

INTERNATIONAL TRADE COMMISSION

Sunshine Act Meeting

AGENCY HOLDING THE MEETING: United States International Trade Commission.

TIME AND DATE: January 29, 1999 at 11:00 a.m.

PLACE: Room 101, 500 E Street S.W., Washington, DC 20436.

STATUS: Open to the public.

MATTERS TO BE CONSIDERED:

1. Agenda for future meeting: none
2. Minutes
3. Ratification List
4. Inv. No. AA1921-167 (Review) (Pressure Sensitive Plastic Tape from Italy)—briefing and vote. (The Commission will transmit its determination to the Secretary of Commerce on February 12, 1999)
5. Outstanding action jackets:
 - (1) Document No. GC-98-069: APO matters
 - (2) Document No. GC-98-071: APO matters

In accordance with Commission policy, subject matter listed above, not disposed of at the scheduled meeting, may be carried over to the agenda of the following meeting.

Issued: January 20, 1999.

By order of the Commission.

Donna R. Koehnke,

Secretary.

[FR Doc. 99-1603 Filed 1-20-99; 2:46 pm]

BILLING CODE 7020-02-M

DEPARTMENT OF JUSTICE

Notice of Lodging of Three Consent Decrees Pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act

Notice is hereby given that three proposed consent decrees in *United States v. Drum Service Co. of Florida, et al.*, M.D. Fla., Civil No. 98-687-Civ-Orl-18C, were lodged on January 6, 1999, with the United States District Court for the Middle District of Florida. The consent decrees resolve claims under Section 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. 9607, as amended, brought against (1) defendants Douglass Fertilizer & Chemical Co., Inc., Spencer G. Douglass, Joseph P. Brooks, the Estate of Irving Feinberg, Mallory Corporation, and Coatings Application & Waterproofing Co.; (2) defendants Zellwin Farms Co., Inc., W.R. Grace & Co.—Conn., Paul Alexander, Julia

Alexander, Chemical Systems of Florida, Inc.; and (3) defendant Joseph P. Brooks for response costs incurred and to be incurred by the United States Environmental Protection Agency in connection with responding to the release and threatened release of hazardous substances at the Zellwood Groundwater Contamination Superfund Site ("Site").

One proposed decree would partially resolve the liability of five former owners and operators of a liquid fertilizer business at the Site and the current owner of the portion of the Site on which the liquid fertilizer business was located. The Decree would release claims against Douglass Fertilizer & Chemical Co., Inc., Spencer G. Douglass, Joseph P. Brooks, the Estate of Irving Feinberg, Mallory Corporation, and Coatings Application & Waterproofing Co. ("Settling Defendants"), for response costs incurred to perform the remedy selected in a Record of Decision for Operable Unit One of the Site. The Settling Defendants collectively would pay \$199,980.11 to resolve these claims.

The second proposed decree would resolve the liability of four current owners and one current operator for all past and future response costs at the Site. Zellwin Farms Co., Inc., would pay \$18,048.23; W.R. Grace & Co.—Conn. would pay \$8,114.94; and Paul Alexander, Julia Alexander and Chemical Systems of Florida, Inc., collectively would pay \$8,114.94 to resolve the United States' claims.

The third proposed decree would resolve the liability of Joseph P. Brooks, a former operator at the Site, on the grounds that Mr. Brooks has an inability to pay. Mr. Brooks, who is paying \$70,000 as a Settling Defendant in the first proposed Consent Decree, would pay an additional \$500 to resolve his remaining liability.

The three proposed consent decrees include a covenant not to sue by the United States under Sections 106 and 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. 9606 and 9607, and under Section 7003 of the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. 6973.

The Department of Justice will receive, for a period of thirty (30) days from the date of this publication, comments relating to the proposed consent decrees. Commenters may request an opportunity for a public meeting in the affected area, in accordance with Section 7003(d) of RCRA. Comments should be addressed to the Assistant Attorney General for the Environment and Natural Resources

Division, Department of Justice, Washington, DC 20530, and should refer to *United States v. Drum Service Co. of Florida, et al.*, M.D. Fla., Civil No. 98-687-Civ-Orl-18C, DOJ Ref. #90-11-2-266.

The proposed consent decrees may be examined at the office of the United States Attorney, Middle District of Florida, 201 Federal Building, 80 N. Hughey Avenue, Orlando, FL 32801; the Region IV Office of the Environmental Protection Agency, Atlanta Federal Center, 61 Forsyth Street, Atlanta, Georgia 30303-8960; and at the Consent Decree Library, 1120 G Street, N.W., 3rd Floor, Washington, DC 20005, (202) 624-0892. A copy of any of the proposed consent decrees may be obtained in person or by mail from the Consent Decree Library, 1120 G Street, N.W., 3rd Floor, Washington, DC 20005. In requesting copies please refer to the referenced case and enclose a check in the amount of \$67.00 (25 cents per page reproduction costs), payable to the Consent Decree Library.

Joel Gross,

Chief, Environmental Enforcement Section, Environment and Natural Resources Division. [FR Doc. 99-1392 Filed 1-21-99; 8:45 am]

BILLING CODE 4410-15-M

DEPARTMENT OF JUSTICE

Antitrust Division

Public Comments and Response of the United States; *United States v. Enova Corporation*

Notice is hereby given pursuant to the Antitrust Procedures and Penalties Act, 15 U.S.C. 16(b)-(h), that public comments and the response of the United States thereto have been filed with the United States District Court for the District of Columbia in *United States v. Enova Corporation*, Civil No. 98-CV-583 (RWR).

On March 9, 1998, the United States filed a Complaint seeking to enjoin a transaction in which Pacific Enterprises ("Pacific") would merge with Enova Corporation ("Enova"). Pacific is a California gas utility company and Enova is a California electric utility company. Enova sells electricity from plants that use coal, gas, nuclear power, and hydropower. Pacific is virtually the sole provider of natural gas transportation and storage services to plants in southern California that use natural gas to produce electricity. The proposed merger would have created a company with both the incentive and the ability to lessen competition in the market for electricity in California. The

Complaint alleged that the proposed merger would substantially lessen competition in the market for electricity in California, in violation of Section 7 of the Clayton Act, 15 U.S.C. 18.

Public comment was invited within the statutory sixty-day comment period. The two comments received, and the responses thereto, are hereby published in the **Federal Register** and filed with the Court. Copies of the Complaint, Stipulation and Order, Proposed Final Judgment, Competitive Impact Statement, Public Comments, and Plaintiff's Response to Public Comments are available for inspection in Room 215 of the U.S. Department of Justice, Antitrust Division, 325 Seventh Street, NW., Washington, DC 20530 (telephone: (202) 514-2481) and at the office of the Clerk of the United States District Court for the District of Columbia, 333 Constitution Avenue, NW., Washington, DC 20001. Copies of these materials may be obtained on request and payment of a copying fee.

Constance K. Robinson,

Director of Operations, Antitrust Division.

United States of America, U.S. Department of Justice, Antitrust Division, 325 Seventh Street, NW., Suite 500, Washington, DC 20530, *Plaintiff*, v. Enova Corporation, 101 Ash Street, San Diego, CA 92101, *Defendant*.

[Case Number: 98-CV-583 (RWR); Judge Richard W. Roberts]

Plaintiff's Response to Public Comments

Pursuant to the requirements of the Antitrust Procedures and Penalties Act ("APPA"), 15 U.S.C. 16(b)-(h) ("Tunney Act"), the United States hereby responds to the two public comments received regarding the proposed Final Judgment in this case.

I. The Complaint and Proposed Judgment

The United States filed a civil antitrust Complaint on March 9, 1998, alleging that the proposed merger of Pacific Enterprises ("Pacific"), a California natural gas utility, and Enova Corporation ("Enova"), a California electric utility, would violate Section 7 of the Clayton Act, 15 U.S.C. 18. The Complaint alleges that as a result of the merger, the combined company ("PE/Enova") would have both the incentive and the ability to lessen competition in the market for electricity in California and that consumers would be likely to pay higher prices for electricity.

The Complaint further alleges that prior to the merger, Pacific's wholly owned subsidiary, Southern California Gas Company, was virtually the sole provider of natural gas transmission and storage to natural gas-fueled electric

generating plants in Southern California ("gas-fired plants"). As a consequence and without regard to the merger, it had the ability to use that market power to control the supply and thus the price of natural gas available to the gas-fired plants. Prior to the merger, however, Pacific did not own any electric generation plants, so it did not have the incentive to limit its gas transportation, sales or storage or to raise the price of gas to electric utilities in order to increase the price of electricity.

The Complaint alleges that in early 1998, the California electric market experienced significant changes as the result of a legislatively mandated restructuring. In this new competitive electric market, gas-fired plants, which are the most costly electric generating plants to operate, set the price that all sellers receive for electricity in California in peak demand periods. Thus, if a firm could increase the cost of the gas-fired plants by raising their fuel prices, it could raise the price all sellers of electricity in California receive, and increase the profits of owners of lower cost sources of electricity.

Based on these facts, the Complaint alleges that the merger violated Section 7 of the Clayton Act because the acquisition of Enova's low-cost electric generating plants gave Pacific a means to benefit from any increase in electric prices. The Complaint challenges the acquisition of these specific plants:

Once Pacific's pipeline is combined with Enova's low cost electricity generation facilities, PE/Enova would have the ability to raise the pool price of electricity either by (a) limiting the availability of natural gas to competing gas-fired plants that supply the most expensive units of electricity into the pool, or (b) by limiting gas or gas transportation to gas-fired plants that are more efficient and would otherwise have kept the pool price for electricity down. PE/Enova would have the incentive to raise the pool price after the merger because, through its ownerships of low cost generation facilities, it could profit substantially from any increase in the pool price of electricity and its incremental profits would more than offset any losses of gas transportation sales that would result from withholding gas from competing gas-fired plants. PE/Enova thus will have the incentive and ability to lessen competition substantially and increase the price of electricity in California during periods of high demand.

(Compl. ¶124 (emphasis added).)

The proposed Final Judgment directly remedies this harm by requiring Enova to divest its low-cost generating units to a purchaser or purchasers acceptable to the United States in its sole discretion. These divestiture assets are the Encina and South Bay electricity generation

facilities owned by Enova and located at Carlsbad and Chula Vista, California, and include all rights, titles and interests related to the facilities.¹ By requiring this divestiture, the incentive that was created by the merger for PE/Enova to raise electricity prices is removed, providing a full remedy to the harm alleged in the Complaint.²

As part of the settlement, the United States also obtained the Defendant's agreement to protection that are beyond those needed to remedy directly the harm created by the acquisition. The proposed decree includes limitations on PE/Enova's ability in the future to acquire other low cost gas-fired generating assets that could give the merged firm the same incentive and opportunity to raise electricity prices that the acquisition of the divested Enova assets would have presented. Recognizing that PE/Enova would have numerous acquisition opportunities over the next few years as a consequence of the State of California's orders that many generating assets be divested (see CIS at 13), the proposed decree requires PE/Enova to seek prior approval from the United States before acquiring ownership or ownership-like rights to other low-cost, California generating assets. The United States can, at its sole discretion, disallow any acquisition of such assets, without incurring the costs and risks of litigation.³ The types of transactions

¹ The Final Judgment provides that the approvals by the United States required by this decree for sale of these assets are in addition to the necessary approvals by the California Public Utilities Commission ("CPUC") or any other governmental authorities for the sale of such assets. Enova must submit required applications to divest the assets no later than ninety days after entry of the Final Judgment, and complete the divestiture as soon as practicable after receipt of all necessary government approvals, in accordance with the proposed Final Judgment.

² As explained in the Competitive Impact Statement ("CIS"), the decree does not require the divestiture of the merged company's nuclear assets, as the price of electricity from those assets will be regulated during the critical first years of the decree, which means that ownership of those assets will not give the merged firm an incentive to raise prices. In 2001, if the nuclear power prices become deregulated, the decree provides for safeguards to ensure that any incentive to use these assets to raise price is minimized or eliminated.

³ The Final Judgment does not prevent PE/Enova from building new capacity in California, or from acquiring capacity built in California after January 1, 1998. New capacity will only be built in California if the output is inexpensive enough to be sold in many hours. By increasing the amount of less expensive power available to meet demand, new, low-cost capacity will reduce the number of hours in which the most costly gas-fired capacity is needed. This in turn will limit PE/Enova's ability to raise the pool price since it is more costly and difficult for PE/Enova to restrict gas to more numerous low-cost plants. For the same reasons, the Final Judgment allows the merged company to acquire or gain control of plants that are rebuilt,

subject to this prior approval process include outright acquisition of any existing California Generating Assets (Final Jmt. § V.A.1); any contract that allows PE/Enova to control such assets (Final Jmt. § V.A.2); any contract for the operation and sale of the output from generating facilities owned by the Los Angeles Department of Water and Power ("LADWP"), the second largest generator of electricity in California and an entity owning more generation than Enova even prior to the divestiture (Final Jmt. §§ V.A.2, II.B); power management contracts of California Generating Facilities with the LADWP (Final Jmt. §§ V.C.4, II.C); and future tolling arrangements of the type that would most clearly mimic true ownership of the tolled facilities (Final Jmt. §§ V.A.2, V.C.3).

In addition, the United States has the ability to monitor PE/Enova's entry into many power management contracts not subject to prior approval (Final Jmt. § V.C.5). The United States thus has the opportunity to review these contracts, which are relatively new in the deregulated California market, and determine whether they would give PE/Enova the same incentive to raise electricity prices that ownership of the divested Enova assets would have created. The United States can then challenge any contracts that would do so.

In sum, the decree provides two types of relief for the United States. First, it achieves a direct remedy for the harm caused by Pacific's acquisition of Enova's low-cost generating assets by ordering divestiture of those specific assets. Second, it provides the additional benefits of the prior approval and contract monitoring provisions. These additional provisions are not meant to (nor can they) prevent PE/Enova from entering any transaction or acquiring any asset that could give it the incentive to exploit Pacific's pipeline market power in the electricity market. Instead they provide the United States with a check on potentially anticompetitive transactions, where the acquisition of such assets would again create incentives similar to those created by the assets acquired (and divested) in the transaction before this Court.

The United States and Enova have stipulated that the proposed Final Judgment may be entered after compliance with the APPA.

II. Response to Public Comments

On June 8, 1998, the United States filed the CIS in this docket and on June

repowered, or activated out of dormancy after January 1, 1998. Output from such plants is the equivalent of output from new-build capacity. CIS at 13-14.

18, 1998, the Complaint, Final Judgment and CIS were published in the **Federal Register**. The **Federal Register** notice explained that interested parties could provide comments to the Department for a period of 60 days. Two parties filed comments with the Department: Edison International ("Edison") and the City of Vernon.

A. Edison's Comments

Edison's primary comment is that the decree does not strip PE/Enova of the ability or incentive to increase electricity prices, but only eliminates one opportunity to do so. Despite the decree, Edison argues, PE/Enova still can use Pacific's market power over natural gas transmission and still can enter into transactions that will give it the incentive to exercise that power and raise electricity prices. Edison enumerates and discusses particular transactions that would give Pacific that incentive:

1. Building or acquiring new or repowered generating facilities;
2. Entering into tolling agreements;
3. Entering into power generation management contracts; and
4. Entering into financial contracts (derivatives) tied to prices in the California Electric market.

But Edison's criticism misses the mark, because each of the potential transaction it lists is a transaction that Pacific could engage in whether or not it merges with Enova. Thus, Edison's comments do not focus on the harm caused by the merger, but rather on the harm to competition that might result from Pacific's premerger ownership of a monopoly gas pipeline. In contrast, the United States' Complaint is focused only on the effects that flow from the merger.

