Farmers Union Central Exchange, Inc. v. Federal Energy Regulatory Commission, 734 F.2d 1486 (D.C. Cir. 1984), cert. denied sub nom., Williams Pipe Line Company v. Farmers Union Central Exchange, Inc., 105 S. Ct. 507 (1984), 469 U.S. 1034 (1984).

(Farmers Union II)

Four years after, the court's remand of the Farmers Union I case to the Federal Energy Regulatory Commission (FERC), this Commission issued its Opinion No. 154 on November 30, 1982, in Williams Pipe Line Company, (21 FERC ¶ 61,260, reh'g denied, 22 FERC ¶ 61,086 (1983)). An appeal was taken to the Court of Appeals for the District of Columbia which handed down its decision in Farmers Union Central Exchange, Inc. v. Federal Energy Regulatory Commission, 734 F.2d 1486 (D.C. Cir. 1984), cert. denied sub nom., Williams Pipe Line Company v. Farmers Union Central Exchange, Inc., 105 S. Ct. 507 (1984), 469 U.S. 1034 (1984), known as Farmers Union II.

The court held that FERC had in Opinion No. 154 contravened its statutory responsibility toensure that oil pipeline rates are just and reasonable. The court also gave the Commission basic guideposts to follow in formulating a regulatory policy. The court stated that pipeline rates must be set within the zone of reasonableness; presumed market forces may not comprise the principle regulatory constraint; any departure from cost-based rates must be made, if at all, only when non-cost factors are identified and the substitute methods ensure that rate levels are justified by those factors; and the rate of return methodology must take into account the risks associated with the regulated enterprise. Finally, the Commission must carefully scrutinize the rate base and the rate of return methodologies to ensure that they operate together to produce a just and reasonable rate. (Id. at 1530).

Pursuant to the court's instructions, the Commission issued Opinion No. 154-B (31 FERC ¶ 61,377 (1985)), which provided the rules and guidelines upon which the justness and reasonableness of oil pipeline rate filings shall to be determined.

Farmers Union Central Exchange, Inc. v. Federal Energy Regulatory Commission, 734 F.2d 1486 (D.C. Cir. 1984), cert. denied sub nom., Williams Pipe Line Company v. Farmers Union Central Exchange, Inc., 105 S. Ct. 507 (1984), 469 U.S. 1034 (1984).

(Farmers Union II)

FARMERS UNION CENTRAL EXCHANGE, INC., et al., Petitioners,

v.

FEDERAL ENERGY REGULATORY COMMISSION, and United States of America, Respondents,

Williams Pipe Line Company, Association of Oil Pipelines, Getty Pipeline, Inc., Marathon Pipe Line Company, Phillips Pipe Line Company, Sun Pipe Line Company. Mid-America Pipeline Company, Texas Eastern Transmission Corporation, ARCO Pipe Line Company, Intervenors.

ASSOCIATION OF OIL PIPE LINES and Williams Pipe Line Company, Petitioners,

v.

UNITED STATES of America and Federal Energy Regulatory Commission, Respondents,

Marathon Pipe Line Company, Farmers Union Central Exchange, Inc., et al., Mid-America Pipeline Company, Buckeye Pipe Line Company, Texas Eastern Transmission Corp., Hydrocarbon Transportation, Inc., Belle Fourche Pipe Line Company, Getty Pipeline, Inc., Sun Pipe Line Company, ARCO Pipe Line Company, Intervenors.

PHILLIPS PIPE LINE COMPANY, Petitioner,

v.

UNITED STATES of America and Federal Energy Regulatory Commission, Respondents,

Farmers Union Central Exchange, Inc., et al., Getty Pipeline, Inc., Sun Pipe Line Company, Mid-America Pipeline Company, ARCO Pipe Line Company, Intervenors.

SUN PIPE LINE COMPANY, Petitioner,

v.

UNITED STATES of America and Federal Energy Regulatory Commission, Respondents,

Farmers Union Central Exchange, Inc., et al., Getty Pipeline, Inc., Sun Pipe Line Company, Mid-America Pipeline Company, ARCO Pipe Line Company, Intervenors.

ARCO PIPE LINE COMPANY, Petitioner,

v.

UNITED STATES of America and Federal Energy Regulatory Commission, Respondents,

Farmers Union Central Exchange, Inc., et al., Belle Fourche Pipe Line Co., Getty Pipeline, Inc., Sun Pipe Line Company, Mid-America Pipeline Company, Intervenors.

MID-AMERICA PIPELINE COMPANY, Petitioner,

v.

UNITED STATES of America and Federal Energy Regulatory Commission, Respondents,

Farmers Union Central Exchange, Inc., et al., Belle Fourche Pipe Line Co., Getty Pipeline, Inc., Sun Pipe Line Company, Intervenors.

Nos. 82-2412, 83-1130 to 83-1134.

United States Court of Appeals, District of Columbia Circuit.

Argued Nov. 18, 1983

Decided March 9, 1984.

As Amended June 26, 1984.

