Supplemental Testimony of Thomas Greene, Chief Assistant Attorney General, California Department of Justice, Before the Senate Committee on the Judiciary Hearing Entitled "Consolidation in the Oil and Gas Industry: Raising Prices?"

This submission responds to the Committee's additional questions at the hearing entitled "Consolidation in the Oil and Gas Industry: Raising Prices?"

Questions Posed by Chairman Specter:

1. **You testified that current case law in many circuits makes it difficult to prove and prosecute "tacit agreements" between competitors in highly concentrated industries. Please expand upon your testimony, and discuss what could be done to make prosecution of such agreements possible. If you have proposed legislative language, please provide that language to the Committee.**

The economic problem is that in industries like petroleum in which individual companies have market power it takes relatively little in the way of signaling or tacit coordination to reach a competitive détente that has the same effect as a traditional price-fix. Judge Posner describes this as a "paradox" because "the more conducive the market's structure to collusion without express communications, the weaker the plaintiff's case" is likely to be on the existence of a "combination" or "conspiracy" in restraint of trade.[1]

Posner suggests that factors like a concentrated market or inelastic demand should be used to understand the potential for tacit agreements. He lists seventeen attributes that are often associated with industries in which a tacit agreement to fix prices or withhold output might be found:

1. Market concentrated on the selling side;
2. No fringe of small sellers;
3. Inelastic demand at competitive price;
4. Entry takes a long time;
5. Buying side of market unconcentrated;
6. Standard product;
7. Nondurable product
8. The principal firms sell at the same level in the chain of distribution;
9. Price competition more important than other forms of competition;
10. High ratio of fixed to variable costs;
11. Similar cost structures and production processes;
12. Demand static or declining over time;
13. Prices can be changed quickly;
14. Sealed bidding;
15. Market is local;

[1] Richard A. Posner, *Antitrust Law 100* (2d. ed. 2001).

16. Cooperative practices; and
17. The industry's antitrust "record".[2]

Clearly, the petroleum industry has a number of these attributes, notably factors 3, demand is inelastic, that is, consumers will purchase about the same amount even if prices rise; 4, entry takes a long time; 5, the buyers side of the market is unconcentrated; 6, industry products meet specific chemical standards; 8, the major firms operate at the same levels; 9, price competition is critical; 10, industry costs and processes are similar; 12, prices can be changed quickly and 15, the industry works cooperatively[3].

Notwithstanding scholarship like Posner's, the federal circuits are split on what is required for a plaintiff to surmount a summary judgment challenge.[4] For example, in Posner's own opinion in *In re High Fructose Syrup*[5], the Seventh Circuit rejected a grant of summary judgment in large measure because the structure of the market was understood to favor tacit agreements. Notably the court also rejected the idea that cheating or lapses in the alleged agreement were inconsistent with the existence of an agreement.[6] On the other hand, the Eighth Circuit in *Blomkest Fertilizer, Inc. v. Potash Corp. of Saskatchewan*[7] ignored the implications of defendants' market power; gave broad deference to the defendants' characterizations of their activities as potentially pro-competitive and assessed each piece of evidence supporting the existence of an agreement separately.

These very different conclusions are driven by what are arguably inaccurate perspectives of the Supreme Court's summary judgment jurisprudence as articulated in *Monsanto Co. v. Spray-Rite Service Corp.*[8] and *Matsushita Electrical Industrial Co. v. Zenith Radio Corp.*[9] As noted by Posner, "[m]ost courts mistakenly regard tacitly collusive behavior as independent and therefore infer from the dictum in *Monsanto* that the plaintiff must negate the possibility that supracompetitive pricing was achieved without explicit agreement."[10] This confusion, in turn, has led another scholar to conclude that:

> The Monsanto/Matsushita approach places oligopoly regulation on its head. It applies the strictest standard to agreements that are least harmful to consumers and reserves the most lenient treatment for the most harmful types of arrangements.[11]

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[2] *Id.* at 69-79.
[3] See also Christopher R. Leslie, *Trust, Distrust and Antitrust,* 82 Tex.L.Rev. 515, 659-673 (2004) ("When competitors are allowed to cooperate in limited, legal ventures, the players can form sufficient trust to engage in illegal endeavors.")
[4] See generally, Thomas A. Piraino, Jr., *Regulating Oligopoly Conduct Under the Antitrust Laws*, 89 Minn.L.Rev. 9, 24-32 (2004).
[5] 295 F.3d 651 (7th Cir. 2002).
[6] *Id.* at 656. An extensive literature on oligopoly behavior concludes that firms in such markets are likely to occasionally cheat but that this is consistent with a tacit agreement to raise prices or withhold output. *See, e.g.,* Edward J. Green and Robert H. Porter, *Non-Cooperative Collusion Under Imperfect Price Information*, 52 Econometrica 1 (1984); Eric Rasmussen, *Games and Information: An Introduction to Game Theory* (1989).
[7] 203 F.3d 1028 (8th Cir. 2000).
[8] 465 U.S. 752 (1984).
[9] 475 U.S. 574 (1986).
[10] See Richard A. Posner, Antitrust Law 99-100 (2d ed. 2001)
[11] Piraina, supra n. 4 at 29.

