicles (LEVs). The most important are:

PU Code §:

> "740.2. (a) The commission shall encourage gas and electric corporations to pursue research, development, and demonstration activities in furtherance of the legislative goal of achieving substantial market penetration of electric and compressed natural gas fueled vehicles. For the purposes of this division, 'electric vehicle' means a vehicle

powered solely by batteries and a vehicle which has an onboard means of generating electricity.

"(b) This section shall remain in effect only until January 1, 1997, and as of that date is repealed, unless a later enacted statute, which is enacted before January 1, 1997, deletes or extends that date.

"740.3. (a) The commission, in cooperation with the State Energy Conservation and Development Commission, the State Air Resources Board, air quality management districts and air pollution control districts, regulated electrical and gas corporations, and the motor vehicle industry, shall evaluate and implement policies to promote the development of equipment and infrastructure needed to facilitate the use of electric power and natural gas to fuel low-emission vehicles. Policies to be considered shall include both of the following:

"(1) The sale-for-resale and the rate-basing of low-emission vehicles and supporting equipment such as batteries for electric vehicles and compressor stations for natural gas fueled vehicles.

"(2) The development of statewide standards for electric vehicle charger connections and compressed natural gas vehicle fueling connections, including installation procedures and technical assistance to installers.

"(b) The commission shall hold public hearings as part of its effort to evaluate and implement the new policies considered in subdivision (a), and shall provide a progress report to the Legislature by January 30, 1993, and every two years thereafter, concerning policies on rates, equipment, and infrastructure implemented by the commission and other state agencies, federal and local governmental agencies, and private industry to facilitate the use of electric power and natural gas to fuel low-emission vehicles.

"(c) The commission's policies authorizing utilities to develop equipment or

> infrastructure needed for electric-powered and natural gas fueled low-emission vehicles shall ensure that the costs and expenses of those programs are not passed through to electric or gas ratepayers unless the commission finds and determines that those programs are in the ratepayers' interest. The commission's policies shall also ensure that utilities do not unfairly compete with nonutility enterprises.
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> PU Code § 745:
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> "(b) The commission may establish a special incentive tariff for gas utilities which applies to gas sold by the utility for refueling of compressed natural gas fueled vehicles, as defined in Section 740.2. The tariff shall be designed to recover the costs and minimize adverse effects on other ratepayers.
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> "(c) The commission shall review any such tariffs annually to ensure that the tariffs do not result in any direct or indirect subsidy from residential gas or electric customers to persons using gas or electricity to refuel vehicles.
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> "(d) This section shall remain in effect only until January 1, 1997, and as of that date is repealed, unless a later enacted statute, which is enacted before January 1, 1997, deletes or extends that date."

The Federal Clean Air Act (S.1630) includes a California pilot test program which requires, among other things, the building and sale of at least 150,000 clean fuel vehicles per year in 1994-1996 and the building and sale of 300,000 vehicles per year thereafter. Natural gas is an eligible fuel.

California Revenue and Tax Code § 17052.11 provides tax credits for converting to low-emission motor vehicles up to $750,000 per year statewide.

1. Evidence

1.1 PG&E's Program

PG&E's witnesses testified that PG&E's objectives for promoting the NGV are to maximize projected environmental and ratepayer benefits by providing early, cost-effective assistance. PG&E proposes to: (1) serve as a catalyst to develop and shape the clean air vehicle fuels market; (2) gather improved technical and operational information on clean air vehicle fuel alternatives; and (3) substantially reduce vehicle emissions in California.

The witnesses said that there are eight million vehicles in PG&E's service territory, not all of which can economically or practically use natural gas as a fuel at the present time. Today, the major determinants are access to refueling locations and sufficient fuel consumption so that fuel cost savings will offset the added cost of converting vehicles to run on compressed natural gas (CNG). For these reasons, CNG is best suited at present for fleets of vans, buses, and trucks which return to their base location each evening for refueling and which tend to consume a high amount of fuel. PG&E's program is targeted to this specific 500,000 vehicle market. Although there are approximately 800,000 government and private fleet trucks, vans, and buses in PG&E's service territory, some of these are not presently suitable for CNG use because they do not operate from a home base, are too old for satisfactory conversion, reside in fleets that are so small (five vehicles or less) that installation of a compressor is not presently justified, or have owners who do not have the mechanical expertise to maintain their vehicles after conversion.

PG&E expects that initially the market will grow slowly as the refueling infrastructure develops and fleet operators experiment with natural gas as a vehicle fuel and find it to be a positive alternative. During this phase, expanding public access to refueling facilities, including natural gas dispensers at selected gasoline stations, selected fleet sites, and PG&E

facilities, and offering incentives to promote the conversion of existing vehicles are believed to be essential to develop the market for CNG vehicles.

PG&E contends that incentives will help fleet owners overcome the initial high cost of converting until manufacturers built NGVs at much lower cost. Through the use of incentives, fleet owners will be able to become comfortable with the use of CNG as a vehicle fuel and its economic and operational benefits. At the same time, strong efforts to encourage the development of dedicated CNG vehicles will be accomplished through PG&E's purchases of dedicated CNG vehicles build by automobile manufacturers and through joint utility/auto manufacturers' marketing efforts. As fleet owner interest increases and vehicle manufacturers perceive a market for CNG vehicles, the supply of dedicated CNG vehicles should increase, with full market entry by 1993. At that point, the availability of vehicles certified by the California Air Resources Board (CARB) and warranted by the manufacturers should accelerate NGV market growth.

PG&E believes that its NGV program will have many benefits for all its customers. It claims that an independently conducted survey indicates that concern for the environment is a widespread and high priority for PG&E's customers. A significant number of customers view air quality as the single most important environment issue. PG&E's customers feel strongly that more needs to be done in this area and that businesses such as PG&E can assist in solving environmental problems. The use of natural gas as a transportation fuel can improve air quality by significantly reducing emissions of ozone precursors and carbon monoxide. Furthermore, the widespread development, promotion, and use of CNG in the transportation sector can have important national security benefits by eliminating dependence on foreign oil and will assist in improved utilization of natural gas facilities. Although the NGV program is an environmental initiative, PG&E forecasts economic

benefits to ratepayers. With successful NGV market development, PG&E projects that this program will contribute to a net reduction in natural gas rates beginning in 1997.

PG&E notes that there are potential obstacles to successful market development, including: (1) unfavorable legislative or regulatory treatment of natural gas as a vehicle fuel, (2) lack of customer acceptance, (3) lack of participation by automobile manufacturers, (4) changing fuel economics, and (5) safety perception. PG&E believes that these obstacles should be manageable and should not prevent successful development of this environmentally beneficial fuel.

PG&E's witnesses pointed out that equipment exists to convert gasoline engines to run well on natural gas, but market barriers exist to developing natural gas as a vehicle fuel, such as (1) a lack of conveniently located refueling facilities; (2) a lack of manufacturer supplied vehicles; (3) higher investment costs associated with acquiring CNG vehicles or converting existing vehicles to use CNG; (4) a lack of a clear understanding among fleet owners of the economic and environmental benefits of CNG; and (5) a lack of fleet owner expertise with CNG fuel systems.

Under its proposed NGV fleet market development program, PG&E expects to play a major role in overcoming those barriers and will serve as a catalyst to introduce the use of natural gas as a vehicle fuel in California.

PG&E proposes to:

1. Increase access to CNG refueling stations by:
   a. Installing 19 refueling stations to serve PG&E and customer vehicles, and
   b. Entering into an agreement with one or more oil companies to install CNG dispensers at six selected gasoline service stations.

2. Pursue joint efforts with one or more automobile manufacturers to introduce CNG vehicles into the northern and central California market. This joint effort, to be completed by mid-1991, could:

   a. Provide after-sale conversion service,

   b. Coordinate ordering of dedicated CNG vehicles for PG&E and other fleet owners, and

   c. Develop a cooperative marketing venture.

3. Offer customized CNG vehicle incentives up to $1,250 per vehicle (to a maximum of 50% of the conversion cost) to fleet vehicle owners to convert their existing vehicles to use CNG. Incentives will be directed toward customers in geographic areas supported by existing customer or PG&E refueling stations.