Edison's assertion (Edison Comments at 13) that Pacific had no premerger incentive to manipulate electricity prices is simply wrong. As soon as California deregulated retail electricity prices, Pacific had the incentive, among other things, to build or acquire new and/or repower other existing generating assets, purchase derivatives, and make gas tolling agreements in order to exploit its pipeline's market power over gas-fired generators. The ability and incentive of Pacific to exercise its natural gas transmission market power for gain in the electric market in any of these manners does not require acquisition of any of Enova's generating assets or its "electricity expertise."⁴

⁴ Edison's comments, which mention Enova's "electricity expertise" in one sentence, do not define this term, identify where in Enova it resides, or assert that Pacific, the pipeline's parent company, did not already have such expertise prior

Nevertheless, Edison argues that the Final Judgment is defective because the United States did not also "understand[], anticipat[e], and then prohibit[] all the various means by which the merged company could seek to retain or create incentives to earn profits through electricity price manipulations." (Edison Comments at 20.) To the extent that Edison means to suggest that, once any merger transaction is found to violate the Clayton Act, a merger decree should enjoin any and all other means by which the defendant might violate the antitrust laws in the future, the suggestion plainly is incorrect.⁵ Contrary to Edison's suggestions, enforcement of the merger laws, Section 7 of the Clayton Act, is aimed at remedying the competitively harmful changes in market structure or other conditions that result from the merger. Here, the merger takes Pacific's ability to profitably raise electric prices and adds the incentive provided by Enova's low cost generating assets. The proposed decree severs those assets from the merged company, remedying the change in incentive and ability from the status quo ante. The Final Judgment requires these assets to be sold to a party that will not own the monopoly pipeline and removes the new incentive provided by the acquired Enova assets for PE/Enova to use the pipeline's already existent market power.⁶

Just as Edison's critical comments do not address the merger-related harms alleged in the Complaint, its comments do not address whether the parties' proposed decree is adequate to remedy the harms alleged in that Complaint. Instead, Edison proposes its own alternative remedies that either do not

to the merger or have the ability to obtain it by a number of means, including hiring employees with electric experience.

⁵ See *Zenith Radio Corp. v. Hazeltine Research, Inc.*, 395 U.S. 100, 133 (1969) (explaining that a court may not enjoin "all future violations of the antitrust laws, however unrelated to the violation found by the court"); *Hartford-Empire Co. v. United States*, 323 U.S. 386, 409-10 & n.7 (1945) (citing *NLRB v. Express Publ'g Co.*, 312 U.S. 426, 433, 435-36 (1941)).

⁶ Edison also makes the same argument from the opposite perspective—that competition is separately harmed because Enova has gained an ability via the merger to raise price. (Edison Comments at 5.) Again, there is no additional pipeline monopoly power created by the merger. The proposed remedy is effective against the harm caused by the combination (the pipeline and Enova's low cost generating assets), whether the Southern California Gas Company pipeline's monopoly power is wielded by Enova or by Pacific.

address the harm caused by the merger, or are not as effective as the decree. Edison suggests that: (1) The merger be rescinded, (2) the pipeline be divested, (3) the pipeline be controlled by an independent system operator, or (4) the merged company be barred from trading in financial instruments for Southern California electricity markets (Edison Comments at 6).⁷

Two of Edison's proposed remedies—the independent system operator and the bar on trading—are aimed at controlling the preexisting market power of the gas pipeline rather than remedying any harm created by the merger. And, ironically, the Edison remedies aimed most closely at the merger—rescission or divestiture of the pipeline—would not place any limits on the pipeline's new owner's ability to raise the price of electricity or limit the pipeline owner from acquiring assets or contracts that would give it the incentive to do so, even though this incentive and ability is purportedly the gravamen of Edison's concern. The Proposed Final Judgment, in contrast, gives this emerging electric market more protection than Edison's suggested remedies through prior notice and market monitoring provisions.⁸

⁷ Edison compares its preferred options with the proposed Final Judgment, calling the remedy in the proposed Final Judgment "the least attractive option" from Edison's perspective. (Edison Comments at 3 ("The last but least attractive option is to try to lessen the merged firm's incentive to exercise its monopoly power in order to profit from higher electric prices.")) Edison finds this course less attractive because "it requires a complex latticework of provisions * * * [that is] difficult to write and even harder to administer." *Id.* The alternative it suggests, creating an independent system operator for the pipeline system, has never been done anywhere in the United States and, while possible, cannot be assumed to be easy to write and easier to administer.

⁸ For example, Edison argues that the FTC's consent decree in *PacifiCorp (PacifiCorp/The Energy Group)*, FTC File No. 9710091 provides a superior remedy. It mischaracterizes the FTC decree as equivalent to the divestiture of Pacific's gas pipeline assets that constitute virtually all of the assets Pacific contributed to the merger with Enova. Unlike this case, however, the divestiture of coal assets in *PacifiCorp* was not the equivalent of rescission of the merger. *PacifiCorp* is a large integrated electric utility with coal holdings in the western United States. It was acquiring the Energy Group, an international electric company, the second largest electric distribution company in the United Kingdom, which also held coal reserves in both eastern and western United States. The FTC decree did not require the Energy Group to divest its coal business, much less its primary utility business, as Edison would have the decree in the instant case require divestiture of Pacific's utility pipeline business. Instead, the FTC decree required a specific subset of the Energy Group's western coal mines to be divested. The FTC's *PacifiCorp* decree stopped with divestiture of those specific assets and, unlike the Final Judgment proposed here, did not go further to limit the merged company's reacquisition of assets that would create the same vertical problem as the divested assets.

In the end, Edison's preference for a different remedy is not relevant to the Court's inquiry. Under the Tunney Act, the Court may not choose or fashion a remedy that is "better" in someone's opinion than the one negotiated and agreed to by the parties. To the contrary, "a proposed decree must be approved even if it falls short of the remedy the court would impose on its own, as long as it falls within the range of acceptability or is 'within the reaches of the public interest.'" ⁹ The proposed Final Judgment meets and exceeds this legal standard.

B. City of Vernon's Comments

The City of Vernon recognizes in its comments that the Proposed Final Judgment focuses entirely on the potential of PE/Enova to reduce competition in the electricity market in Southern California. It comments that the proposed judgment "ignores" the effect of the merger on the natural gas transmission market in Southern California. The case brought by the Department, however, involved the electricity market in Southern California, and the relief addressed in the Proposed Final Judgment remedies the competitive harm posed by the proposed acquisition to that market. The Complaint does not allege violations in the natural gas transmission market, and the City of Vernon's proposed relief is thus not relevant to this proceeding.

III. The Legal Standard Governing the Court's Public Interest Determination

Once the United States moves for entry of the proposed Final Judgment, the Tunney Act directs the Court to determine whether entry of the proposed Final Judgment "is in the public interest." 15 U.S.C. § 16(e). In making that determination, "the court's function is not to determine whether the resulting array of rights and liabilities is one that will best serve society, but only to confirm that the resulting settlement is within the reaches of the public interest." *United States v. Western Elec. Co.*, 993 F.2d 1572, 1576 (D.C. Cir.) (emphasis added, internal quotation and citation omitted), *cert. denied*, 114 S. Ct. 487 (1993).

The Court is not "to make de novo determination of facts and issues." *Western Elec.*, 993 F.2d at 1577. Rather, "[t]he balancing of competing social and political interests affected by a proposed antitrust decree must be left, in the first instance, to the discretion of the Attorney General." *Id.* (internal

⁹ *United States v. American Tel. & Tel. Co.*, 552 F. Supp. 131, 153 n.95 (D.D.C. 1982), *aff'd sub nom. Maryland v. United States*, 460 U.S. 1001 (1983)(mem.).

quotation and citation omitted). In particular, the Court must defer to the Department's assessment of likely competitive consequences, which it may reject "only if it has exceptional confidence that adverse antitrust consequences will result—perhaps akin to the confidence that would justify a court in overturning the predictive judgments of an administrative agency." *Id.* ¹⁰ The Court may reject a decree simply "because a third party claims it could be better treated." *United States v. Microsoft*, 56 F.3d 1448, 1459 (D.C. Cir. 1995), or based on the belief that "other remedies were preferable," *id.* at 1460.

Further, the Tunney Act does not contemplate judicial reevaluation of the wisdom of the government's determination of which violations to allege in the Complaint. The government's decision not to bring a particular case on the facts and law before it, like any other decision not to prosecute, "involves a complicated balancing of a number of factors which are peculiarly within [the government's] expertise." *Heckler v. Chaney*, 470 U.S. 821, 831 (1985). Thus, the Court may

¹⁰ The Tunney Act does not give a court authority to impose different terms on the parties. See *e.g.*, *American Tel. & Tel.*, 552 F. Supp. at 153 n. 95; *accord* H.R. Rep. No. 93-1463, at 8 (1974). A court, of course, can condition entry of a decree on the parties' agreement to a different bargain, see *e.g.*, *American Tel. & Tel.*, 552 F. Supp. at 225, but if the parties do not agree to such terms, the court's only choices are to enter the decree the parties proposed or to leave the parties to litigate.

United States v. Thomson Corp., 949 F. Supp. 907 (D.D.C. 1996), cited by Edison (Edison Comments at 9-10), does not support Edison's argument to reject the Proposed Final Judgment. That case involved the Tunney Act review of a proposed final judgment that required one of the merging companies to license a copyright that it claimed but had not licensed prior to the merger. While there was some controversy as to whether the decree's license provisions could have been extracted as the result of a trial, see *Thomson*, 949 F. Supp. at 927, the Court nevertheless considered comments on the specific terms of the license proposal because of the potential anticompetitive harm that could result from "the merger of these two publishing giants in conjunction with" the asserted copyright claim. *Id.* at 928. The *Thomson* Court addressed comments on the license provision on that ground, and not because the decree would remedy preexisting wrongs; nor did the court add or alter any provisions to the Final Judgment that had not been agreed to by the parties. Here, in contrast, Edison is not commenting on a specific remedy agreed to by the parties as a means of addressing the harms related to a merger. Instead, Edison is asking this Court to insert an entirely new mechanism for relief into the decree, in order to address Pacific's preexisting pipeline market power as it could be exercised in relation to the acquisition of any electricity assets, regardless of Pacific's merger with Enova. Edison's proposed approach is completely at odds with Judge Friedman's actions in the *Thomson* case. Judge Friedman, as Edison concedes, was careful not to substitute his judgment for the government's and, further, did not adopt proposed remedies that were unrelated to the merger. (See Edison Comments at 10).

not look beyond the Complaint "to evaluate claims that the government did not make and to inquire as to why they were not made." *Microsoft*, 56 F.3d at 1459; see also *United States v. Associated Milk Producers, Inc.*, 534 F.2d 113, 117-18 (8th Cir. 1976).

The government has wide discretion within the reaches of the public interest to resolve potential litigation. See e.g., *Western Elec. Co.*, 993 F.2d 1572; *American Tel & Tel.*, 552 F. Supp. at 151. The Supreme Court has recognized that a government antitrust consent decree is a contract between the parties to settle their disputes and differences, *United States v. ITT Continental Baking Co.*, 420 U.S. 223, 235-38 (1975); *United States v. Armour & Co.*, 402 U.S. 673, 681-82 (1971), and "normally embodies a compromise; in exchange for the saving of cost and elimination of risk, the parties each give up something they might have won had they proceeded with the litigation." *Armour*, 402 U.S. at 681. As Judge Greene has observed:

If courts acting under the Tunney Act disapproved proposed consent decrees merely because they did not contain the exact relief which the court would have imposed after a finding of liability, defendants would have no incentive to consent to judgment and this element of compromise would be destroyed. The consent decree would thus as a practical matter be eliminated as an antitrust enforcement tool, despite Congress' directive that it be preserved.

American Tel. & Tel., 552 F. Supp. at 151. This Judgment has the virtue of bringing the public certain benefits and protection without the uncertainty and expense of protracted litigation. See *Armour*, 402 U.S. at 681; *Microsoft*, 56 F.3d at 1459.

Finally, the entry of a governmental antitrust decree forecloses no private party from seeking and obtaining appropriate antitrust remedies. Defendants will remain liable for any illegal acts, and any private party may challenge such conduct if and when appropriate.

IV. Conclusion

After careful consideration of the public comments, the United States concludes that entry of the proposed Final Judgment will provide an effective and appropriate remedy for the antitrust violation alleged in the Complaint and is in the public interest. The United States will therefore ask the Court to enter the proposed Final Judgment after the public comments and this Response have been published in the **Federal Register**, as 15 U.S.C. 16(d) requires.

Dated: January 11, 1999.

Respectfully submitted,
Jade Alice Eaton
D.C. Bar #939629, Trial Attorney, U.S.
Department of Justice, Antitrust Division, 325
Seventh Street, N.W., Washington, DC 20530.
Phone: (202) 307-6316.

Certificate of Service

I hereby certify that I have caused a copy of the foregoing Plaintiff's Response to Public Comments, as well as attached copies of the public comments received from the City of Vernon, California, and from Southern California Edison Company, to be served on counsel for defendant and for public commentators in this matter in the manner set forth below:

By first class mail, postage prepaid:
Steven C. Sunshine,
Shearman & Sterling, 801 Pennsylvania
Avenue, N.W., Washington, DC 20004.
John W. Jimison,
Brady & Berliner, 1225 Nineteenth Street,
N.W., Suite 800, Washington, DC.
J.A. Bouknight, Jr.,
David R. Roll,
James B. Moorhead,
Steptoe & Johnson LLP, 1330 Connecticut
Ave., N.W., Washington, DC 20036.

Dated: January 11, 1999.

Jade Alice Eaton,
D.C. Bar # 939629, Antitrust Division, U.S.
Department of Justice, 325 Seventh Street,
N.W., Suite 500, Washington, DC 20530, (202)
307-6456, (202) 616-2441 (Fax).

Brady & Berliner

1225 Nineteenth Street, N.W., Suite 800,
Washington, DC 20036

August 17, 1998.

Mr. Roger W. Fones,
Chief Transportation Energy & Agriculture
Section Antitrust Division, U.S.
Department of Justice, 325 Seventh
Street, N.W., Suite 500, Washington, DC
20530.

Re: Comments of the City of Vernon,
California, on the Proposed Final
Judgement, Stipulation in the
Competitive Impact Statement in U.S. v.
Enova Corporation, Civil No. 98-CV-583

Dear Mr. Fones: Pursuant to the legal notice issued by the Antitrust Division on June 18, 1998 the City of Vernon, California, ("Vernon") hereby provides these comments in opposition to the approval of the Proposed Final Judgement Stipulation in the Competitive Impact Statement in U.S. v. Enova Corporation, Civil No. 98-CV-583 ("Proposed Judgement").

Vernon submits that the Proposed Judgement would permit a merger to be consummated that will alter and damage the potential for competition in the California natural gas market. The Proposed Judgement focuses entirely on the potential of the merged entity to reduce competition in the electricity market in southern California, and orders as a remedy the divestiture of certain

electricity generating stations owned by the San Diego Gas & Electric Company ("SDG&E"). The Proposed Judgement ignores the fact that the merger will combine the two largest natural gas transmission and distribution companies in southern California. The merger will thus eliminate the potential for competition between them, or for support by either of them for new natural gas transmission pipeline which would compete with the other.

Vernon operates a municipal electricity utility including its own gas-fired power plant and will complete this year a municipal natural gas utility. Vernon and other natural gas distributing entities in southern California have lacked any meaningful alternative to the monopoly natural gas transmission service from the Southern California Gas Company ("SoCalGas"), the parent of which, Pacific Enterprises, is merging with Enova. Although two interstate pipelines were built into California in the first years of this decade, their systems terminate in the Bakersfield, California, region and do not compete with SoCalGas in its service territory in the large Los Angeles metropolitan region, including Vernon.

In order for a competing pipeline to be constructed into Los Angeles, the sponsor must overcome significant hurdles and expenses of locating and obtaining an environmentally suitable right-of-way, and must have agreements with shippers for an adequate volume of natural gas to support the expensive project. Having large prospective shippers under contract to use a new pipeline is a prerequisite to constructing one. Despite these obstacles, there have been a number of potential pipelines discussed and considered that would have competed with SoCalGas' gas transmission service into the Los Angeles area. However, to date, SoCalGas' actions to frustrate and oppose any such competition have been successful. These efforts have included special discounted contracts offered to the most likely customers of a new pipeline and adopting a penalty tariff that effectively forbids any customer of a new pipeline from taking any service at all from SoCalGas—even at different locations—without paying the full SoCalGas system tariff for transmission in addition to the cost of the competing pipeline.

The single largest potential "anchor" customer of a new pipeline to compete with SoCalGas was SDG&E. The merger that would be approved by the Proposed Judgement would eliminate SDG&E's potential role as an anchor shipper on a new pipeline, and cement a permanent alliance between SDG&E and SoCalGas to sustain their joint monopoly on gas transmission services in southern California.