The central, practical issue that challenges courts is whether a case should be advanced to trial in the absence of explicit evidence of a clear agreement in restraint of trade. Since there can be a very thin line between concerted action and unilateral conduct, particularly in industries like petroleum, the interpretation of potentially ambiguous conduct that might support either the existence of an agreement or parallel behavior by independent firms at summary judgment is crucial. The Supreme Court in its *Kodak* decision appears to have strongly counseled trial courts to allow potentially ambiguous evidence go to a jury "unless plaintiff's theory is economically senseless."[12] Notwithstanding the wisdom of such an approach when so little is required to allow an oligopoly to coordinate prices and production, some courts still go to great lengths to dismiss strong evidence of agreement in summary judgment proceedings.[13]

Since summary judgment is the crucial point at which cases like those brought against oil companies are dismissed, the committee may wish to consider instructing federal trial courts on the appropriate summary judgment standard in antitrust cases. An amendment offered in our Legislature by Senator Dunn of Orange County to his SB 1274 to California's basic antitrust law, the Cartwright Act,[14] may provide a model. Note that this amendment was offered to overturn the result in *Aguilar v.* ARCO[15], an oil company price-fixing case dismissed on summary judgment. The Dunn amendment provided that:

> ***In a motion for summary judgment or summary adjudication under this chapter, all of the following apply:***
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> ***(1) A plaintiff may reasonably rely on circumstantial evidence and inferences drawn from circumstantial evidence.***
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> ***(2) A plaintiff may reasonably rely on inferences from conduct that is as consistent with permissible competition as with restraint of trade or commerce unless a defendant demonstrates by a preponderance of evidence that allowing such inferences would have a detrimental effect on competition consistent with the goals of this Act and federal antitrust laws.***
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> ***(3) A plaintiff is not required to submit proof that tends to exclude the possibility of pro-competitive conduct.***
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> ***(4) A motion for summary judgment or summary adjudication may not be granted solely on the basis of denials by an officer, director or employee of the non-moving party.***

A "federalized" version of these concepts might look like:

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[12] *Eastman Kodak Co. v. Image Technical Services, Inc.*, 504 U.S. 451, 468-469 (1992)
[13] *See In Re:Baby Food Antitrust Litigation,* 166 F.3d 112 (3rd Cir.1999).
[14] California Business and Professions Code §§ 16700 et seq.
[15] 25 Cal.4th 826 (2001).

In a motion for summary judgment with respect to the existence of an agreement in any action arising under section 1 of this Act, codified at 15 U.S.C. § 1, the following rules shall apply:

1. *Plaintiffs may meet their burden of persuasion based on the evidence of agreement as a whole in combination with evidence of the industry's market structure;*

2. *Plaintiffs may meet their burden of persuasion based on evidence of a tacit agreement among defendants or a tacit agreement among one or more defendants and other persons;*

3. *The more substantial plaintiff's evidence of a market structure conducive to collusion, the less evidence is required in order for plaintiff to meet its burden of persuasion;*

4. *Plaintiffs may meet their burden of persuasion based on circumstantial evidence and inferences drawn from that evidence;*

5. *Plaintiffs shall not be required to rebut defendants' characterization of agreement evidence as neutral or pro-competitive unless the conduct challenged in the action constitutes an implausible restraint; and*

6. *Plaintiffs may meet their burden of persuasion even if there is evidence that defendants cheated on the alleged agreement or that the agreement lapsed for periods of time.*

For purposes of this section:

1. *"Agreement" has the same meaning as "contract, combination in the form of a trust or otherwise, or conspiracy" as those terms are used in section 1 of this Act;*

2. *"Implausible restraint" means a restraint of trade that is highly speculative or unlikely. This term does not include alleged agreements to fix or stabilize prices, limit production, allocate markets, boycott or injure competitors, fix prices vertically or tie the sale of one product or service to another;*

3. *"Market structure conducive to collusion" means a market structure that has one or more of the following attributes:*

    a. *Market concentration or market power on the selling side;*
    b. *No or a limited fringe of small sellers;*
    c. *Inelastic demand at competitive prices;*
    d. *Barriers to entry that limit entry in a reasonable amount of time;*
    e. *The buying side of the market is not concentrated;*
    f. *Products are standardized;*

g. Products are non-durable;
h. Principal firms sell at the same level or levels in the chain of distribution;
i. Firms have similar cost structures and production processes;
j. Demand is static or declining over time;
k. Prices can be changed quickly;
l. Bidding is sealed;
m. Markets are small or local;
n. The existence of cooperative practices among industry participants not directly related to potential antitrust conduct;
o. A history of violations of the antitrust law in the industry; and
p. Such other evidence of structural elements conducive to collusion as the court may find reasonable.

4. "Summary judgment" means a pre-trial proceeding involving the presentation and assessment of evidence, including expert opinion, and includes the current procedure contained in Rule 56 of the Federal Rules of Civil Procedure.

2. You testified that amending Section 7 of the Clayton Act to prohibit oil and gas industry mergers that "appreciably diminish" rather than "substantially lessen" would help prevent anti-competitive mergers. Please explain why.

Amending section 7 of the Clayton Act in this way will address the two most important weaknesses of contemporary merger analysis as it applies to the petroleum industry: (1) a lack of fealty to the plain language and legislative history of the Act, and (2) fetishization of market power screens over actual market power analysis.