4. Begin a marketing program to communicate and demonstrate the economical and environmental benefits of CNG vehicles to targeted fleet owners.

5. Reduce emissions from PG&E's own fleet, increase CNG vehicle visibility, and reduce fleet fuel costs by converting or upgrading replacement vehicles with original equipment manufacturer (OEM) CNG options.

6. Develop an after-sale support capability for converted vehicles in those PG&E divisions which serve CNG vehicle fleets. PG&E will work with private service organizations and suppliers to develop these services through public outlets. In the interim, PG&E's division personnel would provide diagnostic, troubleshooting, and other technical support to ensure a positive experience for the customer.

7. Support legislative, regulatory, and customer information needs by expanding emissions, testing, collecting operational data on PG&E and customer CNG vehicles, monitoring administrative developments, and expanding research and development programs to identify, develop, or assess technical options for natural gas.

8. Enhance data collection necessary to evaluate program effectiveness and potential by tracking compressor station installation and operation costs and expand market research to refine fleet vehicle estimates and identify available support services.

9. Pursue additional activities including monitoring of conversion outlets for quality, assistance in the certification of conversion kits, and response to public information requests.

PG&E's witnesses described the incentive program in detail. The incentive program will have a vehicle component and a compressor station component. Criteria for customer participation are:

1. Vehicles

   - The customer must operate a fleet of 20 vehicles (vans and trucks) sited at the same location in PG&E's territory.
   - Converted vehicles must have fuel-injected gasoline engines.
   - Converted vehicles must have less than 20,000 initial miles at the time of conversion.
   - The vehicle must be available for periodic emissions testing and other data gathering by PG&E.
   - Customers must have their own mechanics trained to convert and service their vehicles.

- Vehicles must be located so as to use existing or planned refueling stations.

- Vehicles must be located in air quality nonattainment areas.

2. Customer Compressor Stations

Once the customer has tested the CNG technology and is ready to convert on a larger scale, PG&E will encourage the customer to own its own compressor station. Due to economies of scale, compressor station installations become attractive with conversions of 20 vehicles or more. Subject to the availability of funds, customer-owned compressor stations would be eligible for incentive payments under the following conditions:

- 20 or more vans, light or medium-duty trucks converted or purchased to operate on CNG are located at the refueling site.

- Stations must meet all applicable federal, state, and local codes, and conform with PG&E's CNG compressor station guidelines.

- Stations will be limited to PG&E gas service territory and the following divisions through 1991: Bay, Central, Diablo, Fresno, Kern, Mission, North Bay, Sacramento, San Francisco, San Jose, Skyline, and Vaca-Valley.

- Stations must have their own mechanics who are trained in NGV technology.

The witnesses explained that PG&E's program and its associated revenue requirement relate to the critical developmental period over the next two years. For long-term projections, PG&E has made the following assumptions:

- Regulatory and legislative air quality mandates become both more numerous and demanding,

- Gasoline and alternative clean-fuel prices rise significantly, and
- Costs associated with the conversion to, or production of, NGVs decrease modestly.

Those assumptions in PG&E's opinion, should result in the market becoming self-supporting after 1995. Should this occur, the utilities and governmental agencies will not have to provide capital or subsidies to maintain sales and momentum. After 1995, PG&E expects no customer incentives will be required and that installation of additional PG&E-owned and operated refueling stations would cease. PG&E would continue to operate installed stations to support committed sales volumes and to recover amounts funded by ratepayers to support this program. PG&E admitted that revenue under its proposed CNG rate schedule is expected to be minimal over the 1991 - 1992 period covered by this application.

By the year 2000, NGVs are expected to comprise 18% of new fleet purchases of light, medium, and heavy-duty vehicles. Total penetration by that year is estimated to be 13% of operating vehicles. Gas sales associated with this level of penetration are approximately 300 million therms, or four percent of PG&E natural gas throughput. Revenues from natural gas sales for vehicle fuel use after 1996 are expected to more than cover program costs.

PG&E could not estimate the impact of potential passenger NGV use. While passenger NGV economics do not appear promising, the passenger vehicle market is so immense that even small percentage penetrations could result in significant natural gas sales impacts. If significant events occur, such as a doubling of gasoline prices or stricter emissions regulations being imposed on passenger cars, the impact of passenger vehicles will be reevaluated. But at present PG&E projects no impact; its total effort is directed to fleet operations.

The environmental impact of PG&E's NGV program is expected to be substantial and significant. The witnesses said

that in addition to tailpipe emission reductions, natural gas used as a vehicle fuel has other important benefits:

- Of all the fossil fuels, natural gas results in the lowest, total, greenhouse-gas emissions;
- Evaporative emissions from fuel tanks are totally eliminated;
- Delivery of natural gas through pipelines reduces emissions associated with fuel processing and transportation;
- As natural gas replaces imported oil, the likelihood of spills associated with fuel shipped by tanker will be reduced; and
- North America produces natural gas which provides the greatest security against Middle Eastern fuel supply interruptions.

1.2 DRA's Proposal

DRA's witnesses testified that the Commission should not provide ratepayer funding for an NGV program such as that proposed by PG&E. They stated that the program lacks adequate, timely safeguards to control expenditures of ratepayer funds, and lacks incentives to PG&E to minimize costs. Ratepayer funds should not be viewed by the utility as a piggy bank to underwrite entry into areas where the financial risk is substantially greater than that posed by traditional utility operations, regardless of how worthy the project may be. Not only are the ratepayers asked to absorb the costs of the NGV program, they are also asked to provide the utility with a rate of return. PG&E has an unregulated subsidiary which could undertake such a program provided that by doing so it would not become a regulated entity. (This is part of the sale-for-resale issue: whether selling CNG at a gas station makes the seller a public utility.)

They said that PG&E will have 14 CNG refueling stations open by the end of 1990, some of which will have public access.

These stations are already going into ratebase, irrespective of whatever action the Commission takes with regard to this application. PG&E projects that it will have a total of 116 NGVs in its corporate fleet by the end of 1990, most of which will be dual-fuel vehicles. There are less than a dozen customers currently taking service under the G-NGV-2 (CNG) rate schedule. The total monthly throughput for each of these 16 stations is extremely low.

Instead of embarking on an ambitious program to build 25 additional CNG stations, 13 of which would be dedicated to a specific customer and lack public access, DRA asserts that PG&E could use its own existing stations to allow fleet customers to refuel small numbers of their vehicles on an experimental basis and thus gain experience with NGVs while deciding if they wish to move on to large-scale conversions and construction of their own dedicated refueling stations. In DRA's opinion, it is poor planning to spend over $7 million in the next two years in station construction costs alone to create a refueling infrastructure before customers determine if CNG is the best option for their operation. DRA recommends, rather than PG&E's expensive program, that the Commission authorize a ratepayer-funded program of $2 million where PG&E can build six additional CNG refueling stations, convert PG&E fleet vehicles to run on CNG, and allow NGV fleet access to the stations.

DRA, although completely opposed to putting any facilities associated with an NGV program into ratebase, acknowledges that costs associated with PG&E's own fleet are normally incorporated into ratebase. If no ratepayer-funded NGV program is approved, DRA would not oppose ratebase treatment for the cost of converting additional vehicles in the PG&E fleet to operate on CNG or the incremental cost of purchasing OEM NGVs. DRA also would not oppose ratebasing the cost of constructing CNG refueling stations for the PG&E fleet. If the Commission

authorizes some form of ratepayer-funded NGV program, DRA recommends that all non-PG&E fleet NGV-related costs be expensed.

Should the Commission decide that an NGV program more extensive than DRA's program is needed to reach PG&E customers, DRA proposes two alternative methods of funding the program. Its first proposal provides for partial ratepayer funding of an NGV program. Ratepayers would be responsible for 100% of the PG&E fleet costs, but all additional costs would be shared 50/50 between the ratepayers and shareholders. In this way shareholders would not only participate in a program that is beneficial but also would have an incentive to provide efficient management of the program. All program costs would be expensed except for the PG&E fleet stations, which are ratebased. A tracking account would be created to track program expenses and revenues, and to allocate the net over or undercollection between ratepayers and shareholders. This program would be authorized for two years. If PG&E wishes to continue a ratepayer-funded NGV program, it should file for an extension of the program and include a report which describes in detail the program costs, revenues, sales, infrastructure, etc. During the current program PG&E should file brief progress reports on a quarterly basis.