After remand, 584 F.2d 408, Federal Energy Regulatory Commission entered an order specifying the generic rate-making methodology to be applied to all oil pipelines pursuant to the Interstate Commerce Act and petitioners sought review. The Court of Appeals, Wald, Circuit Judge, held that: (1) Federal Energy Regulatory Commission, which set oil pipeline rate ceilings which would admittedly be egregiously extortionate if reached in practice and then failed to demonstrate that market forces could be relied upon to keep prices at reasonable levels throughout the oil pipeline industry, violated a statutory directive to determine whether rates are "just and reasonable," and (2) Federal Energy Regulatory Commission, in specifying generic rate-making methodology to be applied to all oil pipelines pursuant to Interstate Commerce Act, failed both to give due consideration to responsible alternative rate-making methodologies purposed during its administrative proceedings and to offer a reasoned explanation in support of its own chosen rate-making methodology and therefore the Commission order constituted impermissible "arbitrary and capricious" agency action.

Remanded.

1. Carriers ⇐26

Federal Energy Regulatory Commission order specifying generic rate-making methodology to be applied to all oil pipelines pursuant to Interstate Commerce Act constituted a rate-making under Administrative Procedure Act and would be reviewed to determine whether the order was arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law. Interstate Commerce Act, § 15(1), 49 U.S.C. (1976 Ed.) § 15(1); 5 U.S.C.A. § 706(2)(A).

2. Administrative Law and Procedure ⇐763

Under "arbitrary and capricious" standards, a reviewing court must conduct a searching and careful inquiry into the record in order to assure itself that the agency has examined relevant data and articulated a reasoned explanation for its action including a rational connection between the facts found and the choice made. 5 U.S.C.A. § 706(2)(A).

3. Administrative Law and Procedure ⇐763

Agency decision making must be more than "reasoned" in light of the record; it must also be true to the congressional mandate from which it derives authority and therefore a reviewing court must be satisfied with agency's reasons and actions do not deviate from nor ignore the ascertainable legislative intent.

4. Administrative Law and Procedure ⇐763

"Arbitrary and capricious" standard of review demands that an agency give a reasoned justification for its decision to alter an existing regulatory scheme. 5 U.S.C.A. § 706(2)(A).

5. Public Utilities ⇐123

While Federal Energy Regulatory Commission enjoys substantial discretion in its rate-making determinations, that discretion must be bridled in accordance with statutory mandate that resulting rates be "just and reasonable." Interstate Commerce Act, §§ 1(5), 15(1), 49 U.S.C. (1976 Ed.) §§ 1(5), 15(1).

6. Public Utilities ⇐123, 194

An agency may issue, and courts are without authority to invalidate, rate orders that fall within a "zone of reasonableness," where rates are neither "less than compensatory" nor "excessive"; "zone of reasonableness" is delineated by striking of fair balance between financial interests of the regulated company and the relevant public interests, both existing and foreseeable.

7. Public Utilities ⇐168

When Federal Energy Regulatory Commission chooses to refer to noncost factors in rate setting, it must specify nature of the relevant noncost factor and offer a reasoned explanation of how the factor justifies the resulting rates.

8. Carriers ⇐26

Federal Energy Regulatory Commission, which set oil pipeline rate ceilings which would admittedly be egregiously extortionate if reached in practice and then failed to demonstrate that market forces could be relied upon to keep prices at reasonable levels throughout the oil pipeline industry, violated a statutory directive to determine whether rates are "just and reasonable." Interstate Commerce Act, §§ 1(5), 15(1), 49 U.S.C. (1976 Ed.) §§ 1(5), 15(1); 5 U.S.C.A. §§ 706(2)(A, C).

9. Carriers ⟹26

Federal Energy Regulatory Commission, in specifying generic rate-making methodology to be applied to all oil pipelines pursuant to Interstate Commerce Act, failed both to give due consideration to responsible alternative rate-making methodologies purposed during its administrative proceedings and to offer a reasoned explanation in support of its own chosen rate-making methodology and therefore the Commission order constituted impermissible "arbitrary and capricious" agency action. Revised Interstate Commerce Act, 49 U.S.C.A. § 10101 et seq.; 5 U.S.C.A. § 706(2)(A).

10. Administrative Law and Procedure ⟹486

An agency has a duty to consider responsible alternatives to its chosen policy and to give a reasoned explanation for its rejection of such alternatives.

11. Public Utilities ⟹129

While determination of a fair rate of return cannot and should not be constrained to the mechanical application of a single formula or combination of formulas, rate-making agency has a duty to ensure that the method of selecting appropriate rates of return are reasonbly related to the method of calculating the rate base.

12. Public Utilities ⟹124

Federal Energy Regulatory Commission may adopt any method of valuation for rate base purposes so long as the end result of the rate-making process is reasonable.

13. Carriers ⟹26

Federal Energy Regulatory Commission, in its oil pipeline rate-making, did not err in failing to use purchase price of petitioner's assets in its rate base and depreciation basis calculations.

14. Carriers ⟹26

Federal Energy Regulatory Commission, in its determination of rate base issue in oil pipeline rate-making proceeding, prematurely determined cost allocation issue.