The current language of section 7 of the Clayton Act, codified at 15 U.S.C. § 18, proscribes any merger that "may be substantially to lessen competition, or tend to create a monopoly." Although the substantiality requirement has changed over time[16], the dictionary defines "substantial" to mean "considerable in quantity: significantly great…being largely but not wholly that which is specified."[17] By contrast, "appreciable" means "capable of being perceived or measured."[18] Therefore, a common sense reading of the proposed language would be that it is designed to stop a merger in the petroleum industry if the challenger can show any perceptible or measurable negative effect on competition.

Current merger jurisprudence shows little fidelity to either the existing language of the Clayton Act or the expressed intent of Congress. This was not always the case. The most important early case interpreting the scope of section 7 of the Clayton Act after its modernization in 1950 spent twelve pages discussing the intent of Congress.[19] The Court noted particularly a Senate committee report that concluded that, "[t]he intent here…is to cope with monopolistic

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[16] See generally 2 Von Kalinowski, Antitrust Laws and Trade Regulation 2nd § 30.01[3] at pp. 30-14 et seq.
[17] Merriam Webster's Collegiate Dictionary 1174 (10th ed. 1997).
[18] *Id.* at 57.
[19] *Brown Shoe Co. v. United States*, 370 U.S. 294, 311-323 (1962).

tendencies in their incipiency."[20] The principal danger of this new firm, as the Court saw it, was its ability to shut out a number of independent shoe manufacturers from sales of shoes to the retail arm of the new firm.[21] Applying the text of the Act in light of the intent of its drafters, the Court sustained a challenge against two shoe companies that would have created a firm with a 5% share of the retail market.[22]

In *United States v. Philadelphia National Bank*,[23] the Court dealt with the proposed merger of two banks that would have enjoyed a combined 36% of total bank assets and 34% of net loans in the four-county area in and around Philadelphia. Based on the legislative history of the Act, the Court concluded, "intense congressional concern with the trend toward concentration warrants dispensing, in certain cases, with elaborate proof of market structure, market behavior, or probable anticompetitive effects." [24]This led to a presumption that "a merger which produces a firm controlling an undue percentage share of the relevant market, and results in a significant increase in the concentration of firms in that market, is so inherently likely to lessen competition substantially that it must be enjoined in the absence of evidence clearly showing that the merger is not likely to have such anticompetitive effects."[25]

The trigger for this presumption was clarified in *United States v. General Dynamics*.[26] In this case, two coal companies sought to merge. At least facially, the transaction would have given the new firm a large share of the market. Looking below the raw statistics, however, both the trial court and the Supreme Court concluded that the new firm would not have the market strength suggested by its market share. Specifically the Court noted that the trial court had found that the acquiring firm was "facing the future with relatively depleted [coal] resources at its disposal, and with the vast majority of those resources already committed under contracts allowing no further adjustment in price.[27] Endorsing the trial court's rejection of current market share data as "proper indicators of future ability to compete", the Court found that the *Philadelphia National Bank* presumption had not been triggered. [28]

In the 1980's, the original intent of Congress and the subsequent federal jurisprudence concerned with relatively small increases in concentration, protected by the *Philadelphia National Bank* presumption was further eclipsed by a new paradigm that had its roots in laissez faire economics. This sea change was marked by the issuance of federal merger guidelines in 1982. Conceptualized as a statement of prosecutorial intent for the business community, these guides broke dramatically with the prior jurisprudence. Indeed, a standard text on antitrust law concludes that these guides "set forth a detailed analytical framework, largely economic in nature and devoid of citations—or fidelity—to the case law".[29] From a policy perspective, the guidelines were premised on the belief that "earlier Supreme Court decisions

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[20] *Id.* at 318, quoting, S.Rep. No. 1775, 81st Cong., 2nd Sess. 4-5. .
[21] *Id.* at 328-329
[22] *Id.* at 343-344.
[23] 374 U.S. 321, 330-330 (1963).
[24] *Id.* at 363.
[25] *Id.*
[26] 415 U.S. 486 (1973).
[27] *Id.* at 503.
[28] *Id.* at 510.
[29] Wayne D. Collins, *Mergers & Acquisitions*, 1 Antitrust Adviser 4th § 3.3 at 3-7 (Irving Sher ed. 2005).

reflected bad policy—if not bad law—and should not be followed, even though they had never been overruled or corrected."[30]

Although these are still just prosecutorial guidelines for the federal competition agencies, their importance has been exaggerated by practical limits on private actions. In 1977, the Supreme Court concluded that a competitor challenging a merger could not recover damages for losses due to increased competition from the merged firm. *Brunswick v. Pueblo Bowl-O-Mat.*[31] This common sense notion was extended, however, to preclude competitors from seeking injunctions, even against patently anticompetitive mergers in *Cargill, Inc. v. Montfort of Colorado, Inc*[32]. As noted by a frustrated Justice Stevens for the dissenters, notwithstanding proving "to the satisfaction of the District Court [citation omitted] and the Court of Appeal [citation omitted] that the merger…is illegal…the Court holds, however, that the merger should not be set aside because…[the injury to the plaintiff] does not constitute the kind of 'antitrust injury' that the Court described in *Brunswick Corp v. Pueblo Bowl-O-Mat* [citation omitted].[33]Although the Court did leave open the theoretical possibility that interested competitors might challenge anticompetitive mergers, this decision has practically eliminated private actions against mergers. With the exception of actions brought by state attorneys general, actions by the federal competition agencies, premised on these guides, represent the real standard of merger law in the nation today.