The witnesses explained their proposal in great detail and said that its principal feature (other than the 50/50 sharing) is to establish a natural gas vehicle tracking account (NGVTA). The NGVTA will contain two subaccounts to allocate over or undercollections 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 PG&E fleet costs, which will be booked entirely to the ratepayer subaccount. The ratepayers normally absorb the capital and operational costs of PG&E's own fleet, so it is appropriate for the ratepayer subaccount to absorb all of the incremental costs for PG&E fleet NGVs. Under this plan DRA estimates that the maximum

cost to be recovered from ratepayers over the two-year life of the program is $9,439,000, or an annual revenue requirement of $4,715,000.

As an alternative, should the Commission fail to adopt the 50/50 proposal, DRA recommends a ratepayer subsidy option which follows a more traditional ratemaking treatment in which almost all of the financial burden falls upon the ratepayers and all program costs are recovered through rates. This program would scale back PG&E's proposal significantly. It would provide only $6 million in total for a two-year period and it would allocate 10% of the $6 million to PG&E to compensate the ratepayers for the beneficial public relations PG&E will receive through a ratepayer-funded environmental image enhancement.

This program would end on December 31, 1992. Because this program lacks the incentives contained in the 50/50 risk-sharing incentive proposal, DRA believes that open-ended authorization of this program would not send the proper signal to PG&E, and would actually create a disincentive for the utility to exit from the NGV market. Since PG&E has only minimum financial interest in the program under this scenario, DRA believes that a short-term program with a fixed termination date will reduce the likelihood that another entrenched self-perpetuating layer of utility employees will be created.

Under this ratepayer-funded program DRA has provided funding for all of the requested PG&E fleet refueling stations, but has reduced oil company stations from six to three, and eliminated funds for customer fleet-dedicated stations. As in DRA's primary proposal, DRA believes that ratepayer money should not be used to subsidize private entities. Funding has been provided to increase the total number of PG&E and oil company stations from 14 to 23. Fleet customers should utilize these stations to experiment with the use of NGVs. Funding for conversion subsidies has been eliminated by DRA on the ground that with the passage of Senate

Bill (SB) 2600, tax credits for conversion to CNG are available to fleet operators, and an additional subsidy is unnecessary. Subsidizing construction of customer-owned refueling stations is no different than constructing a PG&E-owned station on customer facilities: both involve using the ratepayers' money to assist private entities and both have been eliminated.

Research, development, and demonstration (RD&D) costs have been reduced by eliminating funding for a proposed technology center and for an emissions benefits study. Both of these activities are more appropriately funded by CARB, the Environmental Protection Agency, or other government agencies. DRA has retained funding for a fuel consistency study, which will sample PG&E's gas at various points within its system and use the samples to fuel test vehicles, and then analyze their performance and emissions. DRA has also retained funding for PG&E's contribution to the dedicated CNG systems test project, which is a joint effort between auto manufacturers, the Gas Research Institute, and various utilities.

Market research, joint projects with industry groups, literature, displays, and miscellaneous categories have all been reduced to 25% of the requested amount by DRA. This is primarily due to elimination of the conversion subsidies, but DRA also believes that the requested amounts are too high. Because the PG&E figures were estimated on a best guess basis, DRA has not been provided with any calculations upon which to base its specific reductions. In this situation, DRA's best guess is lower than the utility's. Labor has been reduced from 31 full-time equivalent positions (FTEs) to 13. Some of PG&E's labor estimates were also based on a best guess by various managers. DRA has studied the responses to various data requests and believes that 13 FTEs are more than adequate to operate the scaled-down program it is proposing.

In regard to rate design, DRA proposes that if the Commission adopts DRA's primary proposal (no ratepayer-funded program), DRA recommends no change at this time to PG&E's existing experimental tariffs. DRA also does not oppose ratebasing costs associated with the use of NGVs by PG&E's own fleet. However, if the Commission adopts a ratepayer-funded program, then DRA recommends that a new rate schedule GNGV-f, which features a single volumetric rate based on the wholesale gasoline price, be adopted to be competitive with the current price of a customer's alternative fuel. DRA made no revenue calculation for the sale of CNG under any of the scenarios it discussed.

In regard to cost allocation, DRA's witnesses testified that PG&E's proposed revenue allocation method would result in core customers being allocated a far larger share of program costs than noncore customers. DRA recommends that ratepayer-funded NGV program costs be recovered from all customers on an equal cents per therm basis. Under PG&E's proposal, core customers would be allocated $4.3 million, while noncore customers would be allocated only $.9 million, a ratio of more than 4:1. Adjusted core and noncore deliveries differ only slightly (3,012,234 MTH for core versus 2,915,352 MTH for noncore). Residential customers alone are allocated $3.1 million under PG&E's proposal, which is over three times as much as the costs allocated to noncore customers. In addition to equity issues, DRA alleges that such an allocation would be a violation of PU Code § 745, which prohibits using residential customers to subsidize NGV programs.

Finally, DRA maintains that at this time there is no guarantee that CNG will be the alternative fuel that prevails in the marketplace. To date, alcohol fuels like methanol and ethanol have enjoyed greater attention and funding--both for RD&D and demonstration projects--than CNG. DRA believes that the view that the gaseous, rather than liquid, composition of CNG makes it less desirable to consumers and poses barriers to market acceptance.

Consumer acceptance problems may be further exaggerated by oil company efforts to produce reformulated gasolines that will meet recently mandated CARB regulations. Auto manufactures have been reluctant to mass produce alternative fuel vehicles. When they have produced them, it has been on a limited run basis, and with guaranteed purchase. These purchase agreements have been made with fleet operators and government entities sponsoring direct subsidy programs.

1.3 TURN's Proposal

A witness for TURN testified that TURN, while a strong supporter of CNG as an alternative transportation fuel, believes that ratepayer funding of an NGV marketing and infrastructure development program is completely inappropriate and perhaps illegal. Any ratepayer funding should be limited to that required to convert and refuel PG&E's own vehicle fleet. In no event should residential gas and electric (UEG) ratepayers, who will at best receive incidental benefits and more likely suffer increased costs, pay any portion of the revenue requirement for any NGV promotional program that this Commission may approve.

He said that natural gas consumers, as such, do not create the air pollution problems that LEVs are designed to alleviate. While obviously some gas ratepayers also drive cars, there are gas consumers who do not own cars and drivers who do not purchase natural gas from PG&E. There is no reason why users of a clean fuel (natural gas) should be forced to subsidize the cleanup of pollution created by those who utilize gasoline and diesel fuel. Like many other socially beneficial projects, NGV commercialization deserves the financial support of public agencies and private businesses. Regulated monopoly utilities are neither governmental nor entrepreneurial institutions, however. Ratepayers should not be taxed through their utility bills in order to stimulate the market for a new product, even if it happens to be a socially

desirable one. Nor should they become involuntary investors in a potentially risky new enterprise.

TURN contends that the retail sale of CNG as a vehicle fuel should be a competitive market function, with PG&E providing only transportation of the gas to the refueling stations. Gas utilities have no special expertise in service station operation, nor is that activity a natural monopoly. What is needed to foster a competitive market in CNG retailing is not ratepayer subsidies, but resolution of the "sale for resale" issue, so that oil companies can sell CNG to their customers without the threat of CPUC regulation.

In terms of economic benefits, TURN is very skeptical that there will ever be any at all. While CNG sales may contribute something above the incremental cost of providing the service, this is not at all guaranteed. TURN notes that CNG service would have a high P-1 priority of service--these are not noncore interruptable loads. If incremental facility costs are properly incorporated into the analysis, PG&E's program is unlikely to show any meaningful economic benefits for ratepayers.