15. Carriers ⟹26

Federal Energy Regulatory Commission ruling permitting oil pipeline companies to decide for themselves whether or not to use tax normalization accounting and prohibiting companies that chose normalization from including the resulting tax reserve accounts in their rate basis did not "completely eliminate" any normalization benefit.

Petitions for Review of an Order of the Federal Energy Regulatory Commission.

John M. Cleary, Washington, D.C., with whom Frederick L. Wood, Washington, D.C., was on the brief for Farmers Union Exchange, Inc., et al., petitioner in No. 82-2412 and intervenor in Nos. 83-1130, 83-1131, 83-1132, 83-1133 and 83-1134.

Robert G. Bleakney, Jr., Boston, Mass., with whom David M. Schwartz and Robert L. Calhoun, Boston, Mass., were on the brief for Williams Pipe Line Company, petitioner in No. 83-1130 and intervenor in No. 82-2412.

Cheryl C. Burke, Neal J. Tonken and Glenn E. Davis, Washington, D.C., were on the brief for Phillips Pipe Line Company, petitioner in Nos. 83-1131 and intervenor in No. 82-2412.

Paul A. Cunningham, Marc D. Machlin and Arthur W. Adelberg, Washington, D.C., entered appearances for Sun Pipe Line Company, petitioner in Nos. 83-1132 and intervenor in Nos. 82-2412, 83-1130, 83-1131, 83-1133 and 83-1134.

Robert E. Jordan, III, Steven H. Brose, Timothy M. Walsh, Washington, D.C., and Gerald A. Costello, Los Angeles, Cal., were on the brief for ARCO Pipe Line Company, petitioner in No. 83-1133 and intervenor in Nos. 82-2412, 83-1130, 93-1131 and 83-1132.

Robert J. Wiggers, Attorney, Dept. of Justice, Washington, D.C., with whom John Powers, III, Attorney, Dept. of Justice, Washington, D.C., was on the brief, for United States of America, respondent in Nos. 82-2412, 83-1130, 83-1131, 83-1132, 83-1133 and 83-1134.

Robert F. Shapiro, Attorney, Federal Energy Regulatory Commission, Washington, D.C., with whom Stephen R. Melton, Acting General Counsel, Jerome M. Feit, Sol. and Andrea Wolfman, Attorney, Federal Energy Regulatory Commission, Washington, D.C., were on the brief for Federal Energy Regulatory Commission, respondent in Nos. 82-2412, 83-1130, 83-1131, 83-1132, 83-1133 and 83-1134.

R. Eden Martin, Washington, D.C., with whom Lawrence A. Miller, Washington, D.C., Howard J. Trienens, New York City, and Patrick H. Corcoran, Washington, D.C., were on the brief for Association of Oil Pipelines, intervenor in No. 82-2412, and petitioner in No. 83-1130. Jules M. Perlberg, Chicago, Ill., and Ronald S. Flagg, Washington, D.C., also entered appearances for Association of Oil Pipelines.

Joseph W. Craft, III, Thomas E. Ricky, Kristen E. Cook, Tulsa, Okl., Jack W. Hanks and Ronald M. Johnson, Washington, D.C., were on the brief for Mid-America Pipeline Company, intervenor in Nos. 82-2412, 83-1130, 83-1131, 83-1132 and 83-1133 and petitioner in No. 83-1134.

James W. McCartney, Albert S. Tabor, Jr., Houston, Tex., David T. Andril, Washington, D.C., Jack E. Earnest and Bolivar C. Andrews, John E. Kennedy, Houston, Tex., were on the brief for Texas Eastern Transmission Corporation, intervenor in Nos. 82-2412 and 83-1130.

James F. Bell, Washington, D.C., was on the brief for Marathon Pipe Line Company, intervenor in Nos. 82-2412 and 83-1130. Thomas E. Fennell, Washington, D.C., also entered an appearance for Marathon Pipe Line Company.

Frank Saponaro, Jr., Washington, D.C., was on the brief for Buckeye Pipe Line Company, intervenor in Nos. 83-1130.

J. Paul Douglas and Jon L. Brunenkant, Washington, D.C., entered appearances for Getty Pipeline, Inc., intervenor in Nos. 82-2412, 83-1130, 83-1131, 83-1132, 83-1133 and 83-1134.

Walter E. Gallagher and Peter C. Lesch, Washington, D.C., entered appearances for Hydrocarbon Transportation, Inc., intervenor in Nos. 83-1130.

Jack Vickrey, Houston, Tex., was on the brief for Belle Fourche Pipe Line Company, intervenor in Nos. 83-1130, 83-1133 and 83-1134.

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Before WALD, EDWARDS and STARR, Circuit Judges.

Opinion for the Court filed by Circuit Judge WALD.

