REICHLER & SOBLE
ATTORNEYS AT LAW
SUITE 1200
1747 PENNSYLVANIA AVENUE, N. W.
WASHINGTON, D. C. 20006-4604

TELEPHONE: (202) 223-8400
TELEX: 4943588

FAX (202) 223-8560
(202) 785-6687

November 16, 1992

Mr. Charles A. James
Acting Assistant Attorney General
Antitrust Division
Department of Justice
Tenth Street and Constitution Avenue, NW
Room 3101
Washington, DC 20530

Re: Request for Business Review Letter
Relating to Planned Activities of the
Fuel Cell Commercialization Group

Dear Mr. James:

We are submitting this letter on behalf of our client, the Fuel Cell Commercialization Group ("FCCG" or "Group"), a nonprofit membership corporation incorporated in the District of Columbia.

The FCCG is a cooperative research and development venture pursuant to the National Cooperative Research Act of 1984 ("NCRA"), formed to help U.S. industry overcome the technical and economic barriers to the commercial use of molten carbonate fuel cells as a source of clean and reliable electrical power. In accordance with the business review procedures set forth in 28 C.F.R. § 50.6, we respectfully request the Antitrust Division of the Department of Justice to review this letter and state its enforcement intentions with respect to the planned activities of the FCCG described herein.

A. Background

1. FCCG Membership

The FCCG consists of a wide variety of electric and gas utility companies, municipal utilities, municipalities, regional utility organizations, and independent power producers from around the United States and Canada. FCCG members include public, private, and municipal corporations, both for profit and nonprofit, ranging in size from City of Manassas, Virginia, Electric Department (a municipal utility with rated sales of

236,968 megawatt hours per year ("MWhr/yr")) to Pacific Gas & Electric Company ("PG&E") (one of the largest public electric utilities in the United States, with retail sales of 74,056,530 MWhr/yr).[1/] Collectively, U.S. FCCG members represent approximately 578,774,000 MWhr/yr of commercial grade electricity sales[2/] (i.e., approximately twenty-two percent of the total annual production of electricity in the United States). With the exception of PG&E, no member of the FCCG has a financial stake in the planned activities described in this letter, other than as potential purchasers of the fuel cell power plants described below.[3/] A complete list of current FCCG members is attached as Appendix A.

Under Article II of the FCCG Bylaws, membership in the FCCG remains open to "[a]ny North American organization or natural person interested in purchasing a fuel cell power plant, whether as a pre-commercial (early production) unit or a commercial unit,

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[1/] Based on 1990 sales data drawn from Electrical World, Directory of Electrical Utilities: 1992 (100th ed., McGraw Hill 1991).

[2/] One FCCG member, Charter Oak Energy of Connecticut, is a non-utility independent power producer, whose sales were not included in calculating this total.

[3/] The FCCG believes that the relationship between PG&E and Energy Research Corporation ("ERC") has no bearing on any of the issues related to antitrust compliance by the FCCG. However, in the interests of full disclosure, we note the following: As of June 25, 1992, PG&E, through its wholly-owned, unregulated subsidiary, PG&E Enterprises, owned 12.85% of the common stock of ERC, and owned 33% of the voting (preferred) shares of Fuel Cell Engineering Corporation ("FCEC"), a subsidiary corporation of ERC created to undertake the engineering of Early Production Units ("EPUs") and commercial units. PG&E's ownership in FCEC terminated on June 30, 1992 and PG&E has no further ownership interest in FCEC. PG&E has also entered into several agreements with ERC regarding PG&E's participation in ERC development efforts, including: (i) an agreement in 1986 under which PG&E agreed to finance certain research and development efforts by ERC in exchange for certain royalties and license fees; said efforts have been completed, and no further support is being provided under that agreement but the royalty position remains; (ii) an agreement in 1990 under which PG&E performed certain preliminary engineering design services for the balance of plant work associated with the Demonstration Unit, in exchange for which PG&E received certain rights to royalties from future commercial sales; and (iii) an agreement in 1991 under which ERC is providing consulting services in support of integrated system testing in PG&E's MCFC pilot plant, using an ERC-provided fuel cell stack. Neither the FCCG nor, to the best of our knowledge, any other member of the FCCG is a party to or in any way privy to these or any other agreements between ERC and PG&E. The information known to the FCCG is reflected in a prospectus issued by ERC in June of 1992 in connection with a registered public offering of shares, a copy of which is attached as Appendix B. For information regarding PG&E, see especially pages 20-21, 26, 34, and 36-37 thereof.