TURN believes that, most importantly from a ratepayer perspective, the development of an end use market for natural gas will only serve to increase the overall market price of the gas commodity itself. This is obviously why the producing sector of the industry is so excited about the prospects for NGVs. Pipelines also stand to profit from increased demand for gas transportation, and perhaps the local distribution companies as well. Indeed, the only current industry participants who stand to lose from the development of a new natural gas market are the consumers. Why then, questions TURN, should consumers fund the development of such a market when it is the producers and transporters who will reap the long-term gains?

TURN is of the opinion that ratepayers should not bear any of the costs of either PG&E's program or DRA's alternates,

other than the cost of converting and refueling PG&E's own vehicle fleet with CNG. But if some ratepayer funding is authorized, TURN states that since the NGV program is geared toward fleet operators, not individual customers, the costs should be allocated entirely to the large commercial and industrial classes. UEG ratepayers (UEG gas use) derive no direct benefits from the program, nor do they cause these costs to be incurred. Therefore, under this Commission's policy of cost-based rates, all NGV promotional costs should be allocated to the large commercial and industrial classes. Otherwise residential customers will be subsidizing the owners of large vehicle fleets.

PG&E proposes to allocate NGV program costs in the same manner as attrition increases, thereby placing 80% of the burden on core customers and at least 57% on the residential class alone. DRA proposes an equal cents per therm allocation of program costs to all customers classes, including residential and UEG. TURN strongly objects to both of these allocations, because they fail to link rate recovery to either cost causation or customer benefit. Moreover, TURN argues, such an allocation would appear to violate Section 745(c) of the PU Code, which requires that the Commission review NGV tariffs annually "to ensure that the tariffs do not result in any direct or indirect subsidy from residential gas or electric customers to persons using gas or electricity to refuel vehicles." TURN contends that since UEG customers would be bearing costs for this program without receiving commensurate benefits, it seems clear that an illegal subsidy exists.

Regarding the design of the NGV rate schedules, TURN proposes that NGV rates should be indexed based on a discount below the price of alternative vehicle fuels, subject to a floor price of five cents per therm above the incremental cost of providing the service. At the minimum the rates should be 68.793 cents per therm for compressed gas and 57.172 cents per therm for uncompressed gas.

Finally, he declared that if any ratepayer funding of NGV infrastructure costs is approved, this Commission must adopt a condition to protect ratepayers in the event that PG&E attempts to sell or spin off any NGV-related assets to an unregulated subsidiary or affiliate. Specifically, any program authorization must be conditioned such that ratepayers will receive compensation equal to the greater of market or book value in the event of a subsequent sale or spin-off to an unregulated affiliate. Absent such a restriction, PG&E could transfer potentially valuable assets to an affiliate at less than market value, or dump off unsuccessful investments and collect the losses from its customers. In either case ratepayers must be protected from the evils of self-dealing.

1.4 Chevron U.S.A. Inc.'s Position

Chevron U.S.A. Inc. (Chevron) did not present any witnesses, but filed briefs. In general Chevron supports PG&E's NGV program but points out some pitfalls and requests that any Commission approval be conditioned so as to encourage competition. Chevron asserts that the retail sale of CNG for NGV purposes should neither be conducted by regulated public utilities nor be subject to Commission jurisdiction. Governmental involvement in the safety of CNG transactions neither requires nor warrants retention of any jurisdiction by the Commission. Because presently, in Chevron's opinion, an entity cannot sell CNG without exposing itself to Commission regulation (i.e., the sale for resale issue), development of the NGV industry requires an interim bridging strategy which includes some circumscribed utility participation in the CNG retail market. The Commission should seek to assure that this bridging strategy not evolve into a permanent utility-based framework for the CNG retail market. Chevron recommends that we order PG&E to withdraw from the CNG retail sale market as soon as practicable after resolution of the sale for resale issue. The Commission should also structure the bridging strategy to best assure that this interim program not leave any anticompetitive

vestiges in the competitive CNG market which will develop. In particular, Chevron argues, the Commission (1) should not allow PG&E to place the costs of refueling stations at third party locations into ratebase for an extended period; (2) should presently order that upon resolution of the sale for resale issue, PG&E cease entering new service agreements for the retail sale of CNG; and (3) should reject DRA's suggestion for a permanent NGV tariff rate whose price would be set at a rate competitive with the unregulated CNG market place.

In Chevron's opinion, during the bridging period and continuing after resolution of the sale for resale issue, the Commission should enable the CNG consumer to choose among the maximum number of unbundled (e.g. transportation, storage) services as feasible. Accordingly, the Commission should immediately allow otherwise eligible CNG end users to utilize the fullest range of unbundled gas services that are available to industrial gas consumers. Additionally, the Commission should provide that upon the resolution of the sale for resale issue, the entities performing the CNG retail sale and compressor-related services may themselves utilize, and also offer, the broadest panoply of unbundled services.

Finally, Chevron believes it is incumbent that the Legislature pass legislation to provide the requisite assurance that the retail sale of CNG is not and will not be subject to public utility jurisdiction. The Commission should acknowledge the need for such legislation and urge the Legislature to enact the appropriate statutes.

2. Discussion

Air pollution is a serious problem. There are many who say it is the most serious environmental problem in California. The Legislature, in response, has created boards and agencies to deal directly with various aspects of the process to alleviate air pollution, e.g., the State Air Resources Board; and to assure that

all avenues of approaches are considered, has mandated agencies such as this Commission to evaluate and implement specific programs. One such program is to promote the development of equipment and infrastructure needed to facilitate the use of natural gas to fuel LEVs. As part of that mandate the Legislature has authorized charging the costs of the program, under certain conditions, to the ratepayers.

The evidence in this case clearly shows that because of consumer indifference, the low cost of gasoline, the lack of oil company participation, and the lack of financial incentives, the chance of a natural gas fueled vehicle industry surviving and growing without some form of initial public assistance is practically nil.

Recognizing the need for alternate fueled vehicles the Legislature declared that "It is in the interest of the State of California to provide incentives for the development and market penetration of clean fuel vehicles, including...compressed natural gas vehicles...." (SB No. 2103, Stats. 1990, Chapter 791, Section 1(e); PU Code § 740.3.) The Legislature directed the Commission to insure that the cost of these programs is not passed through to the ratepayers "unless the commission finds and determines that those programs are in the ratepayers' interest." (PU Code § 740.3(c).) So, while we must provide incentives to promote CNG vehicles, we must make sure that the programs created to provide those incentives are in the public interest. In this application public policy is not the issue; that has been determined by the Legislature. The issues in this application are the scope of PG&E's program and the allocation of costs.

In a broader context, we have issued D.90-09-045 in Rulemaking 87-10-013, in which we are reviewing the gas and electric utilities' RD&D programs over a wider spectrum. This application by PG&E regarding NGVs is a response to a specific legislative policy in the RD&D field and it is not to be considered

a substitute for the utility's more extensive RD&D programs nor for funding of the more extensive programs. While some overlap between this specific NGV program and other RD&D programs is inevitable, we intend that the NGV program should be distinct from other RD&D programs with its funding separate.

PG&E has proposed a two-year program to cost approximately $12.5 million which will provide:

- Installation of 19 additional CNG refueling stations to service PG&E and customer NGVs in 1991 and 1992 (in addition to the 14 stations which will be operational by the time this decision is rendered);
- Provision of incentives up to $1,250 per vehicle to defray up to 50% of the cost of converting existing nonutility vehicles to use CNG or the incremental costs of natural gas options on new vehicles;
- Installation of CNG dispensers at six oil company service stations;
- Provision of incentives for construction of a customer-owned and operated compressor station on customer's property;
- Encouragement of OEMs to deliver production-line NGVs;
- Stimulation of private sector involvement in the production, servicing, and support of NGVs;
- Conversion of over 500 additional PG&E vehicles to use CNG;
- Collection of emissions data from a broad cross-section of vehicle and engine types including production-line vehicles when they become available; and
- Expansion of research and development activities to establish improved testing capabilities, evaluate emission impacts, and reduce ongoing testing costs to PG&E.