WALD, Circuit Judge:

Petitioners, along with the Department of Justice and the Williams Pipe Line Company, challenge an order of the Federal Energy Regulatory Commission (FERC) on a wide variety of grounds. The FERC order in question specified the generic ratemaking methodology to be applied to all oil pipelines pursuant to the Interstate Commerce Act. In its order, the Commission articulated for the first time its belief that oil pipeline rate regulation should serve only as a cap on egregious price exploitation by the regulated pipelines, and that competitive market forces should be relied upon in the main to assure proper rate levels. Furthermore, in devising a specific ratemaking methodology in accordance with these beliefs, FERC retained the rate base formula used in the past in oil pipeline ratemaking, even though this formula had met with severe criticism from this court in *Farmers Union Central Exchange v. FERC,* 584 F.2d 408 (D.C.Cir.1978), *cert. denied sub nom. Williams Pipe Line Co. v. FERC,* 439 U.S. 995, 99 S.Ct. 596, 58 L.Ed.2d 669 (1978). At the same time, the Commission revised its rate of return methodology so that the resulting rate levels would represent ceilings seldom reached in actual practice.

For the reasons set forth below, we find that the Commission's order contravenes its statutory responsibility to ensure that oil pipeline rates are "just and reasonable." In addition, we hold that FERC failed both to give due consideration to responsible alternative ratemaking methodologies proposed during its administrative proceedings, and to offer a reasoned explanation in support of its own chosen ratemaking methodology, and that therefore the FERC order constitutes impermissible "arbitrary and capricious" agency action. Accordingly, we remand this case for further proceedings consistent with this opinion.

I. Background

Williams Pipe Line Company (Williams),[1] an independent common carrier, operates oil pipelines over a large territory in the midwestern United States. Williams entered the pipeline business in 1966, when it purchased its operating assets from the Great Lakes Pipe Line Company. In late 1971 and early 1972, Williams increased its local rates and initiated new joint rates with another pipeline company. Those rates are still at issue today.

Petitioners, various oil producers and refiners that ship their products through Williams' pipeline, challenged the lawfulness of these rates before the Interstate Commerce Commission (ICC) in 1972. After evidentiary hearings, the presiding administrative law judge concluded that the Williams rates were "just and reasonable" within the meaning of the Interstate Commerce Act, 49 U.S.C. § 1(5), and a three-commissioner division of the ICC subsequently adopted in full the administrative law judge's findings. *See* 355 I.C.C. 102 (1975).[2] The full ICC then reopened the proceedings for reconsideration "because of the relative dearth of precedent concerning petroleum pipeline rates, and in view of the substantial sums of money at issue." 355 I.C.C. 479, 481 (1976). Upon reconsideration, the full ICC affirmed the division's decision, ruling that "[c]onsiderations of consistency and fairness require that we adhere to our previously recognized criteria in investigating the rates of particular pipelines," 355 I.C.C. at 484, and that a pending rulemaking was "the [proper] proceeding for considering a change" in the methods

1. Williams Pipe Line Company formerly did business as Williams Brothers Pipe Line Company. *See* 355 I.C.C. 479 (1976).

2. Under 49 U.S.C. § 17(1), (2), the ICC may "divide [its] members ... into as many divisions (each to consist of not less than three members) as it may deem necessary" and "direct that any of its work ... be assigned or referred to any division ...."

for valuating the rate base and for determining the proper rates of return for oil pipelines. *See* 355 I.C.C. at 485, 487.

Petitioners then sought judicial review in this court. In 1977, during the pendency of the appeal, Congress transferred regulatory authority over oil pipelines to the newly created Federal Energy Regulatory Commission (FERC).[3] In 1978, this court remanded the case to FERC for reconsideration, in order "to avail ourselves of some additional expertise before we plunge into this new and difficult area [of oil pipeline regulation], and to allow [FERC] to attempt for itself to build a viable modern precedent for use in future cases that not only reaches the right result, but does so by way of ratemaking criteria free of the problems that appear to exist in the ICC's approach." *Farmers Union Central Exchange v. FERC*, 584 F.2d at 421 (*Farmers Union I*). While at that time this court expressed "unease with the ICC's findings regarding rate base, rate of return, and depreciation costs," *id.*, based as they were upon "weak and outmoded ... products of a bygone era of ratemaking,"[4] *id.* at 418, "[w]hat clinch[ed] our decision to remand [was] the fact that the agency *now* charged with [ratemaking] responsibility, FERC, ha[d] requested a remand so that it may begin its regulatory duties in this area with a clean slate," *id.* at 421. Accordingly, we remanded so that FERC could conduct a fresh and searching inquiry into the proper ratemaking methods to be applied to oil pipelines.

In February 1979, after Williams had filed other new rate changes, FERC reopened the remanded case, and assigned an administrative law judge (ALJ) to hold hearings on the consolidated cases.[5] At the prehearing conference, the ALJ bifurcated the proceedings. Phase I was to devise generic principles for the setting of just and reasonable oil pipeline rates. Phase II would apply those principles to the *Williams* case in particular.[6] After seventy-six days of hearings in Phase I, FERC directed the ALJ to omit an initial decision and to certify the record directly to the Commission, and instructed the parties to submit briefs directly to the Commission.[7] FERC heard oral argument on June 30, 1980. Almost a year then passed without a FERC decision. Accordingly, Farmers Union Central Exchange (Farmers Union) filed a motion in this court to compel agency action, which we dismissed upon receiving assurances from FERC counsel that a decision was forthcoming imminent-

3. Department of Energy Organization Act, Pub.L. No. 95-91, § 402(b), 91 Stat. 584 (1977) (codified at 42 U.S.C. § 7172(b)), *effectuated*, Exec.Order No. 12,009, 42 Fed.Reg. 46,267 (Sept. 13, 1977), *implemented*, 42 Fed.Reg. 55,-534 (Oct. 17, 1977).