While the divestiture of SDG&E's power plant may have reduced the potential that the merged entity would use that monopoly to favor its own gas-fired generators in a competitive electricity market, that limited divestiture does nothing to reduce the damage to competition created by this merger in the natural gas market.

Across the United States, competition among natural gas transportation companies has benefitted consumers with improved

service at lower tariffs. With the exception of those customers in the Bakersfield area, and those selectively receiving discounts to ensure they will not support competing pipelines, the customers in southern California have not had any benefits of competition among gas transmission providers. The approval of the Proposed Judgement and consummation of the merger it approves will reduce their chances of such benefits.

Vernon submits that approval of the merger should have been conditioned not only on actions to reduce the potential risks to competition in the electricity market, but also to reduce the injury to competition in the natural gas market. Such action could have included a requirement that SoCalGas sell to independent entities a volume of transportation capacity equivalent to that which it had traditionally used to serve SDG&E, or a requirement that SoCalGas offer transportation rights on its system which can be released and brokered to others, creating the potential for a competitive third-party market among gas shippers with defined rights. No such action was taken in the Proposed Judgement.

For this reason, Vernon opposes the approval of the Proposed Judgement.

Respectfully submitted,

John W. Jimison, Esq.,

Attorney for The City of Vernon.

Comments of Amicus Curiae Southern California Edison Company on the Proposed Final Judgment

Kevin J. Lipson,

Mary Anne Mason,

Hogan & Hartson LLP, Columbia Square, 555-Thirteenth Street, NW, Washington, DC 20004-1109, (202) 637-5600.

Stephen E. Pickett,

Douglas Kent Porter, Southern California Edison Company, P.O. Box 800, 2244 Walnut Grove Avenue, Rosemead, California 91770, (626) 302-1903.

J.A. Bouknight, Jr.,

David R. Roll,

Stephote & Johnson LLP, 1330 Connecticut Avenue, NW, Washington, DC 20036, (202) 429-3000.

Dated: August 17, 1998.

Comments of Amicus Curiae Southern California Edison Company on the Proposed Final Judgment

Southern California Edison Company ("SCE") respectfully submits the following comments on the proposed Final Judgment in the above referenced matter.¹

Introduction and Summary

This is a case about an electric utility. Like any company in our capitalistic system, this utility would like to raise

its prices in order to increase profits for its shareholders. Finding that competition constrains its ability to increase electricity prices, the utility decides to buy the only company in the world that will give it that ability to raise electricity prices in the area where the utility competes. Not surprisingly, the Department of Justice ("DOJ") finds the merge to be an obvious violation of the antitrust laws. DOJ then files a complaint and proposes a Final Judgment that permits the merger without eliminating the competitive problem identified in the complaint.

The violation alleged in DOJ's complaint is straight-forward. Enova Corporation ("Enova"), the owner of one of California's three major electric utilities, has acquired Pacific Enterprises ("Pacific"), which owns and operates the intrastate gas pipeline system that provides virtually all of the natural gas consumed in southern California. As DOJ's complaint alleges, control of this pipeline system will provide Enova with monopoly control of natural gas in the southern California market. This in turn will permit Enova to control the price of electricity in southern California much of the time, because natural gas is used to generate electricity "on the margin" during most hours of the year in southern California.

In competitive markets, the cost characteristics of a producer on the margin are likely to set the market-clearing price. In southern California, as of April 1, 1998, this is necessarily true, because California has created a power exchange ("PX")—the first such market in the United States—in which generators of electric power bids for each hour and all successful bidders are paid a price determined by the highest bid that is accepted. Thus, where gas-fueled generation is on the margin, as it is most of the time, an increase in the price of natural gas leads directly to an increase in the price for every kilowatt hour of electricity consumed in southern California.

Prior to the merger, Enova had every incentive to raise electricity prices but it lacked the ability to do so because it has no control over natural gas prices. On the other hand, before the merger, Pacific had the ability to control natural gas prices but had not succeeded in entering the electricity marketing business.² Thus, Enova has the

² Before the merger, Pacific had established a subsidiary for gas and electricity marketing and tried to enter the electricity marketing business. However, as Enova explained to the Federal Energy Regulatory Commission ("FERC"), this subsidiary had not succeeded in securing any contracts to sell electricity at the time of the proposed merger. See *Ensource*, 78 FERC ¶ 61,064, at 61,231 (1997)

incentive but not the ability to manipulate electricity prices; Pacific had the ability but lacked the incentive.

DOJ correctly concluded that a merger of these two firms, which combines the ability and incentive to raise electricity prices in the southern California market, violates the antitrust laws. In the face of this violation, what is the remedy? The most obvious remedy, of course, is to stop the merger from happening. Short of that, the next most effective and logical remedy is to remove the source of the merged firm's *monopoly power*, either by requiring divestiture of the natural gas pipeline system or by creating an independent system operator ("ISO") to operate that system. The last but not least attractive option is to try to lessen the merged firm's incentive to exercise its monopoly power in order to profit from higher electricity prices. This is the least attractive option because curbing incentives to profit from higher electricity prices requires a complex latticework of provisions designed to prevent the merged firm from retaining and acquiring contractual rights and other types of economic interests in electric power. Such a remedy is difficult to write and even harder to administer.

Rather than stopping the merger in its tracks or adopting a structural remedy to remove the source of the monopoly power, DOJ asks this Court to approve a remedy that will have little or no impact on the merged company's incentive to raise electricity prices. The proposed Final Judgment should be rejected because the merged entity still has the unfettered ability to enter into a variety of electric power transactions, which will enable it to profit from higher electricity prices. Specifically:

- While the proposed Final Judgment requires Enova to divest two of its gas-fueled electric generating plants, totaling some 1650 megawatts, it allows the merged company to acquire an unlimited amount of generating facilities built after January 1, 1998, or any repowered/rebuilt facilities, whatever the fuel-type. Thus, the 1650 MW divestiture requirement can be undone with a single purchase of a large new facility.

- There is no prohibition on the merged company contracting, the day after divestiture, to purchase the electrical output of those same divested generating facilities (or other facilities).

- The proposed Final Judgment explicitly permits the merged firm to enter into "tolling" arrangements by which it can in essence rent electric generating plants to convert gas into electricity.

- There is no prohibition on the merged company entering into financial contracts (derivatives such as options and futures) that

("Since Ensource never has engaged in marketing activity* * *").

¹ As a part of these Comments, SCE is attaching the Affidavit of Paul R. Carpenter, an economist who has extensive experience in analyzing energy markets.

would enable it to prohibit from changes in southern California electricity prices.

Under the proposed decree, the merged firm can acquire both new and repowered/rebuilt electric generation assets. It can acquire by contract the economic attributes of ownership of electric generation. It can rent generating units to produce electric power. And it can trade in electricity financial contracts for the southern California market. If it can do all this, then it obviously can benefit from increases in the price of electricity just as it could if it still owned the divested electric generating facilities. Consequently, the proposed Final Judgment does not eliminate the merged firm's incentive to exercise market power in order to increase electricity prices. And it does not even purport to address market power. Therefore, the proposed Final Judgment does not even come close to solving the fundamental competitive problem articulated in DOJ's complaint.

One rationale that DOJ has put forward for having accepted the ineffective remedial measures in the proposed Final Judgment is that more effective remedies would involve relief that extends beyond the effect of the merger, as Pacific could theoretically have engaged in these activities without a merger. But this is an unlawful merger. Without the acquisition, Enova's incentive to raise electricity prices is not backed by any ability to do so. The merger dramatically and unlawfully changes the landscape by immediately coupling Enova's incentive and electricity-expertise with Pacific's natural gas muscle. The argument that a substantial link between the gas pipeline system and electricity markets could easily have been established without the merger ignores the fact that this merger creates that substantial link.

If, for whatever reason, DOJ prefers not to stop the merger and not to address the upstream source of the market power, but instead chooses to focus on the incentives to exercise its market power in the downstream electricity market, then the public interest requires that it craft remedies designed to curb the incentives that are sufficiently effective to cure the antitrust violation. Because DOJ failed in that task, this Court is faced with a proposed Final Judgment that falls far short of being within the reaches of the public interest.³

³ As a diversionary tactic, Enova can be expected to urge the Court to disregard SCE's comments, no matter how persuasive they may otherwise be, because SCE is merely a self-interested competitor

In summary, SCE urges that the proposed Final Judgment be rejected. If DOJ nevertheless concludes that a salvage effort is appropriate, DOJ and Enova can be sent back to the bargaining table to produce a Final Judgment that remedies the competitive problem described in the complaint. Such remedies would include one of the following:

- (1) Rescission of the merger;
- (2) Divestiture of the gas pipeline system or, alternatively, establishment of an independent system operator to operate it independently of the merged company; or
- (3) Adoption of measures that will eliminate the merged company's incentive to participate directly, and indirectly through financial instruments, in the southern California electricity market in any manner that would allow it to profit from increased electricity prices.

Argument

I. The Tunney Act Standard of Review Requires This Court To Determine Whether the Proposed Final Judgment Is in the Public Interest

On March 9, 1998, the Antitrust Division of DOJ filed a complaint against Enova alleging that the merger of Enova and Pacific will violate Section 7 of the Clayton Act. Along with the complaint, DOJ filed a Stipulation and Order pursuant to which the parties consented to entry of a proposed Final Judgment and Enova agreed to abide by its terms pending its entry by the court.

The filing of the proposed Final Judgment triggered a proceeding under the Antitrust Procedures and Penalties Act, commonly known as the Tunney Act.⁴ The purpose of the Tunney Act is to provide notice to the public, an opportunity to comment, and judicial

of the merged firm. While it is true that SCE is a competitor for electricity sales, SCE's principal interest in this matter is at the largest purchaser of electricity in the southern California market, one that will be directly and significantly harmed by electricity price increases resulting from this merger. Under the California restructuring legislation, the legislature "froze" electricity rates at levels in effect as of June 1996. See Cal. Pub. Util. Code § 368(a). During the rate freeze period which will end December 31, 2001, SCE must purchase all the energy that it sells to its utility service customers from the PX. SCE's rates include separate components for transmission, distribution, etc. The sum of these separate components is less than the frozen rate levels, with that residual difference being used by SCE to recover costs associated with generation-related assets that would not otherwise be recouped if cost recovery were determined solely by selling energy purchased from these assets at the prevailing market price. As a consequence, SCE's shareholders are at risk and will be directly harmed if PX electricity prices rise to a level that would cause SCE's costs to exceed the frozen rate levels.

⁴ 15 U.S.C. § 16(b)-(h).

scrutiny of consent decrees in antitrust cases to determine whether they are in the "public interest." The Tunney Act requires DOJ to publish the proposed Final Judgment and to file and publish a competitive impact statement ("CIS") explaining the case, the anti-competitive conduct involved, the proposed remedy, and any alternative remedies considered by it. DOJ must also furnish to the Court any comments that it receives from the public during a 60-day period commencing with the noticing of the CIS, its response to these comments, and any documents it "considered determinative in formulating" the decree.

Before a court may approve a proposed Final Judgment, the Tunney Act requires the court to "determine that the entry of such judgment is in the public interest".⁵ The Act provides that in making its public interest determination, the court may consider:

(1) the competitive impact of such judgment, including termination of alleged violations, provisions for enforcement and modification, duration or relief sought, anticipated effects of alternative remedies actually considered, and any other considerations bearing upon the adequacy of such judgment;

(2) the impact of entry of such judgment upon the public generally and individuals alleging specific injury from the violations set forth in the complaint including consideration of the public benefit, if any, to be derived from a determination of the issues at trial.⁶

The scope of Tunney Act review was articulated in a 1995 decision of the Court of Appeals for the D.C. Circuit in *Microsoft*.⁷ In that case, District Judge Sporkin had declined to enter a proposed consent decree settling an action by DOJ alleging monopolization and various exclusionary practices. Although the Court of Appeals reversed and ordered entry of the proposed decree without revision, it set forth certain guidelines, among others, that are relevant to the Court's public interest determination in this case:

- "[T]he court's function is not to determine whether the resulting array of rights and liabilities is the one that will best serve society, but only to confirm that the resulting settlement is within the reaches of the public interest."⁸

- "[I]f third parties contend that they would be positively injured by the decree, a district judge might well hesitate before assuming that the decree is appropriate."⁹

⁵ 15 U.S.C. § 16(e).

⁶ *Id.*

⁷ *United States v. Microsoft*, 56 F.3d 1448 (D.C. Cir. 1995).

⁸ *Id.* at 1460 (emphasis in original, internal citations and quotation marks omitted).

⁹ *Id.* at 1462.

• “A district judge * * * would and should pay special attention to the decree’s clarity [and may] insist on that degree of precision concerning the resolution of known issues as to make this task, in resolving subsequent disputes, reasonably manageable * * *. If the decree is ambiguous, or the district judge can foresee difficulties in implementation, we would expect the court to insist that these matters be attended to.”¹⁰

Under *Microsoft*, it is now clear that a court may not reject a remedy simply because it is not the “best” remedy that could have been selected. On the other hand, it is equally clear under *Microsoft* that a court has discretion to reject a negotiated remedy which is ineffective because it does not seek to address and resolve the core competitive problem identified in DOJ’s complaint.

Following *Microsoft*, courts have continued to scrutinize proposed consent decrees to determine whether they effectively address and resolve the fundamental competitive problems articulated by DOJ. For instance, in *Thomson*, District Judge Friedman examined concerns about several aspects of a proposed consent decree as expressed in briefs submitted amicus curiae by two competitors of the merging parties, in public comments submitted to DOJ, and at an extended public hearing.¹¹ Judge Friedman carefully examined arguments concerning each of the four separate areas of concern, noting proposed supplemental commitments¹² and modifications to the initially filed proposed consent decree to resolve some of these concerns.¹³ He was careful not to substitute his own judgment for DOJ’s as to what could be the best remedy¹⁴ and he declined to suggest relief for conduct unrelated to the merger.¹⁵ Nonetheless, Judge

Friedman refused to enter even the revised decree, because neither the original nor the proposed revision resolved substantial concerns that the decree would maintain, by court order, a dubious copyright claim that DOJ’s complaint and commentators had identified as a substantial barrier for new competitors seeking to enter the relevant market.¹⁶ Only after the parties submitted a further amendment addressing these concerns did Judge Friedman order entry of the consent decree.¹⁷

II. The Proposed Final Judgment is Not in the Public Interest

Under standards laid down in *Microsoft* and implemented in *Thomson*, the proposed Final Judgment is not within the “reaches of the public interest” because it does not remedy the core competitive problem identified in DOJ’s complaint—namely, that the merged entity will have the ability and incentive to increase electricity prices. Unless and until DOJ and Enova agree to a remedy which addresses and resolves this problem, the Court must reject the proposed decree.

A. The Complaint Correctly Identifies the Root of the Competitive Problem: Pacific’s Control of Natural Gas Transportation and Storage in California

As a result of its monopoly over intrastate transmission and storage of natural gas, Pacific (via its subsidiary, SoCal Gas), has the power and ability to increase the price of natural gas to gas-fired electric generators which in turn will increase the price of electricity in California. In its complaint, DOJ found that, notwithstanding regulatory oversight, Pacific has the ability to use its control over those assets to manipulate the price of gas to consumers, including gas-fueled electric generators:

- Pacific has “a monopoly of transportation of natural gas within southern California [and] a monopoly of all natural gas storage services throughout California.”¹⁸
- “[A]lthough regulated by the California Public Utilities Commission (‘CPUC’), Pacific has the ability to restrict the availability of gas transportation and storage to consumers, by limiting their supply or cutting them off

¹⁶ See *id.* at 927–930 (discussing complaint’s allegations and decree’s proposed remedy regarding copyright claim).

¹⁷ See *United States v. The Thomson Corp.*, 1997–1 Trade Cas. (CCH) ¶ 71,735, 1997 U.S. Dist. LEXIS 1893 (Feb. 27, 1997).