or in active participation in a fuel cell power plant demonstration, ..." (Copies of FCCG's Articles of Incorporation and Bylaws are attached as Appendices C and D, respectively.) The FCCG Board of Directors has interpreted "North American" to include persons or organizations from the U.S., Canada, and Mexico. In 1991 and 1992, all members were required to pay $10,000 per year in annual dues. FCCG membership remains open on a non-discriminatory basis. A current appraisal of outside interest in the Group indicates that it will likely grow somewhat beyond its current 37 members.

2. Fuel Cell Technology

Fuel cells are devices that create electricity through chemical reactions, much like ordinary batteries. The key difference between a fuel cell and an ordinary battery is that the chemical reactants in a fuel cell can be continuously replaced, resulting in continuous electrical production. Fuel cells can be developed for large-scale, long-term manufacture of electricity. There are various types of fuel cells based on different "electrolytes" (the material in which fuel cell chemical reactions occur). The FCCG was created to encourage the commercialization of "molten carbonate" fuel cells. The reason for the FCCG's focus on molten carbonate fuel cells is explained below.

Fuel cells have captured the attention of energy producers throughout the industrialized world because fuel cells make electricity far more efficiently, and far more cleanly in environmental terms, than any source of electricity now in commercial use. (See Lapp, "Fuel Cells: A Clean Method of Storing Clean Energy," Power Line, July/August 1992, pp. 7-8, attached as Appendix E). Fuel cells are also compact and quiet, and can be designed in a large range of sizes. Thus, fuel cells will be suitable for large-scale use by major utility companies, as well as for smaller applications by independent producers or industrial consumers of electricity.

The principle of fuel cell technology was discovered in 1839. Research in the U.S. accelerated in the 1960s, in conjunction with U.S. space programs. Research for terrestrial applications developed during the 1970s. Only in the last few years, however, have large-scale applications of fuel cells become feasible. Today, experimental fuel cell power plants are

under development in Europe, Japan, and the United States.[4/] Europe and Japan have aggressive research, development, and commercialization programs underway. Japan expects to have 2000 megawatts of fuel cell capacity by the end of the 1990s. Thus, the United States is facing a significant challenge from abroad to its leadership in the field of fuel cell technologies.

B. History and Purposes of the FCCG

There remain two fundamental obstacles to the commercialization of fuel cell power plants: first, technical obstacles must be overcome to perfect large-scale fuel cells and to integrate them into commercial power plants; second, significant financial risks must be borne by both producers and purchasers of fuel cells in the commitment to a new source of electric power. The purpose of the FCCG is to help overcome these obstacles with regard to the commercialization of molten carbonate fuel cells.

The FCCG was created as a continuation of a process that began with a technology review, known as the "Notice of Market Opportunity" ("NOMO") Review, undertaken in 1988 by the American Public Power Association ("APPA") in conjunction with the Electric Power Research Institute ("EPRI").[5/] The NOMO Review Team issued public "Notices of Market Opportunity" to fuel cell developers world-wide, inviting them to submit competitive proposals describing their power plant technologies. In response, five proposals from leading U.S., Japanese, and European companies were received. Of these, the only proposal that met the objective criteria established for endorsement by the NOMO Review Team was the proposal by the ERC of Danbury,

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[4/] Fuel cell power plants are electricity generating plants that use fuel cells as the source of power. Other components of fuel cell power plants are fuel storage and treatment facilities, and facilities for the conversion of direct current electricity produced by fuel cells into commercial grade alternating current electricity.

[5/] The APPA is a nonprofit association of more than two thousand municipally owned electric utilities; EPRI is a nonprofit research and development organization supported by the U.S. electric power industry. The APPA is not a member of the FCCG. EPRI is an "honorary" member, in accordance with FCCG Bylaws Art. II, § 3. Many FCCG members are also members of the APPA, and many FCCG members contribute to the support of EPRI.