4. The ICC developed its oil pipeline rate methodology in the early 1940s. In *Farmers Union I*, this court found "significant changes in [both] the relevant *legal* environment since the ICC's 1940's decisions [and] important *economic* transformations." 584 F.2d at 414 (emphasis in original).

More specifically, we found that the ICC methodology—which attempts to arrive at a valuation rate base—was formulated in an era during which the Supreme Court *required* ratemaking based upon the "fair value" of the enterprise's capital. *See, e.g., Missouri ex rel. Southwestern Bell Tel. Co. v. Missori Pub. Serv. Comm'n*, 262 U.S. 276, 43 S.Ct. 544, 67 L.Ed. 981 (1923); *Smyth v. Ames*, 169 U.S. 466, 18 S.Ct. 418, 42 L.Ed. 819 (1898). In 1944, however, "the Supreme Court decisively reversed its field and became openly critical of talismanic reliance on 'fair value.'" *Farmers Union I*, 584 F.2d at 414 (citing *FPC v. Hope Natural Gas Co.*, 320 U.S. 591, 601, 64 S.Ct. 281, 287, 88 L.Ed. 333 (1944)).

Furthermore, we found in *Farmers Union I* that the economic conditions facing the oil pipeline industry had changed dramatically since the days when the ICC formulated its ratemaking methods. In contrast to the 1940s, "the modern onslaught of inflation, petroleum shortages, and reliance on imports, as well as the maturing of the industry itself" all signaled the need to reevaluate the propriety of the old ICC methodology. *Id.* at 416.

5. *See Williams Pipe Line Co.*, 6 FERC (CCH) ¶ 61,187 (Feb. 23, 1979).

6. *See* Invitation to Submit Comments on Ratemaking Principles for Oil Pipeline Rate Cases (April 11, 1979), *reprinted in* Joint Appendix (J.A.) at 240.

7. *See* 10 FERC (CCH) ¶ 61,023 (January 9, 1980).

ly.[8] Three months later, however, in October 1981, FERC ordered a reargument by the parties on November 19, 1981.[9]

Eight months after reargument, FERC had still failed to issue a decision. Upon petition from Farmers Union, the district court, finding that FERC had abrogated its statutory responsibilities under both the Interstate Commerce Act[10] and the Administrative Procedure Act,[11] ordered FERC to issue a decision within sixty days.[12] This court then stayed the district court's order so that FERC would be allowed until November 30, 1982 to issue its decision.[13]

On November 30, FERC issued Opinion No. 154, the subject of this appeal. *See* 21 FERC (CCH) ¶ 61,260 (Nov. 30, 1982). The Department of Justice, representing the United States as statutory respondent under 28 U.S.C. §§ 2344, 2348, joined petitioners in seeking reversal of the FERC opinion.

II. The FERC Opinion

FERC heralded its Opinion No. 154 (the *Williams* opinion) as "the longest and most elaborate" decision it had ever issued.[14] The *Williams* opinion announces FERC's intended approach to future oil pipeline ratemaking; thus it is of great importance to oil producers, refiners, and pipeline owners.

FERC's essential conclusion in *Williams* is that ratemaking for oil pipelines should serve only "to restrain gross overreaching and unconscionable gouging"[15] in order to keep rates within the zone of "commercial reasonableness," not "public utility reasonableness."[16] As FERC said in a related order issued the same day as *Williams:*

> *Williams* says that oil pipeline rate regulation should be relatively unobtrusive. It finds competition (both actual and potential) a far more potent force in this industry than in the others we regulate. Accordingly, it proposes to rely in the main on market forces. It views oil pipeline rate regulation as a modest supplement to rather than a pervasive substitute for the market. The supplement, *Williams* tells us, is in the nature of a check on gross abuse.

Trans Alaska Pipeline System, 21 FERC (CCH) ¶ 61,092, at 61,285 (Nov. 30, 1982). The following summary describes how FERC reached that conclusion, and how it translated that conclusion into a particular ratemaking methodology.

A. *The Congressional Purpose in Mandating "Just and Reasonable" Oil Pipeline Rates*

In 1906, Congress adopted the Lodge Amendment to the Hepburn Act, which ex-

8. *See Farmers Union Cent. Exch. v. FERC*, No. 76–2138 (D.C.Cir. July 28, 1981). Over five years ago, in deciding initially to remand this case to FERC, "we rel[ied] on assurances from counsel for FERC that the agency will move this case through its ratemaking procedures with dispatch." *Farmers Union I*, 584 F.2d at 422.