¹⁸ Complaint ¶ 15.96 percent of gas-fueled generators in southern California buy gas transportation services from Pacific. *Proposed Final Judgment and Competitive Impact Statement; United States v. Enova Corp.* (“CIS”), 63 FR 33393, at 33403 (June 18, 1998).

entirely, which has the effect of raising the price they pay for natural gas.”¹⁹

The attached Affidavit of Dr. Paul Carpenter describes the numerous means by which Pacific (via SoCalGas) can exercise its monopoly power, as charged by DOJ, to restrict the availability of gas transportation and gas storage capacity in southern California. These means include SoCalGas’ ability to (a) control and deny access to its intrastate transmission and storage assets, (b) manipulate the price of intrastate services, such as short-term balancing or emergency supply services, (c) withhold the quantity of interstate capacity it makes available in secondary markets in order to raise price, (d) determine the volume of flowing supplies on a day-to-day basis through its core-related storage injection and withdrawal decisions, and (e) manipulate prices and access through its possession of valuable operational information.²⁰

The ability of Pacific to restrict the availability of gas transportation and storage to consumers, including gas-fueled generators, is the key to its power to increase electricity prices in southern California for two related reasons. *First*, as explained by DOJ, most electricity generated in California is bought and sold through the California PX, which is a computerized bidding system that matches electricity supply and demand every hour.²¹ The price of electricity for all units sold is determined by the most expensive unit sold in that hour, regardless of the cost or bidding price of less expensive units.²² Stated differently, all sellers receive the PX’s marginal price, regardless of their bid, and all buyers pay the marginal price.²³

Second, “gas-fired plants are in general the most costly to operate.”²⁴ In other words, gas-fueled plants are usually on the margin. Because of the California PX, an increase in the price of natural gas to these gas-fired plants will translate in an increase in the price of all electricity sold in California through the PX. DOJ made this point in its CIS as follows:

[d]uring these periods [of high electricity demand], the gas-fired plants, as the most costly to operate and thus the highest bidders

¹⁹ Complaint ¶ 16; see also Complaint ¶ 20.

²⁰ Aff. at ¶ 8.

²¹ CIS at 33403. The CIS states that the matches occur every half-hour; in fact, the matches are hourly.

²² CIS at 33403.

²³ Aff. at ¶ 9. This is true with one exception involving nuclear-powered generators, which are covered by a different pricing scheme.

²⁴ CIS at 33403.

¹⁰ *Id.* at 1461–62.

¹¹ *United States v. The Thomson Corp.*, 949 F. Supp. 907, 909, 912 (D.D.C. 1996), *aff’d per curiam* 1998 U.S. App. LEXIS 12921 (May 29, 1998).

¹² See, e.g., *id.* at 916 (noting that “Thomson confirmed in writing that it will continue” a practice that commentators and amicus curiae thought might cease after the merger).

¹³ See, e.g., *id.* at 916 (noting adoption of new consent decree provision barring Thomson from taking certain actions to undermine viability of products to be divested under the decree); *id.* at 924 (noting proposal to add language to proposed decree to ensure that licenses to one of the products to be divested may be sublicensed); *id.* at 925 (noting further change to proposed consent decree after Tunney Act hearing to ensure that divestiture will not affect pre-existing rights under a particular contract). See also *id.* at 926 nn. 19–20 (noting changes to initial proposed decree in response to concerns expressed in comments and at the hearing).

¹⁴ See *id.* at 919.

¹⁵ See, e.g., *id.* at 920 (refusing to consider requests to reopen bidding on past contracts, because not related to competition among the parties to the merger).

into the [PX], are able to set the price for all electricity sold through the [PX].²⁵

In short, what this all means is that as a consequence of its monopoly over gas transportation and storage, Pacific has the unquestioned ability to directly and materially affect the price of electricity in southern California. As summarized by DOJ:

By virtue of its monopoly over natural gas transportation and storage, Pacific currently has the ability to increase the price of electricity, when during high demand periods, electricity from California gas-fired generators is needed to supplement less costly electricity. Pacific can restrict gas-fired generators' access to gas, which has the effect of raising the cost of gas-fired generators in general. Alternatively, Pacific can cut off or impede the more efficient gas generators' access to gas, leaving the higher-cost generators to meet consumer demand for electricity. *In either case, Pacific is able to increase the cost of electricity from gas-fired plants, thereby increasing the prices they bid into the [PX] and ultimately the price of electricity sold through the [PX].*²⁶

To be sure, Pacific's ability to increase electricity prices existed absent the merger. Without the merger, however, Pacific had no incentive to use its market power because it was not in the electricity business, and it had no economic interest in electricity sales.²⁷ It is surely no coincidence that Enova—one of California's "big three" electric utilities and one which every incentive to raise electricity prices—sought out Pacific, the one company in the world that could raise prices in the soon-to-be deregulated California electricity market (the PX). It is also no coincidence that the timing of the merger was to coincide almost precisely with the commencement of operation of that deregulated market.

To take the position, as apparently DOJ does, that Pacific's ability to raise gas prices and hence, electricity prices is not merger related, and therefore should not be subject to any merger-related remedy is to ignore reality. *But for this merger*, Enova would not be able to affect electricity prices. It is the

²⁵ *Id.* DOJ is certainly correct in this critical finding. Attachment B to Dr. Carpenter's affidavit depicts the electricity supply curve for all generating resources in the western United States. As shown, actual demand for electricity (which varies by time of day and by season) falls within a certain band (70,500 megawatts to 93,500 megawatts) about two-thirds of the time. Within that band, 90 percent of the megawatts that can be generated come from gas-fired generators. And, 69 percent of those megawatts come from California gas-fired generators. *Aff. at Attach. B.*

²⁶ CIS at 33404 (emphasis added).

²⁷ A Pacific affiliate did have paper authority from the FERC—the federal overseer of wholesale electricity sales—to make electricity sales but it never made any such sales and, in fact, voluntarily terminated its marketing certificate once the Enova-Pacific merger was announced. *See Ensource*, 78 FERC ¶ 61,064 (1997).

merger that transforms Pacific's previously benign ability to affect electricity prices into a serious, immediate threat to stifle competition in a nascent but vitally important market.

B. The Competitive Problem Attendant to This Merger Calls for a Structural Remedy Directed at the Natural Gas Transportation and Storage Assets

Having identified the source of the competitive problem, and having concluded that the merger was unlawful, DOJ then had to fashion an appropriate remedy. Logic, traditional antitrust policy and precedent, and one of the very terms of the proposed Final Judgment, all point to a structural remedy aimed directly at the source of the market power—Pacific's natural gas transportation and storage assets.²⁸ Such a remedy would separate Pacific's gas transportation and storage assets from the merged company's other assets, either by divestiture or by creation of an ISO to operate those assets. But, for unexplained reasons, the proposed Final Judgment does no such thing; indeed, this remedy apparently was not even seriously considered. In a section of the CIS entitled "Alternatives to the Proposed Final Judgment", the only alternative DOJ stated that it considered was a full trial on the merits.²⁹ The remedies that the DOJ did adopt are all aimed at curtailing the *incentive* of the merged company to carry out its proven ability to manipulate gas and, hence, electricity prices. The ineffectiveness of these remedies is discussed in the following section.

Ironically, a provision in the proposed Final Judgment itself makes clear that the only completely effective remedy is a structural remedy aimed at the source of the market power: the same provision undermines the effectiveness of the remedies actually proposed by DOJ and Enova, which focus only on incentives. Article XIII. A of the proposed Final Judgment provides that all of the complex provisions of the decree will abruptly terminate in the event "an Independent System Operator has assumed control of Pacific's gas pipelines within California in a manner satisfactory to the United States."³⁰ Termination under these circumstances would be appropriate in DOJ's view, because

²⁸ Of course the most obvious and most effective remedy—preventing this unlawful merger from being consummated—was apparently rejected by DOJ. No explanation was given for eschewing this proven, simple method of remedying the effects of this unlawful merger.

²⁹ *See* CIS at 33407.

³⁰ Proposed Final Judgment at 33402.

[i]n that event, PE/Enova will lose the ability to control access to gas transportation and storage. *Without these tools, the merged company will not be able to raise the price for electricity sold through the [PX] by reducing its gas sales, and the basis for the Final Judgment would be removed.*³¹

Thus, DOJ's own reasoning supports the position that the only way to completely eliminate the merged company's ability to increase electricity prices is to eliminate Pacific's control over its gas transportation and storage assets. This structural remedy serves the public interest because it addresses the core competitive problem and is certain to be effective over the long term. No policing is necessary.

The staff of the Bureau of Economics of the Federal Trade Commission ("FTC") recently expressed its view that structural remedies aimed directly at the source of market power are the most effective remedies because such structural remedies alter incentives (by eliminating the ability to exercise market power) while behavioral remedies do not:

As a general proposition, we have found that structural remedies, such as divestiture in merger cases, are the most effective and require the least amount of subsequent monitoring by government agencies. The effectiveness of structural remedies lies in the fact that they directly alter incentives. Behavioral remedies, in contrast, leave incentives for discriminatory behavior in place and impose a substantial burden on government agencies to monitor subsequent conduct.

In 1995, with regard to competition in electric generation and transmission, we suggested that FERC [the Federal Energy Regulatory Commission] promote independent system operators (ISOs) to control the regional electric transmission grids, as an alternative to ordering divestiture of transmission lines or relying solely on open access rules to promote competition in electric generation markets.³²

³¹ CIS at 33406 (emphasis added).

³² Comments of the Staff of the Bureau of Economics of the Federal Trade Commission Before the Public Utilities Commission of Texas, at 2 (June 19, 1998). *See Aff. at ¶ 13.* Adoption of a structural remedy aimed at the source of the market power would be consistent with traditional antitrust policy and precedent. *See, e.g., California v. American Stores Cos.*, 495 U.S. 271, 294 n.28 (1990) (citing 2 P. Areeda & D. Turner, *Antitrust Law* § 328b (1978) ("[D]ivestiture is the normal and usual remedy against an unlawful merger"); *United States v. American Cyanamid Co.*, 719 F.2d 558, 565 (2d Cir. 1983) (citing *Ford Motor Co. v. US*, 405 U.S. 562, 573 (1972) ("[D]ivestiture is not uncommonly the appropriate relief when a Section 7 violation is proven"); *See also United States v. Merc & Co., Inc.*, Proposed Final Judgment and Competitive Impact Statement, 45 F.R. 60044 (1980) (ordering divestiture of assets that would give the defendant the ability to exercise market power in

Thus, as explained by Dr. Carpenter, in a merger of electricity transmission and generation companies, the FTC would focus its relief on the source of the market power—the transmission facilities—rather than the generation facilities that provide the incentive to engage in the anti-competitive activity.³³

Earlier this year in an analogous situation, the FTC entered into a consent order settling a challenge to a proposed acquisition by an electric power company of a coal supplier.³⁴ Like the merger in the present case involving electricity and natural gas pipelines, the FTC found that a merger involving electricity and coal posed a direct threat to competition in western U.S. electricity markets. In so concluding, the FTC made findings remarkably similar to DOJ's findings in this case:

- "PacifiCorp's acquisition of Peabody, which is the exclusive supplier of coal to certain power plants that compete with PacifiCorp's own power plants, raises antitrust concerns."³⁵
- During off-peak periods in the western United States, "coal-fired plants frequently are the price-setting, marginal plants."³⁶
- PacifiCorp's acquisition "would give PacifiCorp the power to raise the price (or otherwise diminish the availability) of coal, a necessary input for any firm seeking to compete with PacifiCorp in electricity generation."³⁷
- "PacifiCorp would have an incentive to increase fuel costs at Navajo and Mohave in order to drive up the market price of electricity in the western United States."³⁸

Prior to the acquisition, the coal supplier (Peabody) had the ability to raise coal prices to competing electric generators, but it had no incentive to do so. On the other hand, before the acquisition, the electricity company (PacifiCorp.) had the incentive to increase electricity prices but lacked the

ability. It was the merger of the two, bringing together that ability and that incentive, that gave rise to the FTC's concerns.

In stark contrast to DOJ's remedy in the present proceeding, the FTC in *PacifiCorp/The Energy Group* did not hesitate to adopt a remedy which went to the heart of the market power problem identified in the FTC's complaint. The FTC proposed a remedy that required PacifiCorp to divest Peabody Western Coal Company—the owner of the coal mines that conferred market power on the merged firm and enabled it to increase fuel prices at competing generating facilities (Navajo and Mohave). And, the FTC directly addressed and rejected the proposals of several commenters who had recommended conduct/behavioral remedies to resolve the antitrust problem:

- "Public comments on the consent agreement recommended that we substitute conduct provisions for the order's divestiture requirement, but we were not persuaded that the suggested course of action would be preferable."³⁹
- "The divestiture remedy is consistent with longstanding Commission policy which favors the structural approach to remedies, rather than the behavioral approach which seeks to govern conduct through the use of rules."⁴⁰

In both *PacifiCorp* and this case, the fuel supply assets are the source of the competitive problem identified by the federal enforcement authorities. The simple, direct way to remedy that problem is to cut out and divest those assets or require that they be controlled by an independent system operator.

C. The Remedies Adopted in the Proposed Final Judgment Fail To Effectively Curb the Merged Company's Incentive To Manipulate Electricity Prices

As explained above, DOJ made no pretext of selecting a remedy designed to address the gas market power problem. Rather, DOJ focused all of its attention on the electricity side of the merged company's business and proposed a complicated set of conditions that are supposed to curb the incentive of the merged company to manipulate electricity prices. DOJ's theory is that if there is no financial gain to be made from electricity price

manipulations, then the merged company likely would not engage in such conduct even if it possessed the power and ability to do so. There is nothing wrong with this theory from an analytical point of view. But having chosen this least attractive remedial approach, DOJ needed to "get it right" by understanding, anticipating, and then prohibiting all the various means by which the merged company could seek to retain or create incentives to earn profits through electricity price manipulations. DOJ, however, did not do so.

The proposed Final Judgment requires and allows the following:

- Enova is required to sell its Encina and South Bay electricity generation facilities, totaling some 1650 megawatts, to a purchaser acceptable to DOJ.⁴¹
- Enova is enjoined from acquiring "California Generation Facilities" without prior notice and approval of DOJ.⁴²
- Enova is enjoined from entering any contracts that allow it to "control any California Generation Facilities" without prior notice and approval of DOJ.⁴³
- In general, Enova is allowed to acquire or control up to 500 MW of capacity of California Generation Facilities without prior DOJ approval.⁴⁴
- Enova is allowed to "own, operate, control, or acquire any electricity generation facilities other than California Generation Facilities [and] any cogeneration or renewable generation facilities in California."⁴⁵
- Enova is also allowed to "enter into tolling and reverse tolling agreements with any electricity generation facilities in

⁴¹ Proposed Final Judgment art. IV(A) at 33398 (requiring divestiture) & (D)(3) at 33398 (specifying DOJ's right to prior approval of purchaser) & (I) at 33399 (specifying the criteria for DOJ approval). The divestiture is to occur within eighteen months, subject to extension by DOJ, or a trustee will be appointed. Proposed Final Judgment art. IV(E) at 33399.

⁴² Proposed Final Judgment art. V(A)(1). The term "California Generation Facilities" is defined to mean electricity generation facilities in California in existence on January 1, 1998, and any contract to operate and sell output from generating assets of the Los Angeles Department of Water and Power ("LADWP"). Proposed Final Judgment art. II(B) at 33397. "Acquire" is defined to mean "obtaining any interest in any electricity generating facilities or capacity, including but not limited to, all real property * * * capital equipment * * * or contracts related to the generation facility, and including all generation, tolling, reverse tolling, and other contractual rights." Proposed Final Judgment art. II(A).

⁴³ Proposed Final Judgment art. V(A)(2) at 33399. "Control" means to have the ability to set the level of output of an electricity generation facility." Proposed Final Judgment art. II(E) at 33398.

⁴⁴ Proposed Final Judgment art. V(B)(1) at 33399. The cap may be increased to 800 MW upon Enova's sale of all of its existing nuclear generating capacity, but only up to 10% of its total retail electricity sales. Proposed Final Judgment art. XIII(D) at 33402.

⁴⁵ Proposed Final Judgment art. V(C)(1) and (2) at 33399.

violation of Section 7 of the Clayton Act and Sections 1 and 2 of the Sherman Act).

³³ Aff. at ¶ 13.

³⁴ *PacifiCorp/The Energy Group*, File No. 971 0091. PacifiCorp, headquartered in Portland, Oregon, makes electricity sales throughout the western United States. The Energy Group PLC ("TEG"), headquartered in London, England, is a diversified energy company that owns, among other things, Peabody Coal Company, which produces roughly 15 percent of the coal mined in the United States. See *FTC Restructures Electric/Coal Combination to Ensure that All Consumers Reap Low Prices From Electricity Deregulation*, FTC News Release, Feb. 18, 1998.