DRA recommends that PG&E should be authorized a ratepayer-funded program of $2 million whereby PG&E can build six additional CNG refueling stations, convert PG&E fleet vehicles to run on a CNG, and allow non-PG&E fleet users access to these CNG facilities for testing purposes. DRA's position can be summarized as follows: PG&E's existing NGV infrastructure is currently underutilized, and PG&E's ratepayers should not have to provide economic subsidies to persons who use CNG to refuel their vehicles, even though conceptually, many ratepayers may derive the societal benefit of cleaner air. TURN supports DRA.

For the reasons set forth below we reject DRA's proposal and will adopt PG&E's program with some slight modifications.

2.1 Infrastructure Utilization

DRA asserts that by the end of January 1991, PG&E will have a total of 14 CNG refueling stations located at various PG&E sites throughout the Bay Area. Seven of these 14 stations will permit full public access. Five of these 14 stations will only permit PG&E vehicles to be refueled there. Two of the 14 stations will allow limited customer access, meaning the customer's vehicle enters PG&E's service yard to be refueled by a PG&E employee. Currently, there are only two customers on PG&E's NGV-1 tariff, and approximately 18 to 23 customer vehicles are on the NGV-2 tariff. PG&E currently has 125 to 140 NGVs in its fleet.

Each PG&E CNG refueling facility can serve 10 to 50 vehicles per day. PG&E is still trying to fully utilize its refueling facilities. When PG&E built these refueling facilities, PG&E intended to make CNG available to PG&E customers at these sites and, considering the current number of NGV customers and the number of CNG refueling stations that are in operation, it is apparent that the current PG&E infrastructure is underutilized. Under DRA's primary proposal, in addition to the 14 existing CNG stations, DRA proposes that 6 additional CNG facilities be built on PG&E sites. Given the current and anticipated refueling

facilities, and the number of NGVs in the future, DRA believes that these stations can meet the need of the NGV market.

PG&E responds that its program is the minimum necessary to attempt to develop a new market. It says that recognized barriers to the successful development of NGVs include: (1) a lack of conveniently located refueling facilities; (2) a lack of manufacturer designed and supplied vehicles; (3) higher investment costs associated with acquiring NGVs or converting existing vehicles; (4) a lack of a clear understanding among fleet owners of the economic, environmental, and safety benefits of NGVs; and (5) a lack of fleet owner expertise with CNG fuel systems.

PG&E argues that DRA's primary proposal to limit PG&E's NGV program to conversion of PG&E vehicles and the construction of six additional refueling stations on PG&E property is based on a number of arbitrary and questionable assumptions. DRA assumes that the funding of six additional refueling stations in addition to the stations already in use will provide an adequate infrastructure to foster the development and growth of the NGV market in northern California. DRA also assumes that these 14 PG&E refueling stations are so situated as to afford ample opportunity for a significant number of fleet owners to test NGVs. These critical assumptions, in PG&E's opinion, are nothing more than uninformed speculation. DRA conducted no market research to determine how far potential NGV fleet operators would be willing to drive to use a PG&E NGV refueling station. In fact, DRA never discussed the validity of its assumptions or its proposal in general with any of the fleet owners, automobile manufacturers, or oil companies who make up the potential NGV market.

In our opinion, to adopt DRA's program would be to reject the legislative objective "to promote the development of equipment and infrastructure" to facilitate CNG vehicles (PU Code § 740.3) and to "encourage...the legislative goal of achieving substantial market penetration...." (PU Code § 740.2, emphasis added.) To

promote substantial market penetration, an outreach program is needed. The public must have access to CNG stations and, to patronize the stations, must have vehicles which use CNG. Merely converting its own vehicles and building a few more CNG stations on its own property for dual use is nothing more than preaching to the faithful. No infrastructure at all will result. An infrastructure that has value, that will show Californians the merits of NGVs, is one that provides refueling stations throughout the territory where NGVs are most likely to operate; that provides conversion stations in areas where conversions are most likely; that provides training for those who would operate conversion stations and CNG stations; and, most importantly, provides incentives for PG&E's customers to get involved in the NGV business. PG&E's program provides this structure, DRA's does not.

DRA's alternative proposal to scale back the PG&E program to $6 million suffers from the same infirmaties as its original proposal. Although $6 million obviously provides a broader scope than DRA's $2 million, we are not persuaded that DRA's scaled down model will be adequate. DRA presented no market data to show that its proposal would stimulate NGV market growth. PG&E, having grappled with the problem for a number of years, has a better grasp of what is needed. (Re Rulemaking for Research, etc. Decision (D.) 90-09-045 in R.87-10-013, at p. 2.) As we said in D.90-09-045 "First, we are proposing that the utilities be given greater regulatory freedom in terms of both individual program components, as well as overall budget discretion." (At p. 2.)

DRA argues that because auto manufacturers are now spending large sums on alternate fuel vehicles and federal law requires at least one million LEVs by 2001, and if natural gas is truly the cleanest of the alternate fuels, there is no need for a subsidized ratepayer program. On the contrary, because these vehicles are coming (and they will not all be NGVs) an infrastructure such as PG&E proposes is needed to prepare the way.

We are aware of the competition among alternate fuel vehicles. Natural gas is not the only fuel in these experimental programs and might not be ultimately the fuel of choice.[1] But to test it adequately a program such as PG&E proposes is the minimum needed to catch the attention of fleet owners.

Our decision to adopt PG&E's program is made with full awareness of PG&E's current RD&D program of some $50 million annually which includes money for research and development of NGVs. The funds authorized by this decision are to supplement funding in place so that the NGV program many expand. In our next review of PG&E's general RD&D budget we will consider whether the NGV program shall have two sources of funds.

2.2 Cost Allocation

PG&E proposes to allocate the costs associated with its NGV program to all gas customer classes in proportion to the gas base revenue allocated to each class in PG&E's latest annual cost allocation proceeding (ACAP). This allocation method was adopted in D.89-09-094 for all general rate case and attrition year revenue changes. PG&E proposes no new rate schedules in connection with this program. It proposes to retain the two experimental NGV rates, Schedules G-NGV1 and G-NGV2, established in PG&E's last ACAP (D.90-04-021), for the sale of natural gas as a motor vehicle fuel. As approved in D.90-04-021, revenue collected under these experimental rates is being accumulated in a memorandum account and will be credited to customers in PG&E's next ACAP filing.

1 Electric cars are considered by some to be alternate fuel vehicles. They certainly are LEVs. Automobile manufacturers are expected to have electric cars in production for sale to the general public by 1993. In California electric car batteries will be charged with electricity generated in large part by natural gas. Whether NGVs can survive in this competitive market is, of course, the essential question which fuels this proceeding.

PG&E agrees, in principle, with the DRA recommendation to establish an NGV market rate indexed to the wholesale price of alternative fuels, but it believes that all concerned parties should be given ample opportunity to comment and be involved in the development of this policy. As the original PG&E filing did not address this issue and all interested parties may not be represented, PG&E believes NGV rate design should be deferred to the next allocation proceeding and rates in effect should be used in the interim.

DRA proposes that, should the Commission approve PG&E's NGV program, costs and benefits should be allocated 50% to ratepayers and 50% to shareholders. PG&E maintains that DRA's proposal is misleading and unfair. Although we would not agree with PG&E's characterization of DRA's proposal we do agree that it should not be implemented. The PG&E program is a two-year program; net revenue benefits are not possible during this period. DRA's proposal amounts to nothing more than an imposition of 50% of the program costs on PG&E's shareholders. In that circumstance PG&E declares it would not institute the program. We believe PG&E's program fulfills the legislative intent and that the lion's share of its costs are recovered through a subsidy. It would be inequitable to impose 50% of the costs of a program instituted for the general welfare on the shareholders of one company.

DRA contends that because funding for the NGV program is being decided now, the issue of cost allocation should be decided now. We agree. DRA points out that under PG&E's proposal to allocate costs in the same manner as attrition increases, core ratepayers during the first year of the program would be allocated $4.3 million of the program costs, while noncore customers would be allocated only $900,000. Residential core customers, which make up a majority of the core, would pay $3.1 million of the $4.3 million under PG&E's proposal. In other words, 80% of the burden of the

NGV program costs will be on core customers, and at least 57% of the costs will be borne by the residential class.