9. *See* 17 FERC (CCH) ¶ 61,021 (Oct. 2, 1981). The FERC explained the need for further argument on the grounds that their prior "deliberations were protracted and inconclusive," and that "[o]nly one member of the Commission that heard the argument and that held the post-argument deliberations" was still a member of FERC. *Id.* at 61,037.

10. Under 49 U.S.C. § 15(7), FERC must "give to the hearing and decision of such questions [of determining just and reasonable rates] preference over all other questions pending before it and decide the same as speedily as possible."

11. Under 5 U.S.C. § 555(b), an agency must conclude a matter presented to it "within a reasonable time." Moreover, a reviewing court shall "compel agency action unlawfully withheld or unreasonably delayed." 5 U.S.C. § 706(1).

12. *See Farmers Union Cent. Exch. v. FERC*, No. 82–2065 (D.D.C. Aug. 23, 1982) (order to issue a decision); *see also id.* 557 F.Supp. 34 (1982) (findings of fact and conclusions of law in support of denial of FERC's motion for a stay pending appeal).

13. *Farmers Union Cent. Exch. v. FERC*, No. 82–2065 (D.C.Cir. Oct. 14, 1982).

14. News Release Accompanying Opinion No. 154, *quoted in Report of the Committee on Oil Pipeline Regulation*, 4 Energy L.J. 143, 143 (1983).

15. *Williams Pipe Line Co.*, 21 FERC (CCH) ¶ 61,260, at 61,597 (Nov. 30, 1982).

16. *Id.*

tended the definition of common carrier in the Interstate Commerce Act [17] to encompass interstate oil pipelines, and, as a consequence, required pipeline rates to be "just and reasonable." [18] In *Williams,* FERC embarked on a close study of "the climate of opinion" that existed when Congress passed the Lodge Amendment. In doing so, FERC primarily examined the works of Ida Tarbell, a progressivist of the turn of the century, who has been credited with "inflam[ing] the public's long-standing hostility to the [Standard Oil] combination as nothing before had." [19] FERC concluded that the Lodge Amendment was motivated by the desire to bust the Standard Oil trust.[20]

FERC also found that in the early twentieth century the Standard Oil Company maintained its dominance over the entire American oil business by setting its pipeline rates at such extraordinarily high levels that access to the pipelines (and hence to important downstream markets) was cut off. *See* 21 FERC at 61,597. From this observation, FERC concluded that the Congress, in mandating that oil pipeline rates be "just and reasonable," intended to outlaw only *outrageously* high rates: "Prohibitive rates were a means to that end [of dominating American oil markets]. Congress wanted to forbid both the use of the means and the attainment of the end. The policy at which it fired was a policy of 'prohibitive' pricing." *Id.* In the belief that "[t]he phrase in question, 'just and reasonable,' is a high-level abstraction[,] ... a mere vessel into which meaning must be poured," *id.* at 61,594, and considering numerous differences in the reasons for the establishment of a regulatory scheme over "public utilities," such as electric companies, as opposed to "transportation companies," such as oil pipelines, *id.* at 61,591–96, FERC determined that:

> the authors of the Hepburn Act's oil pipeline provisions did not use the words "just and reasonable" in the sense in which public utility lawyers have used them since the 1940's.
>
> We think that what was meant was not "public utility reasonableness," but ordinary commercial "reasonableness." To be specific, we discern no intent to limit these carriers' rates to barebones cost. What we perceive is an effort to restrain gross overreaching and unconscionable gouging.

Id. at 61,597. Thus, on the basis of this historical survey, FERC interpreted the statutory mandate that oil pipeline rates be "just and reasonable" to require only the most lighthanded regulation, with no necessary connection between revenue recoveries and the cost of service.

B. *The Economic Context*

FERC next surveyed the changes since 1906 in the economics of the oil pipeline industry, and determined that the modern

17. Act of June 29, 1906, ch. 3591, § 1, 34 Stat. 584 (codified as amended at 49 U.S.C. § 1(1)(b)) ("The provisions of this chapter shall apply to common carriers engaged in ... [t]he transportation of oil ... by pipe line ....").

18. *See* 49 U.S.C. § 1(5). Congress recodified the Interstate Commerce Act as 49 U.S.C. § 10101 *et seq.* in 1978. Act of October 17, 1978, Pub.L. No. 95–473, 92 Stat. 1337. However, the Recodification Act excluded from the general repeal of prior statutes "those laws [that] vested functions in the Interstate Commerce Commission ... related to the transportation of oil by pipeline" and "those functions and authority [that] were transferred [to FERC] by sections 306 and 402(b) of the Department of Energy Organization Act." *Id.* § 4(c), 92 Stat. 1470. The prior statutes therefore still govern FERC's authority over oil pipeline rates.

19. B. Bringhurst, *Antitrust and Oil Monopoly: The Standard Oil Cases* 69 (1979), *quoted in Williams,* 21 FERC at 61,580. Tarbell wrote a series of nineteen articles on *The History of the Standard Oil Company* that appeared initially in McClure's Magazine in 1904. *See* I. Tarbell, *The History of the Standard Oil Co.* (D.M. Chalmers ed. 1969).