Connecticut, for the development of two megawatt molten carbonate fuel cell power plants.[6/]

At the end of the NOMO competition, the NOMO Review Team and ERC drafted an outline of a proposed commercialization process, known as the "Principles and Framework for Commercializing Direct Fuel Cell Power Plants" ("Principles and Framework"). This outline, attached as Appendix F, serves as the basis for the collaborative research, development, and demonstration activities of the FCCG and ERC that form the object of this request for a business review. In accordance with the Principles and Framework, the FCCG was created with the following particular purposes, as set forth in the FCCG Articles of Incorporation and Bylaws (see Appendices B and C):

(a) To engage in research activities relating to the production of electrical energy by molten carbonate fuel cells;

(b) To study and evaluate engineering techniques and design specifications for equipment for the production of electrical energy by molten carbonate fuel cells;

(c) To monitor and evaluate the testing of prototypes and demonstration units, equipment, materials, and processes for the production of electrical energy by molten carbonate fuel cells;

(d) To collect, exchange, analyze, and publish research and development information relating to the production of electrical energy by molten carbonate fuel cells;

(e) To hold meetings and workshops and, inter alia, provide a forum for members and others for the discussion of subjects relating to production of electrical energy by molten carbonate fuel cells;

(f) To encourage, through the pursuit of activities consistent with the provisions of the National Cooperative Research Act of 1984, 15 U.S.C. §§ 4301-4305, the commercialization of production of electrical energy by molten carbonate fuel cells;

[6/] The criteria established by the NOMO Review Team were: simplicity of design, timing vs. promise, life cycle mature cost, program dollar requirements, team capabilities and experience, scope of supply, responsiveness to the NOMO, corporate commitment, and turnkey responsibility.

(g) To seek, receive, administer, and disburse resources, including grants or other contributions, to advance the lawful purposes of the corporation; and

(h) To otherwise foster and promote the interests of its members consistent with the District of Columbia Nonprofit Corporation Act, and all other applicable laws.

Because ERC was the only successful competitor in the NOMO Review process, the planned activities of the FCCG currently focus on the commercialization of molten carbonate fuel cells produced by ERC. However, the mission of the FCCG is the commercialization of molten carbonate fuel cells generally -- nothing in the FCCG's organization excludes other manufacturers of molten carbonate fuel cells from entering into other commercialization plans with the FCCG or with any FCCG members.

In accordance with its corporate purposes and its status as a cooperative venture under the NCRA, the FCCG intends to act as a catalyst in the process of commercializing molten carbonate fuel cells. Copies of the FCCG's NCRA notifications in the Federal Register are attached as Appendix G. As explained in detail below, the FCCG will not manufacture fuel cells or fuel cell power plants, nor will its activities require or encourage FCCG members to do so. Moreover, the FCCG will not, as an organization, engage in the purchase or sale of fuel cells or fuel cell power plants.

Because the role of the FCCG is confined to helping overcome the obstacles to the commercial use of molten carbonate fuel cells, the planned lifespan of the FCCG is limited. Once molten carbonate fuel cells are commercially viable, the FCCG will dissolve. Assuming the FCCG's present commercialization plan is successful, the FCCG should accomplish its current goals in approximately five to eight years.

C. Planned Activities: Development of Commercially Viable Molten Carbonate Fuel Cell Power Plants To Be Manufactured By Energy Research Corporation

1. The Commercialization Plan

The goal of the FCCG-ERC commercialization plan is the development of a nominal two-megawatt molten carbonate fuel cell power plant that can be "mass produced" by ERC and offered at a commercially viable market price. The plan calls for four overlapping phases:

(1) **Design Phase,** involving the preparation of design specifications and descriptive information, including preliminary technical information on equipment and system designs, necessary to describe in generic terms the fuel cell power plant that is the subject of the commercialization effort.