Although the guidelines are intended to identify mergers that "create or enhance market power" or "facilitate its exercise",[34]a keystone of the guides are the ranges of concentration identified as potentially actionable. Using a standard Herfindahl-Hirschman Index, the so-called HHI,[35] a post-merger index of 1000 or less will "ordinarily require no further analysis" by the federal agencies. [36]In markets in which the post-merger HHI is between 1000 and 1800, the transaction may "raise significant competitive concerns" depending on the application of various further analytic steps if, but generally only if, the merger increases concentration by 100 or more points. Id. Finally, a market with a post-merger HHI over 1800 begins to trigger presumptions of illegality but typically only if the merger increases concentration by 50 or more points. *Id.*

These ranges are important because the petroleum industry is generally considered only "moderately concentrated". While these ranges do not bind courts and the agencies themselves eschew limiting themselves to these guidelines when they litigate,[37] the guides are used by most courts as a toolbox for sorting out concentration and market power.[38] Using this toolkit, both

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[30] *Id.* at 3-24.
[31] 429 U.S. 477, 488 (1977).
[32] 479 U.S. 104, 120 (1986)
[33] *Cargill*, 479 U.S. at 123.
[34] U.S. Department of Justice and Federal Trade Commission, Horizontal Merger Guidelines § 0.1 (rev. April 8, 1997),
[35] An HHI is determined by summing the squares of the market shares of firms in a relevant market. Markets for this purpose are two-dimensional constructs consisting of a product market and a geographic market.
[36] *Id.* at § 1.51.
[37] *Id.* at § 0.1 (Guidelines do not "describe how the Agency will conduct the litigation of cases it decides to bring."),
[38] See, e.g., *Federal Trade Commission v. Swedish Match*, 131 F.Supp.2d 151, 160 (D.D.C. 2000) (use of guides to establish markets for analysis); *United States v. Sungard Data Systems, Inc.*, 172 F.Supp. 172 (D.D.C. 2001) (use of guides to assist in market definition); *Federal Trade Commission v. Cardinal Health, Inc.*, 12 F.Supp.2d 34 (D.D.C. 1998) (adopting use of HHIs to measure concentration based on guides); *California v. Sutter Health System*, 130

the agencies and increasingly courts use the HHI screens as a sieve through which to test the competitive magnitude of a particular event or practice. Never intended to be more than a rough preliminary proxy for real market power, these screens have increasingly become the sine qua non of market power analysis—a fundamental inversion of their conceptual purpose.[39]

A number of recent, very large petroleum mergers have fallen just within or just outside the current HHI screens for mergers in moderately concentrated industries. Thus, despite public concern about these transactions and new evidence that they have increased prices to consumers by $0.01 to $0.07 per gallon,[40] these are not cases that dramatically violate the current guidelines so they are not easy cases to litigate given the broad acceptance of the guides.

One important explanation for this conundrum is that the HHI screens are based on general industry data. They do not properly take into account the effect of reduced competition in industries like petroleum in which demand is largely inelastic, that is, consumers will continue to purchase the product even when prices rise dramatically. In such a market, a small reduction in supply can have an outsized effect on consumers. From a technical perspective, demand inelasticity, coupled with supply inelasticity at high demand, that is more gasoline can't be made or imported in the short-run, means that small amounts of capacity withheld from the market can lead to dramatic price increases and even firms with relatively small shares of inframarginal capacity can affect prices, and profit from withholding supplies from the market. Federal guidelines and judicial expectations have to be recalibrated to take this into account. If not, the current system will continue to yield equivocal results for the public.

This problem is compounded by the way courts have decided cases since the guides were issued. For example, the guides do not suggest that concentration is a critical part of its analysis but rather a screen that may or may not lead to further investigation. Consistent with this approach, the D.C. Circuit largely eviscerated the *Philadelphia National Bank* presumption in *United States v. Baker Hughes, Inc*[41] by concluding that to make this presumption meaningful would impose an unfair burden on merging firms.[42] If the presumption starts out weak because

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F.Supp.2d 1109 (N.D.Cal. 2001) ("Although the merger guidelines are not binding, courts have often adopted the standards set forth in the Merger Guidelines for analyzing antitrust issues."); *United States v. Oracle Corp.*, 331 F.Supp.2d 1098 (N.D.Cal. 2003) (Guidelines a starting point for analysis; extensive analysis of potential coordinated and unilateral effects that led to approval of merger.)

[39] Neil B. Cohen and Charles A. Sullivan, *The Herfindahl-Hirshman Index and the New Antitrust Merger Guidelines: Concentrating on Concentration*, 62 Tex.L.Rev. 453, 469 (1983).

[40] U.S. Government Accountability Office, Energy Markets: Factors Contributing to Higher Gasoline Prices 2-3 (GAO-06-412, February 1, 2006) (Statement of Jim Wells, Director of Natural Resources and Environment).

[41] 908 F.2d 981 (1990).

[42] According to the *Baker Hughes* court, "[I]f the burden of production imposed on a defendant is too onerous, the distinction between that burden and the ultimate burden of persuasion—always an elusive distinction in practice—disintegrates completely." *Baker Hughes*, 908 F.2d at 99. In another application of this approach, in a case involving the admittedly concentrated market for coal from the Powder River Basin, the fact that by at least one measure the increase in concentration was only 49 (as opposed to 50) points in a concentrated market meant that "although the FTC has satisfied its prima facie case burden, the FTC's prima facie case is not strong, certainly less of a showing is required from defendants to rebut a less-than-compelling prima facie case." *Federal Trade Commission v. Arch Coal, Inc.*, 329 F.Supp.2d 109, 129 (D.D.C. 2004).

the screens are set too high for industries like petroleum, plaintiffs—and consumers--are doubly prejudiced.