DRA states that the proposed allocation method of PG&E is not only inequitable, it is also in violation of subdivision (c) of PU Code § 745:

> "The commission shall review any such tariffs annually to ensure that the tariffs do not result in any direct or indirect subsidy from residential gas or electric customers to persons using gas or electricity to refuel vehicles."

Under PG&E's proposed cost allocation, residential gas customers will be directly subsidizing commercial and industrial fleet customers who use natural gas to refuel their vehicles. Subdivision (c) of PU Code § 745 prohibits that type of subsidy. DRA recommends that if the Commission adopts a full ratepayer-subsidized NGV program, all costs be allocated to all customer classes on an equal cents per therm basis.

TURN supports DRA's position in part and argues that it is indisputable that PG&E's program is aimed exclusively at commercial/industrial customers. PG&E admitted that the economics of NGV-fueled passenger vehicles do not appear promising. Through 1995, when PG&E plans to end conversion incentives, only commercial customers, particularly large commercial customers, are targeted for conversion incentives. In addition to direct conversion payments, commercial and industrial customers who use NGVs will also receive technical assistance, access to PG&E refueling stations, and assistance in constructing and maintaining refueling stations on their own property. Providing those benefits only to commercial customers further evidences the interclass subsidy inherent in PG&E's proposal to allocate the costs of this program on an equal percentage of fixed costs basis. TURN submits that DRA's equal cents per therm approach suffers from the same infirmity--it assesses costs to UEG use customers even though they

receive no direct benefits from the program. Nothing in PU Code § 745(c) authorizes such cross-subsidies.

Finally, TURN argues, in addition to violating PU Code § 745(c), PG&E's proposal violates long-standing Commission precedent that each customer class should be charged its true cost of service. For example, in D.89-12-057 the Commission stated: "In recent years we have pursued a goal of developing cost based rates. When rates are fully based on costs, customers pay rates that are proportionate to the costs the utility incurs in serving them." (Id. at 220.) Providing subsidies to convert commercial vehicles to CNG and constructing and operating refueling stations for commercial customers' NGVs are simply not costs of serving the residential class. Therefore, UEG rates should not be increased to recover the costs of these activities.

PG&E claims that Section 745(c) does not apply to this proceeding. It argues that PG&E is not proposing any special incentive tariffs for the sale of gas to be used as fuel for vehicles, within the meaning of Section 745(b). To the contrary, PG&E is proposing no new tariffs in this proceeding and no change to its existing NGV tariffs, GNGV-1 and GNGV-2, which, in any event, are not special incentive tariffs. It is true, PG&E admits, that incentives, unrelated to the price of gas used for vehicle fuel, play a part in PG&E's proposed NGV program. However, PG&E says that one would have to do serious violence to the plain meaning of Section 745 or ignore its actual language entirely to find this section apposite to PG&E's NGV program.

But, even if Section 745(c) does apply, PG&E believes that all ratepayers should share in the costs of the NGV program because all ratepayers will enjoy the environmental benefits which will accrue as the result of increased NGV use. The nonexclusivity of ratepayer environmental benefits in no way diminishes the fact that environmental benefits accrue directly to all ratepayers. In PG&E's service area there is a virtual identity of ratepayers and

general service area population. Therefore, there is no significant mismatch between the population which both bears partial responsibility for existing pollution problems and which will enjoy the environmental benefits of PG&E's NGV program and the population of ratepayers who will be asked to fund the program.

PG&E contends that its proposed NGV program is analytically no different from the myriad of other programs which have been funded by all classes of ratepayers while offering general societal benefits. The Zero Interest, Direct Weatherization, and Low-income Ratepayer Assistance programs are but a few examples of comparable programs. Stimulation of NGV use is just as legitimately a utility function as are the other services offered by PG&E.

Having considered the rival interpretations of § 745(c), we adopt DRA's equal cents-per-therm basis for allocating costs. Contrary to the suggestion by DRA and the insistence of TURN we do not find § 745(c) a barrier to such a sensible result. In our opinion PUC Code § 745(c) has been fundamentally misconstrued by DRA and by TURN. In essence that reading would attribute to the Legislature a positive command that this Commission discriminate against all ratepayers other than residential customers in funding a program vital to improving the quality of the air for all Californians. In contrast to the fate of all other classes of ratepayers, this reading would mandate that the residential customers gain the undoubted benefits while being totally spared any participation in the consequent costs. Absent a command stated in the most explicit of terms, we decline to attribute such a discriminatory purpose. Such an interpretation also ignores the language of PUC Code § 740.3(c), a provision enacted one year after the legislation now codified as §§ 740.2 and 745. In revisiting the topic of funding the electric power and natural gas low-emission vehicle program the Legislature declared:

> "The commission's policies authorizing utilities to develop equipment or infrastructure needed for electric-powered and natural gas-fueled low emission vehicles shall ensure that the costs and expenses of those programs are not passed through to electric and gas ratepayers unless the commission finds and determines that those programs are in the ratepayers' interest...."

When this language is read in conjunction with the prohbitions on tariffs which result in any "direct or indirect subsidy from residential gas or electric customer to persons using gas or electricity to refuel vehicles", a sensible vision of the legislative scheme becomes clear.

2.2.1 The role of § 740.3(c) is to govern the pass-through of equipment and infrastructure costs associated with electric-powered and gas-fueled low-emission vehicles

We interpret § 740.3(c) to deal with fixed infrastructure costs associated with the Natural Gas Vehicle program. These are the costs incurred in constructing compressor facilities, converting vehicles, and promoting the acquisition and deployment of NGVs. Such costs do not cover either the acquisition of the natural gas nor the cost of its transportation to the point of compression. With respect to these fixed costs our statutory obligation is akin to the task performed by this Commission and its predecessor for more than a century. They are not to be passed through to ratepayers absent a finding on our part that the program has operated prudently and in the ratepayer interest.

In the most general of terms, this determination has been foreshadowed. The Legislature has declared that the pursuit of cleaner air and relief from global warming is in the public interest. There is nothing in the hearing record which suggests that these benefits, as well as the strategic advantage of

lowering our dependence upon foreign oil, will not be realized by the successful implementation of this program. To the extent that they are, they will be enjoyed by all Californians in their capacity as ratepayers.

2.2.2 The role of § 745(c)

While § 740.3(c) sets the standard for reviewing the pass-through of fixed costs, § 745 governs the allocation of variable costs of the NGV program. They include the commodity cost of the gas, the transportation of that gas to the customer's facility and any variable compression costs. PG&E has two existing natural gas vehicle tariffs, one for compressed natural gas and the other for uncompressed gas. Section 745(c) imposes upon the Commission an obligation to review these and any successor tariffs annually to ensure that 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 one year's time we will conduct an initial review of the applicable tariffs to ensure that they have fully recovered the variable costs associated with the commodity, its transportation and compression.

On another point, we agree with TURN that ratepayers should be protected in the event that PG&E attempts to sell or spin off any NGV-related assets to an unregulated subsidiary or affiliate. We would add--to any person or company. Although PG&E will capitalize and ratebase certain facilities, especially customer compression stations, thereby investing its own funds, that investment is an integral part of a subsidized program funded in large part by ratepayers. Under the circumstances it is equitable that any funds derived from the sale or transfer of assets devoted to this NGV program be accounted for to offset losses from the program.

Because of the view we take, we cannot approve any of the cost allocation proposals before us. We expect PG&E to submit a

proposal in compliance with this decision when it seeks to recover its program costs in rates.

2.3 Ratebase

PG&E's proposal calls for ratebasing its own refueling stations, the six refueling stations that are sited on the oil companies' property, and the three to five refueling stations located at customer fleet locations. PG&E also proposes ratebasing the conversion costs of new utility vehicles. DRA believes that ratebase treatment is appropriate for PG&E's own CNG refueling facilities, but is totally inappropriate for the CNG facilities that will be sited on the property of oil companies and fleet customers. The CNG refueling stations that are sited on oil company and customer fleet locations will not be used to refuel PG&E fleet vehicles. Instead, it is contemplated that the oil company stations will be open to the public, while the customer fleet locations will serve the needs of that particular fleet customer. The only benefit that PG&E's gas operations receive from the oil company and customer fleet stations is that the stations promote the use of natural gas as a vehicle fuel. For those reasons, DRA says it is inequitable and unfair for PG&E to include in ratebase facilities which do not directly affect the gas operations of PG&E, and at most confer a societal benefit of better air quality on PG&E ratepayers. DRA claims that if PG&E is permitted to ratebase facilities on customer and oil company property, PG&E would have an incentive to continue the program until the facilities are fully depreciated, about ten years. DRA states that ratepayers should not have to pay a rate of return on a potentially risky venture.