(2) **Demonstration Phase,** involving the development, construction, and testing of a full scale demonstration power plant to meet performance criteria to be established by the FCCG. During this phase, ERC and the FCCG will work together to improve the power plant design and methods of operation. The estimated cost of the Demonstration Unit, to be paid by those members of the FCCG participating in the demonstration, is approximately $21 million. Testing of the Demonstration unit is currently scheduled to begin in 1994.[7/]

(3) **Early Production Phase,** involving the construction and operation of 100 MW capacity (i.e., approximately 50 units) of pre-commercial EPUs, at least 40 MW (i.e., approximately 20 units) of which will be purchased by FCCG members. The FCCG anticipates that total EPU purchases by FCCG members will reach 35 or more units. The initiation of this second phase will depend on the fulfillment of five conditions:

(a) Performance of the Demonstration Unit to FCCG specifications;

(b) Ability of ERC to offer EPUs at a price no greater than approximately $1,500/KW (i.e., $3 million for a 2 MW plant -- 50% above the commercial target price);

(c) Ability of ERC to obtain orders for EPUs, beyond the units to be purchased by FCCG members;

(d) Achievement by ERC of a commercial (post-EPU) offering price of $1000/KW; and

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[7/] The total cost of the Demonstration Unit is currently estimated at $46 million, of which FCCG members participating in the demonstration will provide approximately $21 million, EPRI (an "honorary" member of the FCCG) will provide approximately $5 million, the U.S. Department of Energy will provide approximately $17 million, and the manufacturer (ERC) will provide approximately $3 million.

(e) Commitment by ERC to begin construction of a manufacturing facility for production of power plants during the EPU and Commercial Phases.

As a means of assuring a workable spreading of financial risk, FCCG members will originally place only contingent orders for the EPUs they will purchase. These orders will become firm when ERC has met the five conditions listed above. The commercialization plan calls for EPUs to begin operation in 1997.

(4) **Commercial Phase**, involving the full scale production of 2 MW molten carbonate fuel cells for sale at a "mature" market price of approximately $1,000/KW (i.e., $2 million per 2 MW plant). The commercialization plan calls for the first commercial units to come on line in 1998.

One key to the success of this commercialization plan is a package of incentives to be offered by ERC to FCCG participants in the Demonstration and Early Production phases. As compensation for sharing the risks of the pre-commercial phases, and for paying a price in excess of the commercial target price, all FCCG purchasers of Demonstration Units and EPUs (up to 63 MW) will receive certain "royalty" payments on ERC sales of commercial units during the Commercial Phase, and will receive "preferred customer" treatment with regard to plant maintenance and upgrading.[8/] The amount of the royalties will depend, in the aggregate, on the number of commercial units ERC sells, and will be capped at a total of twice the cost of the Demonstration Unit plus twice the aggregate cost of the excess over market price paid for the EPUs.[9/]

[8/] Initially, the membership policies of the FCCG had assumed that the Group would not grow beyond thirty-five members and limited its membership benefits accordingly. The thirty-sixth and thirty-seventh members joined the Group with full knowledge of difference in membership benefits between the first thirty-five members and all subsequent members. However, because of the unexpected growth of the membership beyond this point (now to thirty-seven), the Board of Directors is considering amendments to its membership policies in order to offer members joining the Group after member number thirty-five benefits of membership that would extend all present rights and benefits except the royalty provisions to all new buyers joining the Group and accepting the Principles and Framework obligations and risks.

[9/] The FCCG is not privy to proprietary information regarding the terms of sale of those EPU units that ERC is obliged to sell to non-FCCG members as part of the commercialization plan. Neither is the FCCG privy to the long-range marketing plans of ERC. The FCCG has obtained a commitment that the terms offered to FCCG members for the purchase of EPUs will be as good as the

2. Role of the FCCG in the Commercialization Process

The commercialization plan described above calls for the FCCG to engage in the following collaborative activities:

(a) Identification of one or more hosts for the Demonstration Unit(s);

(b) Coordination of the placement by FCCG members of contingency orders for EPUs;

(c) Development and administration of a plan for payment of the limited "royalties" on ERC sales of commercial units;

(d) Dissemination of information about the performance of the Demonstration Unit(s) and EPUs to FCCG members and others;

(e) Provision of input to ERC and FCCG members on design and engineering specifications, system planning and evaluation, site location, installation, training, safety, maintenance, permitting and licensing, and other matters of common interest to FCCG members;

(f) Administration of non-exclusive, industry-wide workshops and meetings, and publication of articles in trade publications, to disseminate information about the development of molten carbonate fuel cells; and

(g) Provision of information about the development of molten carbonate fuel cells to federal, state, and local governments.