Against the background of current merger law, the Committee should make clear that its new language is intended to make a clean break with the current guidelines. First, the Committee should make plain that the current HHI screens in the guidelines do not properly capture the significance of reductions in competition in the petroleum industry because, unlike most industries, demand in fuel markets is largely inelastic as is supply. Second, the Committee should consider interpreting its new language as reinvigorating the *Philadelphia National Bank* presumption so that if the agencies demonstrate a dangerous increase in concentration (taking into account the relatively inelastic demand in gasoline markets), the burden shifts decisively to the merging parties to clearly demonstrate that the merger will not harm competition. Third, the Committee should consider discussing the impact its new language may have on the acquisition or control of small, but strategic, assets like pipelines, docks, storage facilities and marine transportation. Such infrastructure is crucial to competition in the petroleum industry and needs the full protection of the law.

Finally, the Committee should make clear that this new language does not preclude actions against petroleum company mergers under current law. In fact, if one looks at the original intent of Congress in enacting the Clayton Act, much could be done. Specifically, *United States v. E.I. du Pont de Nemours & Co.*[43] concludes that federal agencies can reexamine a transaction subject to the Clayton Act decades after the transaction took place.

Questions Posed by Senator Leahy:

1. **Do you think there needs to be more transparency on the commodity exchanges, particularly natural gas transactions? If so, what steps can Congress take to increase transparency in the natural gas market? Should Congress require traders to register?**

Commodity exchanges are of critical importance to America's consumers and businesses, and transparency should be a given in such markets. California learned this the hard way during our energy crisis of 2000-2001. Enron On-Line was created as a new, computer-based commodity exchange for trading natural gas but was exempted from regulation by the Commodity Futures Trading Commission, notwithstanding its importance.[44] Beyond the purview of any regulatory oversight, this exchange became a seedbed for abuse of California consumers. Among other problems, we discovered that a single trader with Reliant engaged in regular, rapid-fire transactions on the exchange that caused prices to rise dramatically. Unbeknownst to other traders (or consumers), Reliant had a "netting agreement" with Enron that insured that while Reliant's trades would send prices on the exchange sky high, Reliant never had to pay those prices. These arrangements had two general effects: (1) prices on the exchange

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[43] 353 U.S. 586 (1957).

[44] Bethany McLean & Peter Elkind, *The Smartest Guys in the Room: The Amazing Rise and Scandalous Fall of Enron* 96 (Penguin Group, 2003); *see also* Frontline at http://www.pbs.org/wgbh/pages/frontline/president/players/gramm.html.

rose precipitously, and (2) since many power contracts were indexed to prices on the exchange, prices rose even for gas that was not traded on the exchange.

These kinds of abuses are certainly possible in motor fuels because prices under inter-refinery supply agreements are also indexed to thinly traded, non-transparent exchanges. Thus wash trades and other tactics used in electricity and natural gas markets during our energy crisis could be used on unregulated commodity exchanges to affect prices in gasoline markets.

Although we successfully challenged both Reliant and Enron over these practices, such activities illustrate the dangers of letting energy trading devolve into practices pioneered by Diamond Jim Brady and other infamous traders from the Gilded Age. Congress and the Federal Energy Regulatory Commission have taken tentative steps to address some of these problems. In the Energy Policy Act of 2005, Congress authorized FERC to issue regulations to proscribe market manipulation under both the Natural Gas Act and the Federal Power Act.[45] These regulations were to be generally analogous to the standards applicable to stock exchanges contained in Rule 10(b) of the Securities and Exchange Act of 1934.[46]

Although this statute is an advance, it has important weaknesses. First, unlike the securities laws, neither section under the Energy Policy Act of 2005 can be "construed to create a private right of action.[47]This means that an already overworked regulatory agency is the only entity that can address market manipulation or potentially complex commodity frauds. Second, the regulations with respect to gas only apply to deals already "subject to the jurisdiction of the Commission."[48] This is understood to exclude both first sales and retail sales.[49] The exclusion of first sales in particular has the effect of excluding large numbers of transactions from the scope of the new rule. Finally, the new rule does not set up a registration requirement or set specific, exchange-wide market rules for exchanges buying and selling energy commodities.

Against this background, greater regulation of trading practices in energy markets by the Commodity Futures Trading Commission, specifically over-the-counter exchanges for derivatives, is wholly appropriate. But such oversight is precluded by exceptions in the Commodity Futures Modernization Act of 2000.[50] The most notable exceptions are for the derivatives and swaps that are increasingly important in energy markets.[51] Although the chairman of the CFTC argues that such exceptions make sense when sophisticated traders are involved[52], our experience with the California energy crisis was that even highly sophisticated

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[45] Pub.L.No. 109-58, §§ 315 (adding §4A to the Natural Gas Act), 1283 (adding §222 to the Federal Power Act).

[46] 15 U.S.C. §78j(b); see also 17 CFR 240.10b-5.

[47] Pub.L.No.109-58 §§315, 1283.

[48] 18 CFR 1c1(a).