PG&E responds that DRA's position betrays a lack of understanding of accounting and ratemaking principles. PG&E capitalizes compressor stations and conversion kits for new vehicles because this equipment is a durable asset with a long life. And under normal accounting and ratemaking principles, the

cost of the asset should be recovered over the useful life of the asset. Capitalizing such equipment is also in conformance with Federal Energy Regulatory Commission accounting standards and is required by the Internal Revenue Service (IRS). In expensing this capital equipment, DRA ignores the fact that the IRS requires that it be capitalized for tax purposes. PG&E says that ignoring the additional cost associated with this tax-timing difference unfairly increases the shareholder's cost burden. In regard to the ten-year depreciation, PG&E has offered to depreciate the equipment over a two or three-year life, provided that the additional cost resulting from tax-timing differences is recovered by the company.

We adopt PG&E's position. In addition to the reasons PG&E puts forth, by capitalizing the costs of facilities PG&E will be investing about $7 million over a two-year period. Admittedly, the ratepayers will have to pay a return on this investment, but they will benefit by not having to pay this $7 million in rates over two years with little or no hope of generating offsetting revenues in the period. They will repay the $7 million in rates (plus return) over the life of the facilities, with a better chance of revenue recoupment. To state it more simply--if ratebase treatment is not permitted, during the next two years ratepayers would have to fund about $18.8 million rather than the $12.5 million under PG&E's proposal.

2.4 Sale for Resale of Natural Gas

PG&E presented evidence that oil companies and gas station operators are hesitant to invest in CNG stations because they are fearful of being embraced by the regulators. The assumption being that this embrace would be detrimental to their economic health. No representative of private industry so testified, but Chevron made the point strongly in its brief. Chevron believes that a statement by the Commission that a sale for resale of CNG is not subject to PUC regulation will not give sufficient comfort to entrepreneurs and that legislation is

required. DRA, supported by TURN, does not object to the Commission's resolving this issue in this proceeding, and resolving it in favor of nonregulation.

DRA proposes that the Commission should adopt rules and tariff provisions which would allow private entities to either transport or purchase natural gas from PG&E for resale at a service station for NGVs. This would serve to foster a competitive market for the sale of CNG. If CNG is a viable alternate fuel, then third parties other than utilities will be willing to invest in NGV service stations and accept the market risks associated with such an investment. Moreover, regulations in California mandate that the gasoline industry must provide for the dispensing of alternate fuels such as CNG. These vendors should be provided the opportunity to sell gas to this potential new market as an unregulated service. The transmission and distribution of gas to the NGV refueling station would continue to be regulated under a tariff, but resale of the commodity would not require any regulation by the CPUC.

DRA recommends that the Commission should:

1. Allow for the sale or transportation of uncompressed natural gas by PG&E to third parties for purposes of resale or fleet use as CNG for use in NGVs;

2. Not regulate the sale of CNG by nonutility entities for use in NGV;

3. Allow third parties selling CNG to charge an unregulated market rate for their product;

4. When required, address any safety standards regarding CNG service stations, for example, vehicle fueling connections.

These actions, DRA believes, will help other parties move toward making the market-based decisions involved in utilizing alternate fuels such as CNG.

The statutes that some parties fear will ensnare them into the regulatory process are simply worded.

PU Code §:

> "221. 'Gas plant' includes all real estate, fixtures, and personal property, owned, controlled, operated, or managed in connection with or to facilitate the production, generation, transmission, delivery, underground storage, or furnishing of gas, natural or manufactured, except propane, for light, heat, or power.
>
> "222. 'Gas corporation' includes every corporation or person owning, controlling, operating, or managing any gas plant for compensation within this State, except where gas is made or produced on and distributed by the maker or producer through private property alone solely for his own use or the use of his tenants and not for sale to others.

Under these statutes a fleet operator owning a CNG pump for its own fleet clearly does not fall within the statute. And we believe it is expanding the meaning of words to an unnecessary degree to equate the word "power" in Section 221 to include CNG which is sold in a manner similar to the retail sale of gasoline for vehicles. After all, we do not believe anyone would seriously contend that a gas station operator is a "pipeline corporation" subject to our jurisdiction merely because he has pipes in his station which deliver "fluid substances except water through pipe lines." (PU Code §§ 227 and 228; cf. Richfield Oil Corp. v. PUC (1960) 54 C2d 419, and (1961) 55 C2d 187.) We have expressed our support for S.B. 547 which specifically exempts retail sales of CNG for use as a motor vehicle fuel.

We agree with DRA on all points except for reserving to ourselves some safety jurisdiction at service stations. If DRA's concern is limited to the PG&E's side of the meter and the connection to the service stations's side of the meter, we agree that we should retain safety jurisdiction. But the service station

side of the meter should be the responsibility of others, just as gasoline pump safety is.

2.5 Anticompetitive Effects

The Legislature has declared that State policies which encourage gas utilities to enter into ventures which promote CNG vehicles should ensure that the utilities do not unfairly compete with nonutility enterprises. DRA believes that if PG&E's NGV proposal is adopted by the Commission, it will have an anticompetitive effect on oil companies as well as on other clean fuel markets. DRA observes that a large part of PG&E's program calls for customer incentives to convert fleet vehicles, incentives to purchase OEM CNG vehicles, and incentives to subsidize in whole or in part the building of refueling stations. DRA argues that these incentives would give CNG a competitive advantage over other clean air fuels. There are no other existing programs where cash incentives are given to a customer to encourage them to convert to a specified clean air fuel. Giving customers cash for converting their vehicle to CNG skews the economic decision that a customer would normally make when deciding which fuel is the best value for the money. In addition, with the tax credits available for low-emission vehicles, additional incentives are no longer necessary. DRA asserts that the proposed ratebasing of refueling stations sited on service stations and customer locations harms oil companies who plan to compete in the sale of CNG. If these PG&E-owned sites are ratebased, the company will earn a rate of return on those stations. Oil companies, on the other hand, do not enjoy a risk free rate of return. The price that oil companies must charge for CNG cannot compete, in DRA's opinion, with the subsidized return that PG&E will earn.

Chevron, who is a potential competitor, does not believe that PG&E's proposal is anticompetitive at this time, but that PG&E's proposal to conduct additional CNG retail sale transactions could be anticompetitive if and when a competitive market for the

retail sale of CNG is able to develop. Chevron is concerned with the anticompetitive impacts of the utility's proposed extended ratebase period and of DRA's suggestion that the Commission retain a competitive CNG retail sales tariff.

To encourage competition Chevron recommends that the Commission should now order that as soon as practicable after resolution of the sale for resale issue PG&E should:

1. Cease entering new CNG retail sale service agreements;

2. Construct no additional refueling stations for retail sale purposes;

3. Be allowed to continue bundled retail tariff sales only to certain CNG customers that it is serving pursuant to existing sale service agreements and subject to certain conditions; and

4. To the extent feasible and if not detrimental to an existing CNG customer, divest itself of the refueling stations used for public retail CNG sales.

PG&E responds that to adopt Chevron's recommendation would create a number of problems. First, it is blind to the most important consideration in PG&E's withdrawal from the refueling market: that is, whether convenient alternative refueling options are available to the NGV customer. Second, it prematurely attempts to set the rules for PG&E's withdrawal from the field before the market has developed and without the input of any number of parties who might have an interest in the terms of such a withdrawal.