20. *See* 21 FERC at 61,582 ("Senator Henry Cabot Lodge of Massachusetts, the amendment's sponsor, made it very plain that the only purpose that he had in mind was to attack Standard Oil. He was not interested in pipelines generally.... [The] bill [was] aimed solely at Standard.").

economic environment does not manifest the same threat of monopolistic practices that bedeviled Congress in 1906.

Comparing the dollars spent in 1981 in America for petroleum products to the dollars spent in the same year for oil pipeline transportation,[21] FERC found that pipeline costs are "not very much when viewed in relation to the nation's total oil bill." [22] Further, FERC found that any savings created by lower pipeline charges would not necessarily—or even likely—be passed on to consumers. *See* 21 FERC at 61,601–02. FERC therefore concluded that "[f]rom the consumer's perspective, oil pipeline rate regulation is akin to efforts to do something about the high price of shoes by controlling the pricing of shoe laces [or] to contain the price of food by seeing to it that the price of spice is always 'just and reasonable.'" *Id.* at 61,601.

FERC also found that, from Congress' perspective in 1906, oil pipeline rates did in fact make a difference to the oil consuming public. Reviewing cost and revenue trends, FERC showed that in the past pipeline charges comprised as much as sixty-eight percent of what the oil producer received for crude oil.[23] Thus, FERC concluded that although Congress may in 1906 have reasonably been concerned about oil pipeline prices, today "[p]rohibitive oil pipeline rate structures are now a problem for the economic historian," and the "oil pipeline rate reform crusade is anachronistic ... overtaken by events so that the combatants' rhetoric is no longer in touch with reality." *Id.* at 61,606–07.

Finally, FERC found that the economic market for oil pipelines has become competitive since 1906. In contrast to the industry during the early part of this century, today "[p]rohibitive pricing has become uneconomic" [24] and "[n]o oil company (not even the largest) is wholly self-sufficient." [25] Also, FERC appeared to conclude that the significant decline in the price of pipeline transportation from 1931–1969 manifests the existence of competition in the pipeline transportation market.[26]

In light of all the foregoing considerations, FERC expressed its belief that the consumer's interest in low pipeline rates is "submicroscopic" while the real threat to the public is underinvestment in needed oil

21. *See* 21 FERC at 61,600–01. FERC excluded pipeline revenues derived from the Trans Alaska Pipeline System (TAPS)—over half the aggregate pipeline revenues—because it found it "implausible" that TAPS rates have any consumer impact and because it had "put that case to one side for individualized treatment." *Id.* at 61,600. Viewing TAPS as *sui generis,* FERC had decided to address ratemaking principles for that system in a proceeding independently of *Williams. See* Trans Alaska Pipeline Sys., 21 FERC (CCH) ¶ 61,092 (Nov. 30, 1982); Trans Alaska Pipeline Sys., 20 FERC (CCH) ¶ 61,044 (July 12, 1982).

22. 21 FERC at 61,601. Even excluding TAPS, oil pipeline charges in 1981 added up to $3.22 billion, a sum that FERC admitted was "a lot of money." *Id.*

23. FERC used 1931 data as its earliest point of reference. According to FERC, 1931 was "the first year for which we have reliable data," *id.* at 61,604, and, in any event, the "[n]umbers for 1906 ... were roughly the same as for 1931," *id.* at 61,694 n. 260.

24. *Id.* at 61,608. FERC reasoned that today pipeline companies seek to maintain their throughput at full capacity. "That objective," FERC observed , "is incompatible with the old tactic of charging *more* than the traffic would bear and move freely." *Id.* (emphasis in original).

25. *Id.* at 61,609. FERC argued that, because every oil company makes use at some time of pipelines owned by other oil companies, "few, if any, pipeline owners are able to gouge their most important customers with impunity." *Id.* Further, the big oil companies would not allow the independent pipeline owners "to steal them blind." *Id.* Finally, "since the statute bars rate discrimination, small shippers are the unintended incidental beneficiaries of the potential competition among the giants." *Id.*

26. FERC stated: "It is obvious that something has been holding these rates down. That something must be a marketplace force. The industry labels that force 'competition.' The parties have spent much time and great energy debating this matter of competition. Each set of protagonists makes valid points. This is a rather 'soft' kind of competition. It appears to be of a live and let-live kind. But this does not mean that it is not there." *Id.* at 61,608.

pipelines.[27] Accordingly, FERC set down as a guiding principle of oil pipeline ratemaking that it is "best to err on the side of liberality" because "the dangers of giving too little vastly outweigh those of giving too much." *Id.* at 61,613.

FERC then turned to apply this general principle to formulate a ratemaking methodology for oil pipelines.

C. *Rate Base*

Under the old ICC method, an arcane formula, comprised chiefly of a weighted average of original cost and cost of reproduction new,[28] was used to calculate the pipelines' "valuation rate base." [29] While admitting that "[w]ere we beginning afresh on a clean slate we might be inclined to use something different" because the ICC formula contains "anomalies and inconsistencies" that result in an inaccurate picture of the pipelines' cost of service, *id.* at 61,616, FERC nevertheless concluded that the costs of adopting another rate base formula outweighed the benefits of such a shift. It therefore chose to "adhere to the formula [it] inherited from the Interstate Commerce Commission." *Id.* at 61,632.