[49] 114 FERC 61,047 ¶16 (January 19, 2006).

[50] . Pub.L.No.106-554, 114 Stat. 2763.

[51] An extremely useful table detailing these and other exceptions to CFTC jurisdiction over energy exchanges prepared by the U.S. Energy Information agency can be found at http://www.eia.doe.gov/oiaf/servicerpt/derivative/tbl14.html

[52] Reuben Jeffery III, chairman, Commodity Futures Trading Commission, "Futures and Derivatives: The Road Traveled and the Road Ahead", presented at the San Juan, Puerto Rico meeting of the American Bar Association

purchasers were abused in unregulated exchanges. And as Warren Buffett famously observed, under-regulated derivatives markets are "weapons of mass destruction."

Indeed, the notion that anti-fraud and other protections should be eliminated in markets merely because some of the customers are sophisticated is itself quite odd. The New York Stock Exchange is an extremely sophisticated market but no one would suggest that anti- fraud and other market rules are unnecessary. In fact, such rules and their effective enforcement are hallmarks of the NYSE. And such regulation makes this and similar markets more competitive and more secure, which, in turn, makes them bigger and more efficient.

In markets for motor fuels, petroleum and natural gas, traders should be registered and the same kinds of rules enforced by the Securities and Exchange Commission in stock markets should be extended to all major commodity markets including markets for derivatives and all other proxies for these commodities.

Senator DeWine Questions:

1. **First, what more should the FTC do to prevent oil industry mergers from lessening competition?**

First, any additional mergers, joint ventures or other inter-company agreements in this industry must be given the most searching scrutiny. This means initially that the Commission must modify its current procedures. Although the Commission has made petroleum issues a priority, use of HHI screens to quickly weed out less important transactions is not appropriate in this industry. At the least, Commission staff should be doing industry interviews and additional document demands in every new proposed merger in this industry.

Second, the Commission should formally review the effects of past merger approvals and settlements going back fifteen years. The GAO says that petroleum industry mergers have cost consumers and American business $0.01-0.07 per gallon. While it is natural for the Commission to dispute such findings, it is also clear that we all have far more information about these transactions now than we had when they were first proposed and approved. It is time to thoughtfully sort out if we got it right the first time around. A major candidate for such a review should be the approval of the take-over of the Thrifty chain of over 100 discount gas stations in southern California by ARCO in the mid-1990s. In hindsight, that appears to me to have been an error and should be reviewed. Other candidates for consideration for such a review include Equilon, the Shell-Texaco refining and marketing joint venture and various inter-refiner supply sharing arrangements.

Third, if we did get it wrong with respect to a merger or with respect to particular curative divestitures, the Commission, preferably in partnership with state attorneys general, should consider challenging any transactions that have proved to be inimical to competition in this industry. The case authority for such challenges, at least by federal agencies, is quite clear.

Committee on Futures and Derivatives Instruments (February 3. 2006) at http://www.cftc.gov/opa/speeches06/opajeffery-7.htm

In *United States v. E.I. du Pont de Nemours & Co.*[53], the Supreme Court approved a challenge in 1949 to stock purchases made thirty years earlier. The Court concluded that, "[w]e repeat, that the test of violation of § 7 is whether, at the time of suit, there is a reasonable probability that the acquisition is likely to result in the condemned restraints." [54]By contrast, private plaintiffs, and potentially state attorneys general, may be subject to the defense of *laches* in such cases. [55]

This course of action should be undertaken only on two conditions. First, it must be clear that unwinding a merger transaction is clearly warranted by the facts. If not, the costs in terms of reasonable business expectancies and general problems in all markets will outweigh the benefits of any single challenge. Second, a broad-gauged attack on a completed transaction should be mounted only if additional spin-offs or other surgical relief cannot fix the competitive problem(s) with the original deal.

Fourth, the Commission should consider more aggressive use of its authority under section 5 of the Federal Trade Commission Act, codified at 15 U.S.C. § 45, root out "[u]nfair methods of competition" to review the many instances in which executives from competing oil companies interact and share information in joint ventures, swap arrangements and other situations to determine if those interactions are dangerous to competition. While the Commission lost a famous case involving practices that facilitated oligopoly pricing in the sale of the ethyl fuel additive[56], this case can and should be confined to its unique facts. And certainly current practices in the petroleum industry that appear to facilitate a non-rivalrous oligopoly in this crucial market should not be ignored because of a single case. At the least, a serious investigation focused on whether these many joint activities ablate competition and whether they may violate section 5 of the FTC Act is warranted.

2. Second, how should U.S. energy policy work to prevent consolidation that leads to higher prices while still addressing the risk that an aggressive merger policy could keep U.S. companies relatively small in a way that puts them at a competitive disadvantages to other global players?

U.S. oil companies are not small firms on the world stage. Despite recent articles suggesting that U.S. firms may be "surprisingly vulnerable"[57], they still seek and win leases in all areas of the world. And as evidenced by their work on the hostile North Sea leases, American companies dominate the technology used to extract oil from the most difficult drilling environments in the world.