Chevron's third condition relates to the provision of bundled tariff sales only to certain current CNG customers and subject to a number of additional conditions, such as the execution by the customer of an annual certificate that it has no other feasible refueling alternatives. PG&E claims that this is onerous and unreasonably limits the use of the public refueling stations to customers who have signed up for CNG service on or before the date

of resolution of the sale for resale issue, whether or not at that date other viable refueling options existed. PG&E says that this provision does not appear to be aimed at promoting the entry into the market of new NGV customers, but rather at protecting the position of nonutility entities interested in the refueling market, whether or not they have actually acted to make refueling stations available to the market. PG&E does not believe its proposed six public refueling stations in its entire service territory can pose a realistic competitive threat to any entity which is seriously interested in committing itself to the market.

PG&E maintains that its NGV program is designed to foster overall market development and eventual competition. Currently, there is no NGV market to speak of. Few CNG vehicles are being manufactured or converted. Few publicly available CNG refueling or vehicle repair stations exist. In short, there is no real NGV market and, as a consequence, there are no competitors. PG&E's program is intended to act as a bridge between the current situation and a mature NGV market. The program is designed to support market development and the participation of private investment. PG&E's goal is not to be involved in construction of NGV service stations in the long term. Our goal is to achieve a smooth transition, as promptly as possible, to an unregulated competitive CNG retail market.

The record is clear, and we find, that PG&E's NGV program is not anticompetitive. There are no competitors now, and potential competitors, if there are any, are waiting for PG&E to show them the way through the investment of PG&E's and ratepayers' funds. As competition in the NGV market emerges and evolves, the Commission will be in a position to adjust the PG&E program, as necessary, in response. PG&E will be subject to ongoing reasonableness reviews. In addition, PG&E's entire NGV program will be subject to review should PG&E apply to continue the program beyond its two-year term. PG&E has also agreed to submit periodic

reports to the Commission. The Commission will have ample opportunity to review the competitive situation and make mid-course corrections as necessary. But, the short answer to Chevron, and others who fear competition from PG&E, is that there is no competition. PG&E is in this market by default. No one wants to compete.

Chevron's position is premature in that it seeks to impose conditions on PG&E to ensure that it leaves the market before we know whether or not there is a market and the extent of PG&E's activities and investment. Further Chevron, while anxious to see PG&E's quick exit, makes no proposal of how PG&E and its ratepayers will recover their investment. Recoupment is an overriding concern of ours.

In funding the utility for a two-year period we are trying to promote the development of the equipment and infrastructure needed to facilitate the use of natural gas as a vehicle fuel. Utilities play a critical role in the development of this market; but the role, though critical, should be temporary. However, we are not prepared to set a timetable for the extrication of the utilities from the market because it is not clear how long their presence will be needed to provide the bridge to a profitable competitive market for retail CNG.

To further promote a retail alternate fuel market we expect to open a comprehensive investigation of the use and promotion of low-emission vehicle. As part of this investigation, we will be soliciting proposals from the utilities, the industry, and other interested parties. The investigation is expected to include electric vehicles and cover a broader range of issues than has been presented in this application. The experience of PG&E and SDG&E with their NGV programs will provide us with the practical information needed to reach a workable policy.

2.6 Timing of Cost Recovery

When PG&E filed its application in this proceeding, it expected a decision by January 1, 1991. However, it is now apparent that a final decision will not be rendered until mid-1991. Consequently, PG&E has amended its rate implementation request. PG&E requests that gas base revenues be increased on an annualized basis as soon after January 1, 1991 that a decision is rendered, and that the 1991 gas rate change be consolidated with the ACAP rate change on April 1, 1991. This proposal means that for every month that a decision is delayed past January 1, 1991, PG&E will be short by one-twelfth of $5.2 million. This is a shortfall of $433,000 per month, or $1.3 million for three months, assuming an April 1 decision, and a collection in 1991 of $3.9 million. In light of this fact, PG&E proposes that a balancing account be established starting at the decision date to allow PG&E to recover up to $5.2 million for 1991. That is, if PG&E spends more than the amount collected in rates in 1991, up to a cap of $5.2 million in expenditures, the undercollection will be recoverable in rates in 1992.

Although PG&E's request is reasonable, we prefer to begin the NGV program for a two-year period on the date this decision becomes final. In our opinion, permitting the program to consume the full two-year period originally proposed will have a more lasting impact on the public. We are concerned that costs incurred by PG&E prior to the effective date of this decision not be recorded in the balancing account, to avoid being construed as retroactive ratemaking.

2.7 Comments

This decision was issued as a Proposed Decision and comments were received from the applicant, DRA, TURN, Southern California Gas Company, the California Gas Producers Association, and Chevron. We have considered the comments and find that most merely reargue positions taken at the hearing to clarify the decision. We have made some minor changes and have expanded portions of the discussion section, especially the section on anticompetitive effects.

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. PG&E's program which will increase access to CNG refueling stations by 25 stations; offer CNG vehicle incentives up to $1,250 per vehicle to a maximum of 50% 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 proposal to restrict PG&E's program to merely adding six additional refueling stations on PG&E's property and converting PG&E's vehicles is inadequate to meet the needs of the public.

6. DRA's proposal that ratepayers be responsible for 100% of PG&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.

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

8. The rates to be generated under the proposed tariffs of PG&E will be reviewed annually over the 1991 - 1992 period to ensure recovery of the variable cost components of the NGV program.

9. The costs to be incurred over the two-year period of PG&E's NGV program are at least $12.485 million.

10. The tariff rates proposed by PG&E and DRA for the sale of CNG and natural gas for compression will not raise sufficient revenue to cover the total costs of the service.

11. The cost allocation proposed by PG&E and DRA to recover the variable costs of the NGV program as part of PG&E's NGV tariffs will be reviewed annually to ensure that 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).

12. PG&E's NGV program is experimental and its proposed tariff rates are incentive rates. For those reasons, and under the circumstances, the tariff rates for the sale of CNG and natural gas for compression proposed by PG&E are just and reasonable.

13. The fixed infrastructure costs associated with the NGV program result in air quality benefits enjoyed by all Californians

in their capacity as ratepayers and, as such, should be recovered on an equal cents-per-therm basis over all volumes sold by PG&E to all customer classes consistent with the intent of Public Utilities Code § 740.3(c).

14. The evidence is insufficient to make a finding when, if ever, the NGV program will be profitable.

15. PG&E should be allowed to ratebase the capital costs as set forth in its proposal.

16. The sale by PG&E of natural gas for resale to customers using NGVs is in the public interest.

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

18. Persons 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. Those persons may sell CNG at prices they deem appropriate.

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

20. PG&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 PG&E's continued presence in that market. The conditions to PG&E's entry and exit from the market proposed by Chevron are premature.

21. PG&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 PG&E NGV program as set forth in this application and modified by this decision should be adopted.

2. The PG&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. PG&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.

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.

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.

O R D E R

IT IS ORDERED that:

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

2. PG&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. PG&E is authorized to spend no more than $12,485,000 plus interest in the initial two years of its program as costs to be charged to the ratepayers.

4. PG&E's 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. PG&E may seek recovery of the balance in its balancing account during its next cost allocation proceeding.

6. 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 PG&E to all customer classes.

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: Roger J. Peters, Jefferson C. Bagby, and Harry W. Long, Jr., Attorneys at Law, for Pacific Gas and Electric Company; and Keith W. Melville and Judy Anderson, Attorneys at Law, for San Diego Gas & Electric Company.

Interested Parties: David R. Stevenson, Attorney at Law; and Skadden, Arps, Slate, Meagher & Flom, by Steven Greenwald, for Chevron U.S.A.; Michel Peter Florio and Joel R. Singer, Attorneys at Law, for Toward Utility Rate Normalization (TURN); Gene Everett Rodrigues, Attorney at Law, for Southern California Edison Company; J. E. Jackson and E. R. Island, Attorneys at Law, and Robert Ballew, for Southern California Gas Company; Adrian Hudson, for California Gas Producers Association; and Randolph L. Wu and Phyllis Huckabee, for El Paso Natural Gas Company.

Division of Ratepayers Advocates: Kathleen C. Maloney and John S. Wong, Attorneys at Law, Kathy Auriemma, Natalie Billingsley, Richard Dobson, and R. Mark Pocta.

Commission Advisory and Compliance Division: William R. Edmonds.

(END OF APPENDIX A)