In connection with the second activity listed above, note that the contingency orders for EPUs will not be placed by the FCCG. Individual FCCG members, acting for themselves, will place these orders directly with ERC, and will negotiate the terms of individual purchase contracts. The coordinative role of the FCCG will chiefly consist of tracking the placement of orders, and drafting non-binding model contract provisions for members to use or revise as they see fit. Although some aspects of the EPU purchases will be subject to FCCG coordination (e.g., the "royalty" payment plan), many of the essential elements of these

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most favorable terms offered to non-FCCG EPU purchasers. Therefore, the FCCG cannot comment on the arrangements ERC may make or have made regarding EPUs falling outside the scope of the FCCG-ERC stream of commitments.

contracts will necessarily vary according to the negotiations between ERC and individual FCCG members.

With regard to the third activity listed above, as already noted, the "royalty" payments to be made by ERC will be limited to an aggregate amount sufficient to compensate FCCG members for the risk and excess cost associated with participation in the Demonstration and Early Production phases. The FCCG will help formulate the allocation schedule for payments under this plan. The details of this arrangement are still under discussion.

Consistent with its organization as a cooperative research and development venture under the provisions of the NCRA, and pursuant to its Bylaws (Art. III (1)), the FCCG will not engage in any of the activities forbidden by NCRA 15 U.S.C. § 4301(b). In particular, neither the FCCG nor any of its members (acting as such) will enter into any agreements with ERC or engage in conduct that restricts, requires, or otherwise involves the FCCG or its members in the production or distribution to third parties of molten carbonate fuel cells.

D. Effects on Competition

There are two principal markets that might be affected by the planned activities of the FCCG: (i) the broad market for the sale of commercial grade electricity, in which FCCG members are active mainly as suppliers; and (ii) the narrow market for molten carbonate fuel cells, in which FCCG members will be active as purchasers. We do not believe that the activities of the FCCG will have a negative effect on competition in either of these markets. Indeed, the effects of the planned FCCG activities on these markets will be overwhelmingly, if not purely, procompetitive.

1. Competition in the Electrical Power Industry

a. Absence of Anticompetitive Effects

There is little or no possibility that the FCCG's activities will have anticompetitive effects on the electric power market, for several reasons. First, on a national scale the effects of the FCCG's activities will be small. The total sales of commercial electricity in the United States is approximately 2,646,809,000 megawatt hours per year. In comparison, FCCG members currently sell 578,774,000 MWhr/yr. Moreover, the FCCG-ERC commercialization plan will only add approximately 455,520 MWhr/yr to the total already produced by FCCG members. In short, the activities of the FCCG, to the extent they might in any sense

"control" a part of the electrical power market, will affect less than one percent of the market held by FCCG members, and less than two hundredths of one percent (.02%) of the electrical power market nationwide.[10/]

Second, fuel cell power plants represent only one among a number of technologies being developed to enhance the production of electricity in the United States. While the FCCG and its members believe that fuel cells will play an important role in the electrical power market of the future, the competitive posture of power producers will also depend on their involvement in the development of improved natural gas, hydroelectric, and coal power plants, as well as in the commercialization of alternative power sources such as solar and geothermal energy.

Third, because molten carbonate fuel cells are only one of several types of fuel cells likely to enter the commercial market over the next ten or fifteen years, the efforts of the FCCG would not have significant anticompetitive effects even if fuel cells developed into a major source of electrical power. Indeed, several U.S. power producers, including a number of FCCG members (acting independently), are involved in efforts to develop fuel cells other than molten carbonate fuel cells.[11/] Thus, even discounting the future availability of fuel cell technologies being developed in other countries, the FCCG will not "control" the contribution of fuel cells to the market for electricity. Moreover, because the FCCG-ERC commercialization plan requires significant involvement by non-members of FCCG, the FCCG will have only a very reduced ability to influence even the limited contribution of molten carbonate fuel cells to the national electric supply.