³⁵ Analysis of Proposed Consent Order to Aid Public Comment ("Analysis") at 4.

³⁶ Analysis at 3.

³⁷ Statement of The Federal Trade Commission Upon Withdrawal From Consent Agreement, In the Matter of PacifiCorp, File No. 971 0091, ("Statement") at 1 (emphasis added).

³⁸ Analysis at 4 (emphasis added).

³⁹ Statement at 1 n.1.

⁴⁰ Analysis at 8. The merger never was consummated because PacifiCorp subsequently withdrew its bid in the face of a competing offer. In closing the investigation, the FTC stated: "Absent this turn of events, the Commission would have been inclined to issue the final order against PacifiCorp without modification." Statement at 1.

California," provided it does not "control" them.⁴⁶

As explained by Dr. Carpenter, these remedies are ineffective because they are incomplete.⁴⁷ While their aim is to curb the merged company's incentives to harm competition by restricting its participation in certain activities, they also allow other activities that can completely undo what DOJ seeks to achieve. It is as if DOJ closed one door to anti-competitive activity but left wide open several other doors.

The rationale underlying DOJ's required divestiture of the 1650 of the 1650 MW of Enova generating facilities is that infra-marginal assets (assets that are low-cost relative to the market price of electricity) create incentives through the price-clearing mechanism in the PX for the merged company to manipulate gas prices. As stated by DOJ:

The Final Judgment requires Defendant to sell all generation assets that would likely give PE/Enova the incentive to raise electricity prices. [footnote excluded] To that end, the Final Judgment requires Defendant to divest all of its low-cost gas generators * * *. Because these generators operate in almost all hours of the year and are relatively low-cost, if PE/Enova were to own them, it could earn substantial profits (revenues exceeding its costs) by restricting the supply of natural gas which, as explained above, would increase the overall price for electricity in the pool and thus the price PE/Enova would receive for electricity.⁴⁸

But, what DOJ overlooked is that many other arrangements and transactions that are *not* prohibited by the proposed Final Judgment will allow the merged entity to directly, or indirectly through financial instruments, collect the earnings from infra-marginal generating facilities. Specifically, the proposed Final Judgment has left in place significant anti-competitive incentives by permitting the merged company to:

- Build or acquire new or repowered generating facilities;
- Enter into tolling agreements;
- Enter into power generation management contracts;
- Enter into financial contracts tied to prices in the California electricity market

1. Acquisition of New or Repowered Generating Facilities

While the merged company would generally be prohibited from owning or controlling existing California generating facilities over and above the 500 MW cap, the proposed Final

Judgment allows it to build or acquire new generating facilities and to acquire plants that are rebuilt, repowered or activated out of dormancy after January 1, 1998. While adding new facilities is generally procompetitive, here that is not the case. Acquisition of new (or rebuilt/repowered/reactivated) generating facilities will create incentives to manipulate gas prices that the merged company does not have, easily undoing via vertical market power the otherwise positive horizontal effect of adding new generation facilities.⁴⁹ DOJ required the divestiture of Enova's two generation plants because, as low-cost facilities, they could "earn substantial profits" under the PX pricing mechanism (*see supra* at p. 22). That same rationale holds equally true for the types of generating facilities that the proposed Final Judgment permits the merged company to acquire.

By way of example, consider two scenarios. In scenario one, the merged company divests 1650 MW of Enova's generating facilities, and then builds a 1650 MW facility to replace the lost output. Because of technology improvements, the new facility can be brought on-line with costs roughly equal to those of the old facilities. In scenario two, the merged company retains its 1650 MW of existing facilities and a disinterested third party builds a 1650 MW facility. In both scenarios, the market has the same amount of megawatts available for consumption and the merged company has roughly the same incentive to raise gas prices.⁵⁰ The proposed Final Judgment permits scenario one but prohibits scenario two. A provision such as that can hardly be said to be within the reaches of the public interest.

2. Tolling Agreements

The proposed Final Judgment permits the merged company to enter into tolling or reverse tolling agreements so long as it does not control the level of the plant's output. Under a tolling agreement, a party who owns natural gas enters into a contract with the owner of the generating facility to use ("rent") that facility, thereby allowing the gas-owning party to produce electricity for a set fee. The gas-owning party can then sell the electricity at the market price, which may be higher or lower than the set fee.⁵¹

The problem is that tolling agreements are akin to virtual ownership because they provide the

merged company with the same incentive to increase electricity prices as does physical ownership. And, the agreement need not provide for control of the plant's output for that incentive to exist. For example, the merged company could enter into tolling agreements with the two Enova generating facilities that it has agreed to divest. The facilities' operator, whoever that is, would bid into the PX at the facilities' marginal cost and the facilities would operate whenever the bids are successful. To the extent that the agreement provides the merged company with electricity at a fixed price, the company has an incentive to increase the PX price by increasing gas prices—it will simply pocket the additional revenue.⁵²

The failure of the proposed Final Judgment to close this gap is another reason to find it not in the public interest.

3. Power Generation Management Contracts

A further reason to reject the proposed Final Judgment is due to its failure to prohibit the merged company from entering into management contracts under which it would operate a generation facility owned by a third party. Such arrangements are similar to tolling agreements in that they permit a sharing in a facility's profits.⁵³

Importantly, the proposed Final Judgment recognizes the potential harm to competition that such contracts can cause. It requires the merged company to notify and/or obtain approval from DOJ for management contracts entered into with the Los Angeles Department of Water and Power and with the California Public Power Providers. These restrictions go part way to reducing incentives but apparently they do not apply to contracts relating to all other California generating facilities.⁵⁴ Permitting such contracts for certain but not all California generating facilities is inconsistent and not in the public interest.

⁵² Aff. at ¶ 25.

⁵³ Aff. at ¶ 26. A management contract may be structured to be more complex than a tolling agreement (e.g., clauses with operating cost incentives) but, in essence, both arrangements have a built-in incentive to make the facility as profitable as possible. *Id.*

⁵⁴ There is some ambiguity due to the definition of "acquisition" in the proposed Final Judgment. "Acquire" could be interpreted to prohibit any *financial* interest, or it could be interpreted to prohibit any *ownership* interest. The latter interpretation leaves open the possibility of entering into management contracts. *See* proposed Final Judgment at art. II(A); *see also* Aff. at ¶ 28.

⁴⁶ Proposed Final Judgment art. (V)(C)(3) at 33399.

⁴⁷ Aff. at ¶¶ 19, 21.

⁴⁸ CIS at 33404.

⁴⁹ Aff. at ¶ 22.

⁵⁰ *See* Aff. at ¶ 23.

⁵¹ Aff. at ¶ 24.

4. Financial Market Contracts

Finally, the proposed Final Judgment fails to place any restrictions whatsoever on the merged company's ability to enter into financial contracts (e.g., forwards, futures, options and other derivatives) that provide the same incentive to increase electricity prices.⁵⁵ Financial contracts can be used to approximate the same financial position the merged company would have by virtue of owning generation facilities.⁵⁶ The merged company, for example, could contract for a one-year call option for 1000 MW of output at a certain "strike price." The higher the electricity market price is above the strike price, the greater the profit when the option is exercised.⁵⁷

As explained by Dr. Carpenter, financial contracts have the potential to foster more anti-competitive creativity than ownership of generation facilities because they are more flexible. While it is difficult to change ownership, it is simple to contract for electricity in varying amounts over differing time horizons and to change positions quickly and frequently. This flexibility allows the merged company to tailor its electricity market position to most advantage itself.⁵⁸

Both individually and collectively, the shortcomings of the proposed Final Judgment are significant because they completely undermine DOJ's effort to curb the merged entity's incentive to increase electricity prices. DOJ's failure to eliminate this incentive renders the proposed Final Judgment ineffective and thus outside the reaches of the public interest. This Court should reject it as presently written.

⁵⁵ A forward contract is a non-standardized bilateral contract for future delivery of electricity at a pre-specified price. A futures contract is a standardized forward contract that is traded on an organized exchange. California-Oregon border and Palo Verde electricity futures contracts, both of which are traded on the New York Mercantile Exchange, are accessible to the California market. Option contracts, which can be either traded on an exchange or done bilaterally, include additional flexibility for the buyer or the seller. For example, a call option gives the buyer the right but not the obligation to purchase electricity in the future at a specified price. Aff. at ¶29 fn.9.

⁵⁶ Aff. at ¶29.

⁵⁷ Aff. at ¶29.

⁵⁸ Aff. at ¶29.

Respectfully submitted,
Kevin J. Lipson,
Mary Anne Mason,
*Hogan & Hartson LLP, Columbia Square,
555—Thirteenth Street, NW, Washington, DC
20004-1109. (202) 637-5600.*
Stephen E. Pickett,
Douglas Kent Porter,
*Southern California Edison Company, P.O.
Box 800, 2244 Walnut Grove Avenue,
Rosemead, California 91770. (626) 302-1903.*
J.A. Bouknight, Jr.,
David R. Roll,
*Steptoe & Johnson LLP, 1330 Connecticut
Avenue, NW, Washington, DC 20036. (202)
429-3000.*

Affidavit of Paul R. Carpenter

Kevin J. Lipson,
Mary Anne Mason,
*Hogan & Hartson LLP, Columbia Square,
555—Thirteenth Street, NW, Washington, DC
20004-1109. (202) 637-5600.*
Stephen E. Pickett,
Douglas Kent Porter,
*Southern California Edison Company, P.O.
Box 800, 2244 Walnut Grove Avenue,
Rosemead, California 91770. (626) 302-1903.*
J.A. Bouknight, Jr.,
David R. Roll,
*Steptoe & Johnson LLP, 1330 Connecticut
Avenue, NW, Washington, DC 20036. (202)
429-3000.*

Dated: August 17, 1998.

1. My name is Paul Carpenter. I am a Principal of The Brattle Group, an economic and management consulting firm with offices at 44 Brattle Street, Cambridge, Massachusetts 02138, in Washington D.C., and London, England.

2. I am an economist specializing in the fields of industrial organization, finance, and regulatory economics. I received a Ph.D. in Applied Economics and an M.S. in Management from the Massachusetts Institute of Technology, and a B.A. in Economics from Stanford University. Since the early 1980s, I have been involved in research and consulting regarding the economics and regulation of the natural gas, oil, and electric power industries in North America, the United Kingdom, and Australia. I have testified frequently before the Federal Energy Regulatory Commission ("FERC"), the Public Utilities Commission of the State of California ("CPUC"), other state and Canadian regulatory commissions, federal courts, the U.S. Congress, the British Monopolies and Mergers Commission, and the Australian Competition Tribunal on issues of pricing, competition and regulatory policy in the natural gas and electric power industries. For at least ten years I have been extensively involved in the evaluation of the economics and

structure of the natural gas industry in California, including the interstate pipelines that serve the state, appearing as an expert witness in many CPUC, FERC and Canadian regulatory proceedings regarding the certification and pricing of interstate pipeline capacity to California. Further details of my professional and educational background and a listing of my publications are provided in my curriculum vitae appended as Attachment A.

Introduction and Summary of Opinion

3. I have been asked by Southern California Edison Company ("Edison") to prepare this affidavit. Its purpose is to evaluate whether the U.S. Department of Justice ("DOJ") Final Judgment in this proceeding (as further explained in its accompanying Competitive Impact Statement ("CIS")) remedies the competitive problem identified in DOJ's Complaint—namely, that as a result of their merger, Pacific Enterprises ("Pacific") and Enova Corporation ("Enova") will have the incentive and ability to lessen competition in the market for electricity in California.

4. The DOJ observed correctly in its Complaint and CIS that the merger will give the combined company ("the Merged Entity") both the incentive and the ability to harm competition in the California electricity market by limiting the supply and/or raising the price of natural gas supplied to gas-fired electric generating plants in southern California.

5. In my opinion, the Proposed Final Judgment does not remedy the serious competitive problem identified by the DOJ in its complaint. The bases for my opinion are summarized here and elaborated upon in the remainder of this affidavit:

- The DOJ correctly concluded that the merger will give the Merged Entity both the ability and incentive to raise electricity prices in southern California.

- The DOJ could have remedied this competitive problem by eliminating the ability of the Merged Entity to exercise market power by requiring either:

- The divestiture of Pacific's intrastate natural gas and storage assets to a third party; or

- The creation of an Independent System Operator to hold and operate Pacific's natural gas assets.

- This type of structural remedy is favored by antitrust authorities because it is aimed directly at the source of the competitive problem—market power—and it is clean and easy to enforce, requiring no ongoing administrative involvement in reviewing the conduct and performance of the suspect market.

- The remedy chosen by the DOJ is to leave the Merged Entity's market power intact, and instead to try to curb the Merged Entity's incentives to harm competition by requiring the sale of two generating plants and by restricting its participation in certain activities. This remedy is ineffective. Not only does it leave market power intact, it fails to eliminate significant anticompetitive incentives that are equivalent financially to the ownership of the two power plants.

- The Proposed Final Judgment has left in place significant anti-competitive incentives by permitting the Merged Entity to:

- Build or acquire new or repowered generating capacity.

- Enter into tolling agreements or management contracts.

- Enter into financial contracts (e.g., forwards, futures, options and other derivatives) for electricity.

- These overlooked capabilities are a very real part of the incentives of the Merged Entity, are a standard part of the package of services of any major energy marketer, and they are consistent with the avowed strategic business plans of the Merged Entity.

The Competitive Problem Associated With the Merger

6. Pacific, through its wholly owned subsidiary Southern California Gas Company ("SoCalGas"), is effectively the sole provider of intrastate natural gas transmission and storage services to almost all of the gas-fired electric generating plants in southern California. As a consequence of this market power, SoCalGas has the ability to limit the supply and/or raise the price of natural gas to gas-fired plants. Prior to the merger, however, it had no strong incentive to do so because it had no position in or control over electricity markets.

7. The DOJ has recognized Pacific's ability to restrict the availability of gas transportation and storage to gas-fired generators, and to raise the price of delivered gas to such generators:

Gas-fired power plants cannot and do not switch to other fuels in response to price increases in natural gas transportation or storage services, and in California Pacific controls almost all gas-fired generators' access to gas supply because the state of California has granted Pacific a monopoly on transportation of natural gas within southern California. Consequently, 96% of gas-fired generators in southern California buy gas transportation services from it. Pacific also has a monopoly on all natural gas storage services throughout California.

Although regulated by the California Public Utilities Commission ("CPUC"), Pacific has the ability to restrict the availability of gas transportation and storage to consumers, including gas-fired generators, by limiting their supply or cutting them off entirely. Limiting or cutting off gas supply raises the price gas-fired plants pay for delivered natural gas and in turn raises the cost of electricity they produce.¹

8. The Merged Entity has numerous means to raise prices or limit supply to gas-fired generators in the southern California market. These means are derived primarily from SoCalGas' control of the intrastate transmission, distribution and storage system in southern California, its role as gas buyer for "core" residential and small commercial customers, and its holding of excess interstate pipeline capacity under long-term contract.

- *Intrastate transmission and storage access.* As operator of the intrastate transmission, distribution and storage system. SoCalGas has considerable authority and autonomy to determine which gas will flow and under what conditions. It decides on the amount of intrastate capacity available at each interstate pipeline interconnect, based on subjective procedures that are not articulated in any tariff or internal procedural manual. It also has discretion in determining storage availability.

- *Pricing of intrastate services.* As the provider of hub and storage services, SoCalGas is allowed under California regulation to exercise pricing discretion with regard to certain negotiated services. These services include short-term balancing or emergency supply services.

- *Interstate access and pricing.* SoCalGas has discretion in determining the price and quantity of capacity it makes available in secondary ("capacity release") markets. This discretion presents the Merged Entity with one more means by which to influence the delivered price of gas to its electricity market rivals.

- *Core procurement behavior.* SoCalGas has substantial flexibility in its core-related storage injection and withdrawal decisions that allows it to determine the volume of flowing supplies on a day-to-day basis, notwithstanding customer demand.

- *Use of operational information.* As the operator of the intrastate natural gas transportation and storage system. SoCalGas possesses considerable operational information that is

extremely valuable in the restructured natural gas and electricity markets. For example, as system operator. SoCalGas will receive regular nomination information from all of its shippers. Because SoCalGas has considerable discretion in operating its system, it can do so in a manner that can result in the manipulation of prices and access, and thus the cost of rivals of using its system. Such manipulations would be almost impossible to detect, difficult to prove, and not readily subject to cure.