While U.S. companies are not too small to compete in world markets, they do face new rivals, notably companies from China, Japan and India, as well as their traditional European competitors. And major U.S. companies are facing increasingly "demanding, even hostile

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[53] 353 U.S. 586 (1957)
[54] *Id.* at 607.
[55] *See, e.g., Garabet v. Autonomous Technologies Corp.*, 116 F.Supp.2d 1159, 1171-72 (C.D.Cal. 2000).
[56] *E.I. du Pont de Nemours & Co. v. Federal Trade Commission*, 729 F.2d 128 (1984),
[57] "Why You should Worry About Big Oil: Beyond the fat profits, the giants are surprisingly vulnerable", Business Week (May 15, 2006) at http://www.businessweek.com/magazine/content/06_20/b3984001.htm

foreign governments."[58] All companies are competing for oil that is harder to find and more expensive to extract as world demand increases.

Against this background, several policy initiatives make sense. First, we are faced by a fully functioning cartel in the Organization of Petroleum Exporting Countries. While not all producing countries belong to OPEC, this cartel substantially controls the price of world oil. The United States should begin to take legal steps to attack this cartel. A key first step would be to pass into law some version of the NOPEC legislation that you have drafted.

Second, we should begin to aggressively improve fuel economy in our automobiles and light trucks. If the United States can reduce its painful reliance on what appears to be a waning resource, we will be more secure economically and politically. Many engineers think that by combining already available technologies like continuously variable transmissions and the use of lighter steels we could significantly reduce our dependence on oil and the regimes that control it. These steps should begin now.

Third, we should stop getting in the way of importing ethanol from other parts of the world. As you may know, Brazil has led the western hemisphere in the use of ethanol. Although this nation is an ally, we impose significant tariffs on imports of ethanol from Brazil. Ethanol is part of gasoline today; and repeal of this tax can help consumers right now. And when more vehicles can use ethanol directly, repeal will make even more sense. This should be coupled with federal research and development support for the production of ethanol from cellulostic and other sources.

Finally, with respect to U.S. competition policy, I would view claims that more mergers are required to give U.S. firms more clout in international markets with enormous skepticism. That said, if we were to see a proposed BP-ARCO/ExxonMobil/ConocoPhillips merger, while the presumption should be strongly against such a deal, the parties should be given the opportunity to explain, if possible, how such a deal would be in the public interest.

3. If there were one change you could make to the antitrust laws to make oil and gasoline markets more competitive, what would that be?

I believe that your NOPEC proposal is the single most important change that can be made now to make petroleum markets more competitive.

Senator Kohl's Follow-up Questions:

1. I have introduced a bill to direct the Secretary of Energy to establish and operate a strategic refining reserve. This reserve should have the capacity to produce at least 5 percent of the domestic demand for gasoline, diesel and aviation fuel. I believe this reserve would be an important step to ending the oil companies' stranglehold over the market, and their ability to manipulate supply in order to have market power. What do you think of this idea?

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[58] *Id.*

This is an important initiative. Attorney General Lockyer recommended the creation of a similar reserve for California to address dramatic price spikes in the California market in 2000. Estimates at that time were that a properly sized reserve could save California consumers hundreds of millions of dollars. The analysis of this proposal is contained in our report entitled *Report on Gasoline Pricing in California* 48 (May 2000) which can be found at http://caag.state.ca.us/antitrust/publications/gasstudy/gasstudy2.pdf

2. **I have introduced legislation to give the Secretary of Energy the authority to prohibit the export of any refined petroleum product when supply is expected to fall below demand. In my view, in times of high demand and severe pressures on supply – such as we saw in the aftermath of the Hurricane Katrina and Rita disasters last Fall - it is simply unacceptable that U.S. oil refiners should ship their products out of the country. What do you think of this legislation?**

While we do have international obligations that we must honor, we must protect our own as much as possible. Consistent with whatever agreements and commitments we have made with friendly nations and customers, I would support such legislation as a short-term stopgap to address a supply emergency in the United States.

Follow-Up Questions of Senator Charles E. Schumer:

1. **We often hear the justification for consolidation that resources abroad are more expensive to develop, but why does that mean we have to consolidate downstream at refining and retail levels? In 2004 the GAO found that market concentration in the downstream sector had increased significantly, and that oil company merger activity had in fact had an upward effect on gasoline retail prices. Wouldn't the market benefit from more independent activity in the downstream sector? Wouldn't competition and the consumer be better served by a higher degree of competition at each segment of the supply chain?**

There is no necessary relationship between oil company mergers and finding new oil reserves. In fact, several major mergers have been driven by the perception that the target firm had proven reserves that were undervalued so the acquisition was an alternative to spending money on exploration and development in new or frontier areas.[59] A recent example of this was the acquisition of Unocal by Chevron. In that transaction, Unocal's assets were offshore leases off Central Asia with substantial estimated reserves.

The market would clearly be better if there was more competition in the downstream sectors of the petroleum industry. At retail, the majors have instituted price zones that allow each of them to effectively compartmentalize competition from independents and to efficiently counter price moves by other majors. The way this works is that individual stations report on their own prices and those of competitors. Based on experience over time, the companies and

[59] D.J. Peterson and Sergei Mahnovski, *New Forces at Work in Refining: Industry Views of Critical Business and Operations Trends* 15-16, n.2. (RAND 2003)

their principal consultant have determined the geographic areas of competition for each station. These areas are called price zones and can be a miles square or an individual intersection.

By comparing the prices at their own stations along with the gallons sold, the majors know that they may need to react to a price-cutter a mile away but not two miles away. Since the majors have developed ways to control prices at retail, even for supposedly more independent franchise dealers, this means that retail prices can be controlled by the refinery oligopoly to maximize profits. The implication for policy makers and consumers is that effective competition requires active, price-cutting competitors in as many price zones as possible.