Fourth, even if the planned activities of the FCCG could result in any degree of "control" over a portion of the electric power industry, that control would be very temporary in nature. As noted above, current plans call for the completion of the FCCG-ERC commercialization plan within the next five to eight years. During this time the FCCG will be involved only in the earliest stages of the development of a commercial market for

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[10/] Indeed, because U.S. power producers, including FCCG members, currently plan to increase their production of electricity from sources other than molten carbonate fuel cells, the percentage of the market to be affected by FCCG activities will be even lower than the foregoing numbers indicate.

[11/] For example, Southern California Gas Company, PG&E, and Southern California Edison -- all FCCG members -- are each involved in fuel cell projects with developers other than ERC. Indeed, Southern California Gas has fuel cell projects underway with four separate developers.

molten carbonate fuel cells. As the demand for molten carbonate fuel cells develops, the role of the FCCG will diminish and quickly disappear.

Thus, it is clear that the opportunity for the FCCG to adversely affect competition in the electrical power industry will be virtually nonexistent. But even if the potential for such adverse effects did exist, the planned activities of the FCCG are specifically designed to foster competition. The FCCG is a non-exclusive organization open to all members of the North American electrical power industry interested in the development of molten carbonate fuel cells; the FCCG-ERC commercialization plan does not affect the freedom of the FCCG, FCCG members, or ERC to enter into other projects with third parties affecting the electric power industry (other than ERC's obligation to sell EPUs to FCCG members on terms at least as favorable as those given by ERC to non-members); many of the commercial advantages of the FCCG will be directly available to non-members as ERC and the FCCG disseminate information about molten carbonate fuel cells to the industry at large; and, above all, the FCCG has committed itself to operate within the bounds set by the NCRA -- i.e., the commercialization plan does not depend on, and will not involve, the sharing of marketing or pricing information beyond that strictly necessary for the accomplishment of the FCCG's cooperative research and development goals. In addition, the FCCG has adopted a series of institutional safeguards against collusion, including the hiring of professional administrative staff and legal counsel who have no special relationship with ERC or with any FCCG member.

In short, there will be neither the opportunity nor the organizational tendency for the FCCG to interfere with competition in the electric power industry.

b. Procompetitive Effects

Far from thwarting competition in the electrical power industry, the activities of the FCCG will have significant procompetitive effects. First, the introduction of molten carbonate fuel cells will increase competition among established electric power utilities by providing a new, flexible, and (it is hoped) cost-effective source of electricity. Beyond the benefits to these established producers of electricity, however, the commercialization of molten carbonate fuel cells will provide the same technological advantages to independent power producers. Because of their compact size, molten carbonate fuel cells are suited for use by small power producers and by industrial or municipal consumers in addition to utilities.

Second, the structure and planned activities of the FCCG are intended to enhance the procompetitive effects of commercializing molten carbonate fuel cells. To begin with, several members of the FCCG directly compete with one another in regional energy markets, and early involvement in the commercialization of molten carbonate fuel cells will only increase the competition between them.[12/] Moreover, since membership in the FCCG is non-exclusive, and since much of the commercially useful information developed by the FCCG will be made publicly available, the FCCG's planned activities will reduce the barriers to entering the electric power market as an operator of a molten carbonate fuel cell power plant. The net effect will be not only an increase in competition among U.S. electrical power producers, but also an enhancement of the international competitiveness of U.S. fuel cell technology.

2. Competition in the Fuel Cell Market

The market for molten carbonate fuel cell power plants, or even for fuel cell power plants, more generally, does not yet exist. The current technical and economic barriers to the creation of that market are unlikely to be overcome without a cooperative effort of the kind planned by the FCCG and ERC. Thus, the fundamental purpose of the FCCG is to create competitive opportunities where none exists today. Moreover, the coordinative activities of the FCCG will themselves have little or no anticompetitive effect on the market they will help create, and will be certain to have significant procompetitive effects, for several reasons:

First, the theoretical anticompetitive effects (if any) of the FCCG's activities will be limited because the FCCG-ERC effort will contribute only a part of the fuel cell development taking place throughout the United States. In the next five years, the energy technology industry will devote an estimated $300 million to fuel cell research and development, while the United States government will provide at least another $250 million. Similarly, during the same period, the R&D funds dispensed in conjunction with the FCCG-ERC commercialization plan will amount to approximately $50 million. During the period that the ERC-FCCG Demonstration Units are being tested, at least 12 other fuel

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[12/] For example, in Southern California, Southern California Gas competes in some regions with Southern California Edison and with municipal electric suppliers such as the City of Pasadena, the City of Anaheim, and the City of Riverside. These entities are FCCG members.

cell power plants, with a total capacity of 2.5 megawatts, will be entering test phases in the United States.[13/] FCCG members are free to participate in any of these other development efforts, and several are doing so.[14/]

Second, the FCCG-ERC commercialization plan will not result in even temporary distortions of market pricing for sales of molten carbonate fuel cell power plants. Under the plan, ERC is required to sell at least twenty Early Production Units outside of the FCCG program, on whatever terms and conditions these purchasers are able to negotiate. Since ERC must also offer FCCG members who purchase EPUs terms at least as favorable as those offered to non-members, the price of these "pre-commercial" units will be driven by market forces. Later on, the sale of ERC's commercial units will not be subject to any coordination under the FCCG-ERC plan, and will be determined entirely by market demand for units at commercial prices.

Third, the market for molten carbonate fuel cells will not be insulated from the electrical power supply market generally. Molten carbonate fuel cells must compete with other methods of producing electricity, including other fuel cell power plants whose technology is now emerging. The entire challenge to developers of new energy technologies is to reduce the cost of their products, in dollars per kilowatt, in order to become competitive with existing technologies for manufacturing electricity. The activities of the FCCG will help developers and purchasers of molten carbonate fuel cells to meet this challenge.

Fourth, because membership in the FCCG is open on a non-discriminatory basis, and because the most significant commercial advantages of participating in the FCCG (principally, access to information about molten carbonate fuel cell power plants) will be made public either free of charge or on reasonable commercial terms, the effect of the FCCG's activities will be to enhance competition in the emerging fuel cell market. In fact, the FCCG's goal is to help produce a large market for fuel cell power plants.

[13/] In addition, during this same period the Japanese will run demonstration fuel cell power plants with a total capacity of 5 to 100 megawatts, or more, while the Europeans plan to demonstrate and test at least 5 megawatts in fuel cell capacity.

[14/] Note that the size of the FCCG and the limited scope of its activities make it virtually impossible for it to hinder competition in either the wider electric power market or in the fuel cell market as a result of "overinclusiveness."

Finally, the FCCG program itself has been designed as a competitive process. It began with open competition during the NOMO Review (discussed above), and continues to remain open by assuring that the relationship between the FCCG and ERC is not an exclusive one. The members of the FCCG are potential purchasers of fuel cell power plants, and the structure and activities of the FCCG reflect their clear interest in sharp competition among fuel cell manufacturers.

E. Conclusion and Request

The planned activities of the FCCG, in accordance with its status under the NCRA, are designed to help U.S. industry overcome the barriers to the commercial use of a new and potentially vital energy technology. The efforts of the FCCG and ERC are thus directly in keeping with U.S. Government policy as recently announced in the National Energy Strategy, which explicitly encourages the use of "industry R&D consortia and cooperative R&D ventures" to facilitate the introduction of new technologies into the national energy market. (National Energy Strategy, 1st ed. (Feb. 1991), p. 136).

We, therefore, request that the Antitrust Division of the Department of Justice review this letter and state its enforcement intentions with respect to the planned activities described herein. Because we believe that these activities are entirely consistent with the mandates of sections 1 and 2 of the Sherman Act, section 5 of the Federal Trade Commission Act, and section 2 and 3 of the Robinson-Patman Act, we request that the Department issue a "no action" letter at the conclusion of its business review.

If you have any questions, or need additional information, we will be pleased to respond. We are available to meet with you or your staff should you consider it expedient.

Sincerely,

Stephen M. Soble

Stephen M. Soble
General Counsel
Fuel Cell Commercialization Group

Attachments