Each one of these advantages is sufficiently potent to enable the Merged Entity to manipulate the price of gas and/or the quality of service to electricity generators.

9. As of March 31, 1998, California launched the Power Exchange (PX), through which much of the electricity is now bought and sold in California. The PX's price per unit of electricity for any given hour is determined by the bid of the marginal generator—the most expensive generator required to meet load in that hour. All sellers receive the marginal price, regardless of their bid, and all buyers pay the marginal price. As DOJ has acknowledged, because of California's mix of generating capacity, gas-fired generators usually are the marginal suppliers, and the marginal-cost pricing instituted by the PX means that the price bid by gas-fired generators will set electricity prices in the California market the majority of the time.² The marginal bid price setting mechanism of the PX means that California gas-fired capacity will have a dominant effect on electricity prices.³

10. Enova, through its wholly owned subsidiary, San Diego Gas & Electric (SDG&E), owns gas-fired electric generating stations and controls over 2,600 MW of electric generating capacity. DOJ recognized that SDG&E's control of substantial quantities of electricity sold into the PX gives SDG&E and incentive to raise the PX's electricity price, making sales of its own

² To illustrate, Attachment B to this affidavit depicts the electricity supply curve for both utility and non-utility generating resources for the entire Western Systems Coordinating Council (WSCC). This supply curve distinguishes gas-fired capacity and California gas-fired capacity from other generation capacity. As illustrated, actual load (which varies by time of day and seasonally) falls within a band of 70,500 MW to 93,500 MW approximately two-thirds of the time. Within this same band of the supply curve, 90% of the capacity is gas-fired capacity, and 69% is California gas-fired capacity.

³ While not all California gas-fired capacity is served by SoCalGas, the majority of it is, and it has been found that the prices paid in northern California for gas delivered by Pacific Gas & Electric Co. (PG&E) are determined by the gas supply alternatives available at the southern California border. See CPUC Decision 97-08-055. August 1, 1997, at p.10.

¹ Competitive Impact Statement (Case 98-CV-583), at 5-7. See also Complaint, at 6.

electricity more profitable. To this existing incentive, the merger with Pacific adds the ability to increase the price of electricity. The Merged Entity can accomplish this by increasing the price of natural gas to gas-fired generating plants in southern California, which in turn will raise their cost of producing electricity. Because California gas-fired capacity dominates the electric margin, this will increase the PX's price per unit of electricity to all sellers.⁴

Failure of the Proposed Final Judgment To Impose a Structural Remedy Aimed at Market Power

11. The proposed Final Judgment fails to eliminate the competitive harm caused by the PE/Enova merger because: (1) it does not contain any provisions designed to curb the Merged Entity's *ability* to harm competition through its monopoly over natural gas transportation and supply, and (2) while it requires SDG&E to divest ownership of two gas-fired electric generating plants, it permits the Merged Entity to replicate ownership by entering into contractual arrangements which offer the same *incentives* to engage in anti-competitive activity.

12. The proposed Final Judgment fails to impose the obvious, traditional, and assuredly effective remedy to a market power problem in a merger proceeding. It could have eliminated the ability of the Merged Entity to harm competition by eliminating its ability to exercise market power. It could have done this by requiring the divestiture of Pacific's intrastate natural gas transmission and storage assets, or by requiring the creation of an Independent System Operator ("ISO") for those assets.

13. The staff of the Bureau of Economics of the Federal Trade Commission has recently expressed its view that structural remedies (such as ISOs) aimed directly at the source of market power are the most effective remedies because such structural remedies alter incentives (by eliminating the ability to exercise market power) while behavioral remedies do not:

As a general proposition, we have found that structural remedies, such as divestiture in merger cases, are the most effective and require the least amount of subsequent monitoring by government agencies. The effectiveness of structural remedies lies in

the fact that they directly alter incentives. Behavioral remedies, in contrast, leave incentives for discriminatory behavior in place and impose a substantial burden on government agencies to monitor subsequent conduct.

* * * In 1995, with regard to competition in electric generation and transmission, we suggested that FERC [the Federal Energy Regulatory Commission] promote independent system operators (ISOs) to control the regional electric transmission grids, as an alternative to ordering divestiture of transmission lines or relying solely on open access rules to promote competition in electric generation markets.⁵

I agree with this view. Thus, for example, in a merger of electricity transmission and generation companies, the FTC would focus its relief on the source of the market power—the transmission facilities—rather than the generation facilities that provide the incentive to engage in anti-competitive activity. As stated above, the FTC would place the transmission facilities in the hands of an independent entity, an ISO, and would prevent those facilities, which confer market power, from being controlled by the merged entity.

14. In remedying the anti-competitive effects of vertical mergers like the present one, the antitrust authorities have opted, and should continue to opt, for structural remedies that eliminate the source of the market power. Recently, in addressing the anti-competitive effects of a proposed merger between an electric utility and a coal company, the FTC insisted on divestiture of the coal supply assets that were the source of the market power which in turn led to anti-competitive control over electricity prices. I agree with this approach and this remedy. A copy of the FTC's reasoning in that case is appended as Attachment C.

15. A structural remedy in this case, requiring intrastate gas transmission and storage divestiture or the creation of an ISO, would eliminate cleanly the Merged Entity's ability to control the price of electricity in California, and it would eliminate the enforcement difficulties associated with behavioral remedies that attempt to control anti-competitive incentives after the fact.⁶

The Proposed Final Judgment Does Not Remedy the Competitive Problem Identified by DOJ

16. The proposed Final Judgment does not attempt to eliminate the

Merged Entity's market power over natural gas transportation and storage which gives it the *ability* to harm competition and raise prices in electricity markets. Instead, DOJ has chosen to attempt to curb the Merged Entity's incentive to harm competition by requiring Enova to divest itself of 1,644 MW of generation assets, namely, the Encina and South Bay gas-fired electricity generating plants. In addition, the Final Judgment caps the Merged Entity's ownership of California electricity generation assets at 500 MW.⁷ The Final Judgment also enjoins the Merged Entity from acquiring electricity generation facilities in California which were in existence on January 1, 1998 (*except* facilities that are rebuilt, repowered, or activated out of dormancy after January 1, 1998) and/or entering into any contract for operation and sale of output from generating assets of Los Angeles Department of Water and Power ("LADWP"), without prior notice to, and approval of, the United States. Finally, the Final Judgment enjoins the Merged Entity from entering into any contracts that allow it to control the output of electricity generation facilities in California in existence on January 1, 1998 without prior notice to and approval of the United States.

17. Importantly, this merger involves much more than an effort to combine SDG&E's electricity generation assets with SoCalGas' natural gas transmission and distribution assets. The problem with the merger is that it combines SDG&E's *expertise* in profiting through the acquisition and sale of electric power with SoCalGas' *ability* to control the price of natural gas in California through its monopoly over natural gas transportation and storage services in California.⁸ As explained further below, this combination of electricity expertise and natural gas control creates a serious competitive problem that is not remedied by the divestiture of assets and other conditions set forth in the Final Judgment. Specifically, such

⁷ Since nuclear plants in California will remain price regulated (i.e., will not receive the PX price) until 2001, Enova's 20% (430 MW) interest in the San Onofre Nuclear Generating Station ("SONGS") will not be included in the 500 MW cap. If nuclear power prices become deregulated after 2001, SONGS capacity will be included in the cap and the period of the final judgment will be extended from five to ten years. A 75 MW contract with Portland General Electric will be included in the cap, unless the contract is terminated or divested. Finally, the capacity of the Encina and South Bay generation facilities will be included in the cap for as long as Enova owns these assets.

⁸ The California Commission noted in its merger decision that " * * * each company sees unregulated energy services (particularly electricity marketing) as a way to increase earnings. But each feels that it lacks critical skills and physical assets." See D. 98-03-073, at 24.

⁴ Much of the gas-fired generating capacity in California is currently under temporary "must-run" contracts for reliability, which when invoked will prevent these units from setting, or profiting from, the PX price. However, this will have no effect when must-run conditions are not declared, and the arrangement is scheduled to expire in three years.

⁵ Comments of the Staff of the Bureau of Economics of the Federal Trade Commission Before the Public Utilities Commission of Texas, at 2 (June 19, 1998).

⁶ Nowhere in its CIS does DOJ explain why it has failed to impose a remedy that eliminates the ability of the merged entity to raise prices.

electricity expertise could be used to enter into tolling agreements, management contracts and forward and futures contracts that perpetuate the Merged Entity's incentive to manipulate gas prices for anti-competitive ends, notwithstanding the Final Judgment's generation ownership restrictions.

18. As a general matter, it is extremely difficult to eliminate all of the anti-competitive incentives facing a utility in a restructured, partially deregulated wholesale electricity market. Those incentives manifest themselves in many different ways—only one of which is through ownership of existing gas-fired plants. Yet to be confident that the harm is competition is eliminated (when the ability to exercise market power remains), the antitrust authority or regulator must identify *all* of the potential incentives to profit from market manipulation and then design remedies that will curb each and every incentive. As explained below, the Final Judgment fails to curb very significant incentives.

19. The Competitive Impact Statement (CIS) correctly defines the Merged Entity's incentive but misconstrues the relationship between the kinds of transactions the Merged Entity might pursue and the incentives that would be created. As a result, the behavioral remedies put forward in the Final Judgment eliminate only part of the Merged Entity's incentives to raise prices.

20. The CIS recognizes that infra-marginal assets (assets that are low-cost relative to the market price of electricity) create incentives through the price-clearing mechanism in the California PX for the Merged Entity to manipulate gas prices. For example, the CIS states (at page 9):

The Final Judgment requires Defendant to sell all generation assets that would likely give PE/Enova the incentive to raise electricity prices [footnote excluded] To that end, the Final Judgment requires Defendant to divest all of its low-cost gas generators * * *. Because these generators operate in almost all hours of the year and are relatively low-cost, if PE/Enova were to own them, it could earn substantial profits (revenues exceeding its costs) by restricting the supply of natural gas which, as explained above, would increase the overall price for electricity in the pool [PX] and thus the price PE/Enova would receive for electricity.

21. In making this finding, the DOJ overlooks the fact that many other arrangements and transactions that are *not* prohibited by the proposed Final Judgment create financial positions equivalent to, and potentially even more profitable than, the physical ownership of an infra-marginal generating unit.

Any arrangement that allows the Merged Entity to collect or share in the earnings of an infra-marginal generator will give it the incentive to manipulate the spot price of power by increasing gas prices. The Final Judgment does not prohibit, and in fact explicitly allows, several such arrangements. Under the Final Judgment, the Merged Entity is allowed to (1) acquire new, rebuilt or repowered generation, (2) enter into tolling agreements with third-party generation owners, (3) enter into power generation management contracts, and (4) take forward contractual positions in the electricity market. All of these permitted transactions allow the Merged Entity to profit by manipulating the price of electric power, and will risk the abuse of market power as long as the Merged Entity has the continuing ability to influence gas prices that the CIS has acknowledged. As I explain below, in each of these situations the Final Judgment's restrictions simply do not eliminate the Merged Entity's incentives to exercise market power.

New or Repowered Generation Capacity

22. Under the proposed Final Judgment, the Merged Entity would be prohibited from owning or controlling existing generating facilities, but it is permitted to build or acquire new generating capacity and to gain control of plants that are rebuilt, repowered or activated out of dormancy after January 1, 1998. However, the addition of new generation by the Merged Entity is not necessarily benign. All else equal, adding generating capacity is usually procompetitive. However, in this case, all else is decidedly unequal. Allowing the Merged Entity to acquire new generation (or to rebuild, repower or reactivate generation) will give it incentives to manipulate gas prices *which it would not otherwise have*, easily undoing via vertical market power the otherwise positive horizontal effect of adding capacity. By giving the Merged Entity an incentive to raise gas prices, ownership of new or repowered generation could lead to an across-the-board increase in the cost of most of the margin-setting capacity in the market. Thus, the Final Judgment should prohibit the acquisition of new generating capacity for the same reason it requires divestiture of existing capacity. Holding any sort of interest in generating capacity eligible for the PX price gives the Merged Entity an incentive to exercise its market power in the gas market, to the detriment of the electricity market.

23. Another way to view this is by considering two scenarios: (A) the Merged Entity divests its existing

generation to a third party, and builds a new generator, or (B) the Merged Entity keeps its existing generation and a disinterested third party builds the new generator. In both scenarios, the market has the same amount of generation, and the Merged Entity has essentially the same incentive to raise gas prices. However, while the CIS correctly recognizes (B) as problematic, the Final Judgment explicitly (though incorrectly) allows (A), the acquisition of new or repowered capacity.

Tolling Agreements

24. In a "tolling" agreement, one party contracts for the use of another party's generating capacity, allowing the first party to convert its own gas into electricity for a set fee. The first party can then sell the electricity at the market price, and will be able to collect the associated profit (or loss) as if it owned the generator. The proposed Final Judgment explicitly allows the Merged Entity to enter into tolling agreements, so long as it does not control the plant's output level in the process.

25. Tolling agreements create virtual ownership positions in power plants, and provide the Merged Entity with the same incentives to increase electricity prices as does physical plant ownership. A tolling agreement would allow the Merged Entity to receive all or most of the generator's infra-marginal net revenues, whether or not it controls the plant's output level. The proposed Final Judgment's restriction against controlling plant output displays a misconception of how the Merged Entity could exercise market power. It is not by withholding generating capacity from the market that the Merged Entity would manipulate electricity prices. Withholding capacity is an issue in *horizontal* market power, but not in the *vertical* market power that is of concern in this instance. Vertical market power arises here because the Merged Entity has the ability to raise the price of electricity by raising the price of gas—the dominant margin-setting fuel, and a vertical input to electricity. The Merged Entity can profit from gas market manipulation if it holds a claim on the net revenues of any infra-marginal plant that is operating when gas-fired generation is setting the PX price, regardless of whether it controls the plant's output. The plant operator, whoever it is, would simply bid into the PX at the plant's marginal cost, so that the plant would dispatch when economical. Thus, for example, if the Merged Entity enters into a tolling agreement with the owners of the two plants it has agreed to divest, its

financial stake will be essentially identical to what it would have been under direct ownership. While physical plant ownership is rightly prohibited, the Final Judgment fails to curb the Merged Entity's incentives because it allows tolling agreements that give the Merged Entity the same profit-making potential.

Management Contracts

26. The same issues arise with "management contracts," under which the Merged Entity would operate a plant owned by a third party, typically for a share of the plant's profits. Such arrangements are similar to tolling agreements in that they allow the Merged Entity to share in a plant's net revenues.

27. The problem with the proposed Final Judgment is that it does not clearly prohibit the Merged Entity from entering into management contracts with existing California generating facilities (e.g. its own divested generators or those of others). Thus, the Merged Entity could sign a management contract for one or more of the plants divested by itself or others and enjoy essentially the same financial incentives it could have had by retaining its own plants. Moreover, these units under management contract need not be gas-fired for them to create price manipulation incentives. To perpetuate such incentives, all that is required is that the plant(s) under contract be infamarginal (i.e., lower cost than the marginal gas-fired plant that is setting the PX price.) To eliminate the anti-competitive incentives associated with management contracts, the Merged Entity would have to be explicitly prevented from entering into a management contract with any entity owning or building generation in California.

28. The proposed Final Judgment recognizes the problems with management contracts when it requires that the Merged Entity notify and/or obtain approval from DOJ for management contracts with assets owned by California Public Power Providers ("CPPP") and the Los Angeles Department of Water and Power ("LADWP"). These restrictions go part way in reducing the Merged Entity's incentives. But since similar restrictions are *not* applied to management contracts involving *other* assets, the Final Judgment gives the appearance of endorsing such contracts. Relatedly, the Final Judgment prohibits the "acquisition" of California Generation Facilities without prior approval. However, by carving out exceptions for management contracts, the meaning of

"acquire" becomes ambiguous, despite being defined as "obtaining any interest in any electricity generating facilities or capacity". "Acquire" could be interpreted to prohibit any *financial* interest (which it must do to be effective), or could it be interpreted more narrowly to prohibit only *ownership* interest—which leaves open the possibility of management contracts. By explicitly restricting management contracts with respect to LADWP and CPPP assets only, the proposed Final Judgment appears to endorse a narrow interpretation of "acquire", and threatens to leave the Merged Entity with significant incentives to exercise its market power. Such debates concerning interpretation mean that at a minimum, in order to enforce the Final Judgment the DOJ will have to put itself in a significant oversight position to ensure consistency of interpretation and compliance. The need for such continuing regulatory activity by the antitrust authority would have been eliminated had the Final Judgment imposed a structural solution to the market power problem.