In the refining sector, as noted in the next answer, companies have generally decided to eliminate or not expand capacity so the market is always on a knife-edge between adequate supplies and shortage. Additional competitors in this sector might view their own individual interests differently. Indeed, in a less comfortable oligopolistic market, some competitors might seek to expand market share based on growing their capacity to refine oil into products. This kind of competition would be of enormous benefit to consumers.

2. In a market this tight on supply and this concentrated, where is the disincentive for oil companies to "take their foot off the pedal" by only barely keeping place with market trends? Is it realistic with so much vertical integration, to assume that if a company does not act swiftly to a price signal another company will competitively respond?

In the refining portion of the market, petroleum companies have successfully reduced capacity in order to increase profits. Indeed, a 2003 RAND study reports that "the elimination of excess capacity" that existed in the 1980's and 1990's "represents a significant business accomplishment" for the industry.[60] "On the other hand", according to RAND, "the elimination of spare capacity generates upward pressure on prices at the pump and produces short-term market vulnerabilities" that can result in "acute (i.e. measured in weeks) supply shortfalls and price spikes."[61] [62]

A new perspective on this part of the business supports a "just enough" strategy. Partly such a strategy keeps costs at a minimum. But more importantly, refiners do not want to repeat the low-profit 1990's. Thus, many refiners question "the once universal imperative of a refinery not "going short"—that is, not having enough product to meet market demand." In fact, RAND reports that:

> Rather than investing in and operating refineries to ensure that markets were fully supplied all of the time, refiners suggested that they were focusing first on ensuring that their branded retailers are adequately supplied by curtailing sales to wholesale markets if needed. "The industry is a lot smarter", said one industry representative. "The 80s and

[60] *Id.* at 83
[61] *Id.* at xv-xvi.
[62] Parallel reductions in product storage facilities and inventories have had similar effects on consumers.

90s were ugly for refining. [Executives] know what caused it, and they don't want to do it again."[63]

This suggests that refiners have and will resist market signals if they think this will lead to "excess" capacity in the industry, leading to lower profits. This also suggests that antitrust authorities must be extremely alert to any increase in concentration among refiners because refinery capacity is the crucial bottleneck in the industry.

3. We've seen a lot of the so-called "rockets and feathers" phenomenon where prices spike, supposedly because retailers have to instantly react to the wholesale price, but then when the wholesale drops, retail lags at the high price. What do you believe is the explanation for this phenomena and what role has consolidation played in creating it?

The "rockets and feathers" pricing phenomenon is referred to by economic researchers as an asymmetric response to crude oil price increases, that is, product prices rise like rockets and fall like feathers.[64] While there is no scholarly consensus on how this occurs, I believe that three intersecting developments explain this phenomenon.

The first is the steady elimination of competitive, independent retailers. Typically, independent retailers were the first to cut prices, forcing majors to cut their own retail prices faster in the past.

Second, refiners have reduced relative capacity (including inventories and storage) since the 1980's and 1999's so majors do not always have fuel to supply independents. With the reduction in the number of independent refiners, independent retailers have become increasingly vulnerable to price spikes. What happens is that if supplies are short, the majors supply their own stations first. Meanwhile, independents buy on the wholesale spot market that may now be higher than the retail price at a major station. This pricing relationship is known as backwardation. In such a market, the few remaining, hitherto price-competitive independents cannot compete on price so they cannot discipline the majors.

Finally, majors use price zones to keep prices high when they do not face direct price competition from price-cutting independents.

To put these factors into context, when a refinery goes out or there is an increase in crude prices, majors will immediately price their products at higher replacement costs irrespective of what they paid for the product. This will be fully passed on to the spot market that is the normal source of fuel for independents. Although majors may not pass all of the increases through to their stations, prices always rise for their own stations and franchisees, often substantially. When

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[63] *Id.* at 16-17.

[64] Li-Hsueh Chen, Miles Finney & Kon S. Lai, *A threshold cointegration analysis of asymmetric price transmission from crude oil to gasoline prices*, 2005 Economics Letters 233(Reed Elsevier, 2005) at www.sciencedirect.com; Stephen P.A. Brown & Mine K. Yucel, *Gasoline and Crude Oil Prices: Why the Asymmetry?,* Economic and Financial Review 23 (Federal Reserve Bank of Dallas, 3rd Qtr. 2000); Severin Borenstein, A Collin Cameron & Richard Gilbert, *Do Gasoline Prices Respond Asymmetrically to Crude Oil Price Changes?,* 112 Quarterly Journal of Economics 305 (MIT Press, 1997)

the broken refinery comes back on line or crude costs subside, majors typically reduce prices only as necessary, typically first in those price zones with independents (if spot prices fall dramatically) and then extend cuts to other areas only as other majors start to drop. This tends to give consumers the impression that retail prices rocket up but only feather down.

Consolidation has touched every aspect of this problem. First, consolidations have touched hitherto highly price competitive segments of the retail market. A good example is the acquisition of ARCO, a traditionally price competitive firm, by BP. As to refinery capacity, the elimination of surpluses in the 1990's appears to be closely linked to the increased concentration in the market. And finally, the use of price zones allows majors to extend their oligopoly power efficiently down to street level, and provides an additional profit, typically realized as increased returns to their refinery operations.