Financial Markets

29. It is apparent from the proposed Final Judgment that the DOJ fails to recognize that financial market contracts (derivatives such as forwards, futures, and options) which the Merged Entity may acquire could also provide it with incentives to act anti-competitively.⁹ In fact, financial contracts can be used to essentially recreate the same financial position one would have by virtue of power plant ownership. For example, holding a one-year call option for 1,000 MW is financially akin to a year's ownership of a 1,000 MW power plant with variable cost equal to the "strike price" of the call (the contract price paid for power if the option is exercised. Such financial market contracts are, in effect, "virtual generation assets."¹⁰ The

⁹ A forward contract for power is simply a non-standardized bilateral contract for future delivery at a pre-specified price. Futures are standardized forward contracts traded on an organized exchange, such as the California-Oregon Border (COB) and Palo Verde (PV) electricity futures contracts which are traded on the New York Mercantile Exchange (NYMEX) and which are accessible to the California market. Options contracts are also derivatives that include additional flexibility for either the buyer or seller. For example, a call option, a common type of derivative, gives the buyer the right but not the obligation to purchase power in the future at a specified price.

¹⁰ Financial contracts can foster even more anti-competitive creativity than power plant ownership, because they are far more flexible. For instance, while it is difficult to change one's ownership of generating capacity, it is simple to contract for power in varying amounts over differing time horizons (a year, a month, a week, a day), and to change one's position quickly and frequently. This

equivalence between financial and physical assets is such that it is now common for electric industry planners to treat power plant ownership as equivalent to holding a series of call options and/or forward contracts to serve future spot markets for power.

30. Consequently, to the extent power plant ownership creates anti-competitive incentives, so would an equivalent bundle of forward or derivative contracts. While the Final Judgment does attempt to restrict the future acquisition of existing generating capacity in order to prevent anti-competitive behavior, it fails to restrict financial market participation, which creates the same incentives to abuse market power.

Conclusion

31. In its Complaint in this matter, the DOJ found that the proposed merger of Pacific Enterprises and Enova results in the creation of an entity that has the ability and incentive to harm competition in the market for wholesale electric power in California. The proposed Final Judgment, however, fails to rectify the problem because it preserves the ability of the Merged Entity to harm competition while imposing remedies that fail to eliminate the incentives. In particular, the Final Judgment fails entirely to deal with the incentives which the Merged Entity could create through ownership of new or repowered generation or contracting for power via tolling agreements, management contracts or financial contracts. The CIS provides no justification for distinguishing between the acquisition of physical assets and financial assets in creating anti-competitive incentives. The limited restrictions that the proposed Final Judgment does place on the future activities of the Merged Entity in the areas of new capacity, tolling and energy management contracts will not eliminate or even substantially curb the Merged Entity's incentives to harm competition.

32. The proposed Final Judgment does not remedy the serious competitive problem identified by the DOJ in its Complaint.

Attachment A—Paul R. Carpenter, Principal

Dr. Carpenter holds a Ph.D. in applied economics and an M.S. in management from the Massachusetts Institute of Technology, and a B.A. in economics from Stanford University. He specializes in the economics of the natural gas, oil and electric utility

would allow the Merged Entity to tailor its electricity market position to make it most advantageous.

industries. Dr. Carpenter was a co-founder of Incentives Research, Inc. in 1983. Prior to that he was employed by the NASA/Caltech Jet Propulsion Laboratory and Putnam, Hayes & Bartlett, and he was a post-doctoral fellow at the MIT Center for Energy Policy Research. He is currently a Principal of *The Brattle Group*.

Areas of Expertise

Dr. Carpenter's areas of expertise include the fields of energy economics, regulation, corporate planning, pricing policy, and antitrust. His recent engagements have involved:

- *Natural Gas and Electric Utility Industries*: consulting and testimony on nearly all of the economic and regulatory issues surrounding the transition of the natural gas and electric power industries from strict regulation to greater competition. These issues have included stranded investments and contracts, design and pricing of unbundled and ancillary services, evaluation of supply, demand and price forecasting models, the competitive effects of pipeline expansions and performance-based ratemaking. He has consulted on the regulatory and competitive structures of the gas and electric power industries in the U.S., Canada, the United Kingdom, Australia and New Zealand.

- *Antitrust*: expert testimony in several of the seminal cases involving the alleged denial of access to regulated facilities; analysis of relevant market and market power issues, business justification defenses, and damages.

- *Regulation*: studies and consultation on alternative rate making methodologies for oil and gas pipelines, on "bypass" of regulated facilities before the U.S. Congress; advice and testimony before several state utility commissions and the National Energy Board of Canada on new facility certification policy.

- *Finance*: research on business and financial risks in the regulated industries and testimony on risk, cost of capital, and capital structure for natural gas pipeline companies in the U.S. and Canada.

Professional Affiliations

International Association of Energy Economists
American Bar Association (Antitrust Section)
American Economic Association.

Academic Honors and Fellowships

Stewart Fellowship, 1983
MIT Fellowships, 1981, 1982, 1983
Brooks Master's Thesis Prize (Runner-up), MIT, 1978.

Publications

"Pipeline Pricing to Encourage Efficient Capacity Editions," (with Frank C. Graves and Matthew P. O'Loughlin), prepared for Columbia Gas Transmission Corporation and Columbia Gulf Transmission Company, February 1998.
"The Outlook for Imported Natural Gas," (with Matthew P. O'Loughlin and Gao-Wen Shao), prepared for The INGAA Foundation, Inc., July 1997.

"Basic and Enhanced Services for Recourse and Negotiated Rates in the Natural Gas Pipeline Industry" (with Frank C. Graves, Carlos Lapuerta, and Matthew P. O'Loughlin), May 29, 1996, prepared for Columbia Gas Transmission Corporation, Columbia Gulf Transmission Company.

"Estimating the Social Costs of PUHCA Regulation" (with Frank C. Graves), submitted on behalf of Central and South West Corp. to the U.S. Securities and Exchange Commission in its Request for Comments on the Modernization of Regulation of Public Utility Holding Companies, File No. S7-32-94, February 6, 1995.

"Review of the Model Developer's Report, Natural Gas Transmission and Distribution Model (NGTDM) of the National Energy Modeling System", December 1994, prepared for U.S. Department of Energy, Energy Information Administration and Oak Ridge National Laboratory under Subcontract No. 80X-SL220V.

"Pricing of Electricity Network Services to Preserve Network Security and Quality of Frequency Under Transmission Access" (with Frank C. Graves, Marija Ilic, and Asef Zobjian), response to the Federal Energy Regulatory Commission's Request for Comments in its Notice of Technical Conference Docket No. RM93-19-000, November 1993.

"Creating a Secondary Market in Natural Gas Pipeline Capacity Rights Under FERC Order No. 636" (with Frank C. Graves), draft December 1992, Incentives Research, Inc.

"Review of the Component Design Report, Natural Gas Annual Flow Module, National Energy Modeling System," August 1992, prepared for the U.S. Department of Energy, Energy Information Administration.

"Unbundling, Pricing, and Comparability of Service on Natural Gas Pipeline Networks" (with Frank C. Graves), November 1991, prepared for the Interstate Natural Gas Association of America.

"Review of the Gas Analysis Modeling System (GAMS): Final Report of Findings and Recommendations," August, 1991, prepared for the U.S. Dept. of Energy, Energy Information Administration.

"Estimating the Cost of Switching Rights on Natural Gas Pipelines" (with F.C. Graves and J.A. Read), *The Energy Journal*, October 1989.

"Demand-Charge GICs Differ from Deficiency-Charge GICs" (with F.C. Graves), *Natural Gas*, Vol. 6, No. 1, August 1989.

"What Price Unbundling?" (with F.C. Graves), *Natural Gas*, Vol. 5 No. 10, May 1989.

Book Review of Drawing the line on Natural Gas Regulation: The Harvard Study on the Future of Natural Gas, Joseph Kalt and Frank Schuller eds., in *The Energy Journal*, April 1988.

"Adapting to Change in Natural Gas Markets" (with Henry D. Jacoby and Arthur W. Wright), in *Energy, Markets and Regulation: What Have We Learned?*, Cambridge: MIT Press, 1987.

Evaluation of the Commercial Potential in Earth and Ocean Observation Missions from the Space Station Polar Platform, Prepared by Incentives Research for the NASA Jet Propulsion Laboratory under Contract No. 957324, May 1986.

An Economic Comparison of Alternative Methods of Regulating Oil Pipelines (with Gerald A. Taylor), Prepared by Incentives Research for the U.S. Department of Energy, Office of Competition, July 1985.

"The Natural Gas Policy Drama: A Tragedy in Three Acts" (with Arthur W. Wright), MIT Center for Energy Policy Research Working Paper No. 84-012WP, October 1984.

Oil Pipeline Rates and Profitability under Williams Opinion 154 (with Gerald A. Taylor), Prepared by Incentives Research for the U.S. Department of Energy, Office of Competition, September 1984.

Natural Gas Pipelines After Field Price Decontrol: A Study of Risk, Return and Regulation, Ph.D. Dissertation, Massachusetts Institute of Technology, March 1984. Published as a Report to the U.S.

Department of Energy, Office of Oil and Gas Policy, MIT Center for Energy Policy Research Technical Report No. 84-004.

The Competitive Origins and Economic Benefits of Kern River Gas Transmission, Prepared by Incentives Research, Inc., for Kern River Gas Transmission Company, February 1994.

"Field Price Decontrol of Natural Gas, Pipeline Risk and Regulatory Policy," in *Government and Energy Policy* Richard L. Itteilag, ed., Washington, D.C., June 1983.

"Risk Allocation and Institutional Arrangements in Natural Gas" (with Arthur W. Wright), invited paper presented to the American Economic Association Meetings, San Francisco, December 1983.

"Vertical Market Arrangements, Risk-shifting and Natural Gas Pipeline Regulations," Sloan School of Management Working Paper no. 1369-82, September 1982 (Revised April 1983).

Natural Gas Pipeline Regulation After Field Price Decontrol (with Henry Dr. Jacoby and Arthur W. Wright), prepared for U.S. Department of Energy, Office of Oil and Gas Policy, MIT Energy Lab Report No. 83-013, March 1983.

Book Review of An Economic Analysis of World Energy Problems, by Richard L. Gordon, Sloan Management Review, Spring 1982.

"Perspectives on the Government Role in New Technology Development and Diffusion" (with Drew Bottaro), MIT Energy Lab Report No. 81-041, November 1981.

International Plan for Photovoltaic Power Systems (co-author), Solar Energy Research Institute with the Jet Propulsion Laboratory Prepared for the U.S. Department of Energy, August 1979.

Federal Policies for the Widespread Use of Photovoltaic Power Systems (contributor), Jet Propulsion Laboratory Report to the U.S. Congress DOE/CS-0114, March 24, 1980.

"An Economic Analysis of Residential, Grid-connected Solar Photovoltaic Power Systems" (with Gerald A. Taylor), MIT Energy Laboratory Technical Report No. 78-007, May 1978.

Speeches/Presentations

"Opening Remarks from the Chair: Rates, Regulations and Operational Realities in the Capacity Market of the Future," AIC conference on "Gas Pipeline Capacity '97," Houston, Texas June 17, 1997.

"Lessons from North America for the British Gas TransCo Pricing Regime," prepared for AIC conference on: Gas Transportation and Transmission Pricing, London, England, October 17, 1996.

"GICs and the Pricing of Gas Supply Reliability," California Energy Commission Conference on Emerging Competition in California Gas Markets, San Diego, Ca. November 9, 1990.

"The New Effects of Regulation and Natural Gas Field Markets: Spot Markets, Contracting and Reliability," American Economic Association Annual Meeting, New York City, December 29, 1988.

"Appropriate Regulation in the Local Marketplace," Interregional Natural Gas Symposium, Center for Public Policy, University of Houston, November 30, 1988.

"Market Forces, Antitrust, and the Future of Regulation of the Gas Industry," Symposium of the Future of Natural Gas Regulation, American Bar Association, Washington D.C., April 21, 1988.

"Valuation of Standby Tariffs for Natural Gas Pipelines," Workshop on New Methods for Project and Contract Evaluation, MIT Center for Energy Policy Research, Cambridge, March 3, 1988.

"Long-term Structure of the Natural Gas Industry," National Association of Regulatory Utility Commissioners Meeting, Washington D.C., March 1, 1988.

"How the U.S. Gas Market Works—or Doesn't Work," Ontario Ministry of Energy Symposium on Understanding the United States Natural Gas Market, Toronto, March 18, 1986.

"The New U.S. Natural Gas Policy: Implications for the Pipeline Industry," Conference on Mergers and Acquisitions in the Gas Pipeline Industry, Executive Enterprises, Houston, February 26-27, 1986.

Various lectures and seminars on U.S. natural gas industry and regulation for graduate energy economics courses at Massachusetts Institute of Technology, 1984-96.

Panelist in University of Colorado Law School workshop on state regulations of natural gas production, June 1985.

(Transcript published in University of Colorado Law Review.) "Oil Pipeline Rates after the Williams 154 Decision," Executive Enterprises, Conference on Oil Pipeline Ratemaking, Houston, June 19-20, 1984.

"Issues in the Regulation of Natural Gas Pipelines," California Public Utilities Commission Hearings on Natural Gas, San Francisco, May 21, 1984.

"The Natural Gas Pipelines in Transition: Evidence From Capital Markets", Pittsburgh Conference on Modeling and Simulation, Pittsburgh, April 20, 1984.

"Financial Aspects of Gas Pipeline Regulation," Pittsburgh Conference on Modeling and Simulation, Pittsburgh, April 19-20, 1984.

"Natural Gas Pipelines After Field Price Decontrol," Presentations before Conferences of the International Association of Energy Economists, Washington D.C., June 1983, and Denver, November 1982.

"Spot Markets for Natural Gas," MIT Center for Energy Policy Research Semi-annual Associates Conference, March 1983.

"Pricing Solar Energy Using a System of Planning and Assessment Models," Presentations to the XXIV International Conference, The Institute of Management Science, Honolulu, June 20, 1979.

Testimonial Experience

Antitrust/Federal Court/Arbitration

In the matter of the Arbitration between Western Power Corp. and Woodside Petroleum Corp., et al., Perth, Western Australia, May-July 1998.

In the United States District Court for the District of Montana, Butte Division, Paladin Associates, Inc. v. Montana Power Company, November-December 1997.

In the United States District Court for the District of Colorado, Atlantic Richfield Co. v. Darwin H. Smallwood, Sr., et al., July 1997.

In the Australian Competition Tribunal, Review of the Trade Practices Act Authorizations for the AGL Cooper Basin Natural Gas Supply Arrangements, on behalf of the Australian Competition and Consumer Commission, February 1997.

In the Southwest Queensland Gas Price Review Arbitration, Adelaide, South Australia, May 1996.

In the matter of the Arbitration between Amerada Hess Corp. v. Pacific Gas & Electric Co., May 1995.

In re Columbia Gas Transmission Corp., Claims Quantification Proceeding in the U.S. Bankruptcy Court for the District of Delaware, Before the Claims Mediator, July and November 1993.

Deposition Testimony in Fina Oil & Gas v. Northwest Pipeline Corp. and Williams Gas Supply (New Mexico) 1992.

Testimony by Affidavit in James River Corp. v. Northwest Pipeline Corp. (Fed. Ct. for Oregon) 1989.

Deposition and Testimony by Affidavit in Merrion Oil and Gas Col, et al., v. Northwest Pipeline Corp. (Fed. Ct. for New Mexico) 1989.

Deposition Testimony in Martin Exploration Management Co., et al. v. Panhandle Eastern Pipeline Co. (Fed. Ct. for Colorado) 1988 and 1992.

Trial Testimony in City of Chanute, et al. v. Williams Natural Gas (Fed. Ct. for Kansas) 1988.

Deposition Testimony in Sinclair Oil Co. v. Northwest Pipeline Co. (Fed. Ct. for Wyoming) 1987.

Deposition and Trial Testimony in State of Illinois v. Panhandle Eastern Pipeline Co. (Fed. Ct. for C.D. Ill) 1984-87.

Economic/Regulatory Testimony

Before the National Energy Board of Canada, Application of Alliance Pipeline Ltd., Hearing Order GH-3-97, December 1997, April 1998.

Before the California Public Utilities Commission, Pacific Enterprises, Enova Corporation, et al. Merger Proceedings, Docket A.96-10-038, on behalf of Southern California Edison, August 1997.

In the Superior Court of the State of California for the County of Los Angeles, Pacific Pipeline System Inc. v. City of Los Angeles, on behalf of Pacific Pipeline System Inc., January 1997.

Before the U.K. Monopolies and Mergers Commission, British Gas Transportation and Storage Price Control Review, on behalf of Enron Capital and Trade Resources Limited, January 1997.

Northern Border Pipeline Company, Federal Energy Regulatory Commission (FERC) Docket No. RP96-45-000, July 1996.

Wisconsin Electric Power Co., Northern States Power Co. Merger Proceedings, FERC Docket No. EC 95-16-000, on behalf of Madison Gas & Electric Co., Wisconsin Citizens Utility Board and the Wisconsin Electric Cooperative Association, May 1996.

Before the California Public Utilities Commission, Application of PG&E for Amortization of Interstate Transition Cost Surcharge, Application 94-06-044, on behalf of El Paso Natural Gas, December 1995.

Tennessee Gas Pipeline Company, FERC Docket No. RP95-112-000, on behalf of JMC Power Projects, September 1995.

Before the National Energy Board of Canada, Drawdown of Balance of Deferred Income Taxes Proceeding, RH-1-95, on behalf of Foothills Pipe Lines Ltd., September 1995.

Pacific Gas Transmission, FERC Docket No. RP94-149-000, on behalf of El Paso Natural Gas, May 1995.

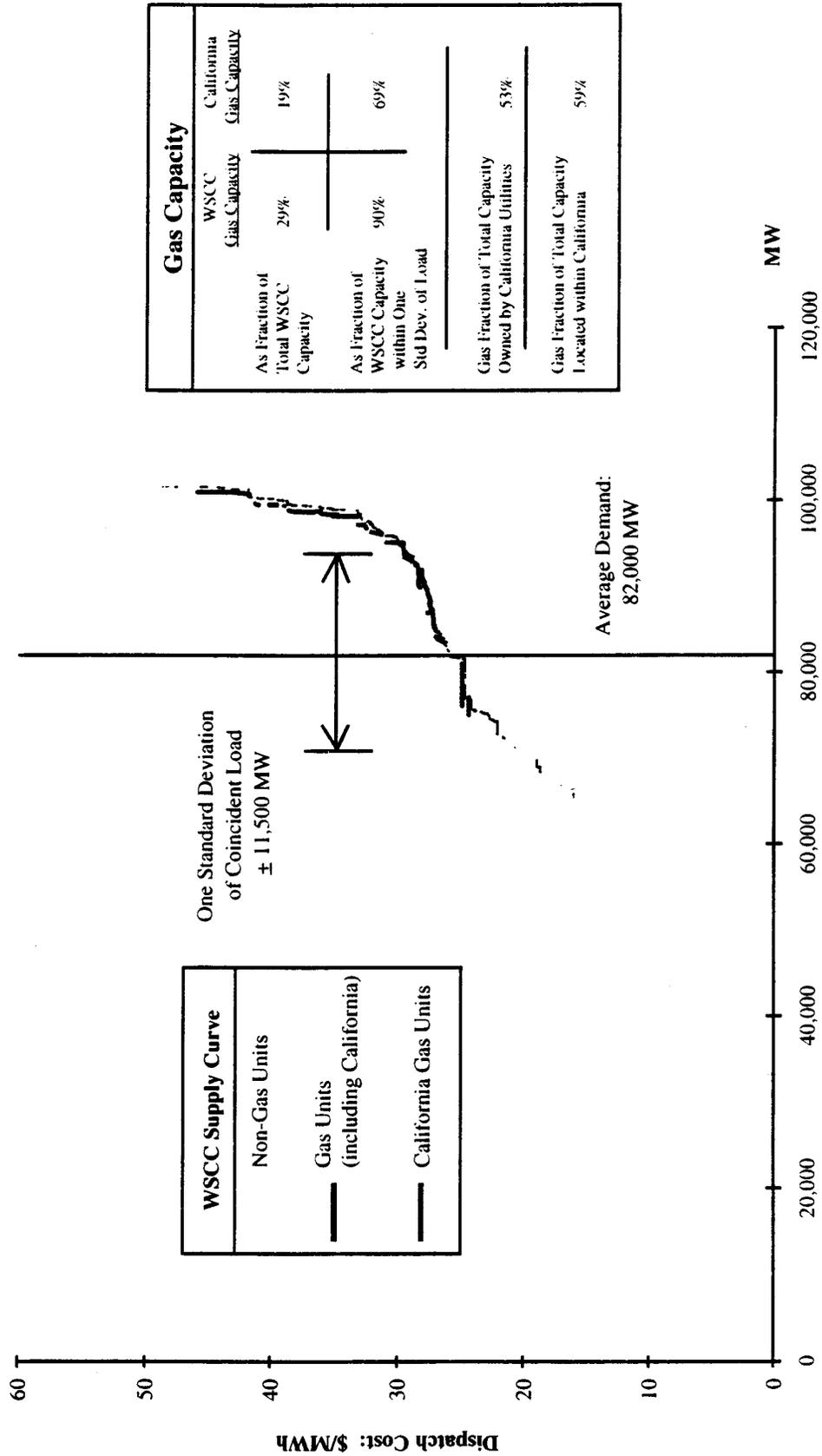
Before the California Public Utilities Commission, Application of Pacific Pipeline System, Inc., A.91-10-013, on behalf of PPSI, April 1995.

Before the National Energy Board of Canada, Multipipeline Cost of Capital Proceeding, RH-2-94, on behalf of Foothills Pipe Lines Ltd., November 1994.

- Before the California Public Utilities Commission, Pacific Gas & Electric 1992 Operations Reasonableness Review, Application 93-04-011, on behalf of El Paso Natural Gas, November 1994.
- Before the National Energy Board of Canada, Foothills Pipe Lines (Alta.) Ltd., Wild Horse Pipeline Project, Order No. GH-4-94, October 1994.
- Iroquois Gas Transmission System, L.P., FERC Docket No. RP94-72-000, on behalf of Masspower and Selkirk Cogen Partners, September 1994.
- Tennessee Gas Pipeline Co., FERC Docket No. RP91-203-000, on behalf of JMC Power Projects and New England Power Company, February, May 1994.
- Before the California Public Utilities Commission, on the Application of Pacific Gas & Electric Company to Establish Interim Rates for the PG&E Expansion Project, July 1993.
- Before the Florida Public Service Commission, Petition of Florida Power Corporation for Order Authorizing A Return on Equity for Florida Power's Investment in the SunShine Intrastate and the SunShine Interstate Pipelines, FPSC Docket No. 930281-EI, June 4, 1993.
- Before the Florida Public Service Commission, Application for Determination of Need for an Intrastate Natural Gas Pipeline by SunShine Pipeline Partners, FPSC Docket No. 920807-GP, April-May 1993.
- Northwest Pipeline Corp., et al., FERC Docket No. IN90-1-001, February 1993.
- City of Long Beach, Calif., vs. Unocal California Pipeline Co., before the California Public Utilities Commission, Case No. 91-12-028, February 1993.
- Alberta Energy Resources Conservation Board, on Applications of NOVA Corporation of Canada to Construct Facilities, January 1993.
- Before the California Public Utilities Commission, on the Application of Pacific Gas & Electric Co. to guarantee certain financing arrangements of Pacific Gas Transmission Co. not to exceed \$751 million, 1992.
- Mississippi River Transmission Co., FERC Docket No. RP93-4-000, October 1992, September 1993.
- Unocal California Pipeline Co., FERC Docket No. IS92-18-000, August 1992.
- Before the California Public Utilities Commission, in the Rulemaking into natural gas procurement and system reliability issues, R.88-08-018, June 1992.
- Alberta Energy Resources Conservation Board, Altamont & PGT Pipeline Projects, Proceeding 911586, March 1992.
- Before the California Utilities Commission, on the Application of Southern California Gas Company for approval of capital investment in facilities to permit interconnection with the Kern River/Mojave pipeline, A.90-11-035, May 1992.
- Northern Natural Gas, FERC Docket No. RP92-1-000, October 1991.
- Florida Gas Transmission, FERC Docket No. RP91-1-187-000 and CP91-2448-000, July 1991.
- Tarpon Transmission, FERC Docket No. RP84-82-004, January 1991.
- Before the California Public Utilities Commission, on the Application of Pacific Gas & Electric Co. to Expand its Natural Gas Pipeline System, A. 89-04-033, May 1990 and October 1991.
- CNG Transmission, FERC Docket No. RP88-211, March 1990.
- Panhandle Eastern Pipeline, FERC Docket No. RP88-262, March 1990.
- Mississippi River Transmission, FERC Docket No. RP89-249, October 1989, September 1990.
- Tennessee Gas Pipeline, FERC Docket No. CP89-470, June 1989.
- Empire State Pipeline, Case No. 88-T-132 before the New York Public Service Commission, May 1989.
- Before the U.S. Congress, House of Representatives, Committee on Energy and Commerce, Subcommittee on Energy and Power, Hearings on "Bypass" Legislation, May 1988.
- Tennessee Gas Pipeline, FERC Docket No. RP86-119, 1986-87.
- Mojave Pipeline Co., FERC Docket No. CP85-437, 1987-88.
- Consolidated Gas Transmission Corp., FERC Docket No. RP88-10, 1988.
- Panhandle Eastern, FERC Docket No. RP85-194, 1985.
- On behalf of the Natural Gas Supply Association in FERC Rulemaking Docket No. RM85-1, 1985-86.
- On behalf of the Panhandle Eastern Pipeline Co. in FERC Rulemaking Docket No. RM85-1, 1985.

BILLING CODE 7515-01-P

Attachment B 1996 WSCC Electric Supply Curve



Attachment B—1996 WSCC Electric Supply Curve (Notes and Sources)**Sources**

Electric Supply and Demand Database (NERC); RDI 1996 Fuel Price Forecast.

Notes

For graphical clarity, units with dispatch cost above \$60/MWh are excluded (30 oil-fired turbines, 740 MW total capacity). Nameplate capacity has been derated to reflect approximate average annual availability; hydro derated to reflect available energy.

The WSCC is the electric reliability council consisting of 11 western states and portions of Canada and Mexico; it contains 162,000 MW of generating capacity from over 1,400 generating units.

The annual average WSCC load is approximately 82,000 MW, and one standard deviation of coincident load is approximately 11,500 MW, so a one-standard deviation band around average load encompasses the range from 70,500 MW to 93,500 MW. Actual values fall within one standard-deviation of the average approximately two-thirds of the time.

Note that this is an "average annual" supply curve, in that nameplate capacity of units has been derated to reflect average annual availability (annual energy limits for hydro). Some care must be taken in interpreting this curve, because at any particular point in time, the actual supply curve will differ somewhat, depending on which particular units are actually available at that time. However, it clearly demonstrates that gas, and particularly California gas, is the dominant fuel of the price-setting marginal units in the entire WSCC. Of course, the effect of California gas-fired capacity on just the California market is even greater.

Affidavit of Paul R. Carpenter, Ph.D.

Commonwealth of Massachusetts, County of Middlesex
ss

I, Paul R. Carpenter, being first duly sworn on oath depose and say as follows:

I make this affidavit for the purpose of adopting as my sworn testimony in this proceeding the attached material entitled "Affidavit of Paul R. Carpenter, Ph.D." The statements contained therein were prepared by me or under my direction and are true and correct to the best of my knowledge, information, and belief.

Further affiant saith not.

Paul R. Carpenter

Subscribed and sworn to before me, a notary public in and for the Commonwealth of Massachusetts, County of Middlesex, this 4th day of August, 1998.

[SIGNATURE ILLEGIBLE].

[FR Doc. 99-1393 Filed 1-21-99; 8:45 am]

BILLING CODE 4410-11-M

DEPARTMENT OF JUSTICE**Antitrust Division****Notice Pursuant to The National Cooperative Research and Production Act of 1993—National Center for Manufacturing Sciences (NCMS): Advanced Embedded Passives Technology**

Notice is hereby given that, on October 7, 1998, pursuant to Section 6(a) of the National Cooperative Research and Production Act of 1993, 15 U.S.C. 4301 *et seq.* ("the Act"), National Center for Manufacturing Sciences ("NCMS"): Advanced Embedded Passives Technology has filed written notifications simultaneously with the Attorney General and the Federal Trade Commission disclosing (1) the identities of the parties and (2) the nature and objectives of the venture. The notifications were filed for the purpose of invoking the Act's provisions limiting the recovery of antitrust plaintiffs to actual damages under specified circumstances. Pursuant to Section 6(b) of the Act, the identities of the parties are Minnesota Mining and Manufacturing Corporation, St. Paul, MN; Compaq Computer Corporation, Houston, TX; Delphi Delco Electronics Systems, Kokomo, IN; E.I. DuPont de Nemours Co., Research Triangle Park, NC; E.I. DuPont de Nemours Co., Inc., Circleville, OH; International Business Machines, Corporation, Endicott, NY; Interconnect Technology Research Institute, Austin, TX; HADCO Corporation, Salem, NH; MacDermid, Incorporated, Waterbury, CT; Merix Corporation, Forest Grove, OR; Northern Telecom, Inc., McLean, VA; Nu Thena Systems, Inc., McLean, VA; Ormet Corporation, Carlsbad, CA; and National Center for Manufacturing Sciences, Inc., Ann Arbor, MI. The nature and objectives of the venture are to develop and demonstrate Advanced Embedded Passives Technology.

Constance K. Robinson,

Director of Operations, Antitrust Division.

[FR Doc. 99-1394 Filed 1-21-99; 8:45 am]

BILLING CODE 4410-11-M

DEPARTMENT OF JUSTICE**Antitrust Division****Notice Pursuant to the National Cooperative Research and Production Act of 1993—National Center for Manufacturing Sciences, Inc. ("NCMS")**

Notice is hereby given that, on October 15, 1998, pursuant to Section 6(a) of the National Cooperative Research and Production Act of 1993, 15 U.S.C. 4301 *et seq.* ("the Act"), National Center for Manufacturing Sciences, Inc. ("NCMS") has filed written notifications simultaneously with the Attorney General and the Federal Trade Commission disclosing changes in its membership status. The notifications were filed for the purpose of extending the Act's provisions limiting the recovery of antitrust plaintiffs to actual damages under specified circumstances. Specifically, 3D Systems, Inc., Valencia, CA; MSE Technology Applications, Inc., Butte, MT; Nonlinear Dynamics, Inc., Ann Arbor, MI; Ramtech Group, Inc., North Highlands, CA; Schafer Corporation, Albuquerque, NM; Star Cutter Company, Farmington Hills, MI; TRW Integrated Supply Chain Solutions, McLean, VA; Cisco Systems, Inc., San Jose, CA; and Laser Imaging Systems, Inc., Punta Gorda, FL have been added as parties to this venture. Also, Applied Science & Technology, Woburn, MA; C.N. Burman Company, Patterson, NJ; Viatec, Inc., Hastings, MI; Cincinnati Milacron, Inc., Cincinnati, OH; and The Center for Optics Manufacturing, University of Rochester, Rochester, NY have been dropped as parties to this venture.

No other changes have been made in either the membership or planned activity of the group research project. Membership in this group research project remains open, and National Center for Manufacturing Sciences, Inc. ("NCMS") intends to file additional written notification disclosing all changes in membership.

On February 20, 1997, National Center for Manufacturing Sciences, Inc. ("NCMS") filed its original notification pursuant to Section 6(a) of the Act. The Department of Justice published a notice in the **Federal Register** pursuant to Section 6(b) of the Act on March 17, 1987 (52 FR 8375).

The last notification was filed with the Department on April 10, 1998. A notice was published in the **Federal Register** pursuant to Section 6(b) of the