In doing so, FERC expressly rejected two proposed alternatives to the ICC ratemaking formula. First, the Commission eschewed original cost ratemaking in the belief that the chief advantage of such an approach—the facilitation of comparable earnings analysis—was of little use in the oil pipeline context, and that the switch to original cost alternative would create unnecessary regulatory burdens and social costs. *See infra* at 1511–18. Second, FERC rejected specific alterations to the ICC rate base formula proposed by the Association of Oil Pipe Lines because, in FERCs view, only "relatively insubstantial" amounts of money would be affected, and, in any event, the ICC's methodological

27. *Id.* at 61,613–14. Without reliance on the record or any other source, FERC simply stated that "[e]verybody agrees that the nation needs and will need more pipeline plant." *Id.* at 61,-614. No attempt was made to forecast future need for capacity or to estimate the relationship between rate of return and attraction of capital for new plant.

28. The old ICC formula weights original cost and reproduction cost according to their relative sizes, and then averages them. The resulting weighted mean is then reduced for depreciation by the "condition percent" method. Next, the result is inflated by a 6% "going concern" value. Finally, amounts said to represent the present value of the pipeline's land, rights of way and working capital are added. In algebraic terms the ICC method can be represented:

$$V = 1.06 \left[\left(\frac{R_1}{R_1 + O_1}\right) R_1 + \left(\frac{O_1}{R_1 + O_1}\right) O_1\right] (CP) + L_1 + L_S + W_1$$

Where: V = valuation rate base
R_1 = cost of reproduction new
O_1 = original cost
CP = condition percent (cost of reproduction new less depreciation divided by cost of reproduction new)
L_1 = present value of land
L_1 = present value of rights of way
W_1 = working capital

See 21 FERC at 61,696 n. 295.

29. The ICC weighting scheme finds its origins in the Supreme Court opinion in *Smyth v. Ames*, which held that "[t]he basis of all calculations as to the reasonableness of rates ... must be the fair value of the property being used ... in order to ascertain that value, the original cost of construction ... and ... the present as compared with the original cost of construction ... are all matters for consideration." 169 U.S. 466, 546–47, 18 S.Ct. 418, 433–34, 42 L.Ed. 819 (1898). Furthermore, in *St. Louis & O'Fallon, Ry. Co. v. United States*, 279 U.S. 461, 49 S.Ct. 384, 73 L.Ed. 798 (1929), the Supreme Court disapproved the ICC's attempt to rely solely on original cost ratemaking. Of course, in *FPC v. Hope Natural Gas*, 320 U.S. 591, 64 S.Ct. 281, 88 L.Ed. 333 (1944), the Supreme Court abandoned its strict disapproval of original cost ratemaking. *See supra* note 4. For a history of the ICC ratemaking formula, see Navarro & Stauffer, *The Legal History and Economic Implications of*

errors tend to compensate roughly for one another. *See infra* at 1518–21.

Thus FERC reaffirmed the ICC rate base method, admitting it to be "much too blunt or too clumsy for close work," but still finding it "pragmatic" and "usable." 21 FERC at 61,616.

D. *Rate of Return*

Quoting at length from this court's opinion in *Farmers Union I,* FERC launched its inquiry into rate of return methods from the premise that "[t]he need for reform is plain." [30] Finding "the parties' arguments ... so unhelpful and the applicable historical tradition ... so palpably deficient," FERC felt "left to [its] own devices" to fashion a new rate of return methodology.[31] It held that a proper rate of return for oil pipelines should be comprised of three elements: (1) debt service, (2) a "full compensatory suretyship premium," and (3) the "'*real*' entrepreneurial rate of return on the equity component of the valuation rate base." *See* 21 FERC at 61,644 (emphasis in original).

The first component, debt service, represents the amount needed to pay interest on the debt the pipeline has accumulated. The second component, the suretyship premium, represents the additional amount that would have been needed above actual debt service in the absence of a debt guarantee from the oil pipeline company's parent.

The third component, the "entrepreneurial" rate of return, according to FERC, "follows logically from [the] basic concept that what the historical background and contemporary public policy needs call for here is a cap on gross abuse." *Id.* at 61,645. Accordingly, FERC offered eight different measures for the "entrepreneurial" rate of return. The measures included the nominal rates of return on book equity realized over the most recent one- or five-year period for (1) the oil industry generally, (2) American industry generally, or (3) the parent company or companies, excluding pipeline operations. The remaining two measures of an entrepreneurial rate of return took the total returns (dividends plus capital gains) on a "diversified common stock portfolio" over (1) the past five years or (2) "the long run—25 years, 50 years, or more." *Id.* Under FERC's method, the pipeline would normally be permitted to choose the applicable rate of return from among these indices.

Once this rate of return is selected, it is adjusted downward "[t]o avoid overcompensation for inflation." *Id.* at 61,646. FERC's methodology subtracts from the selected rate of return the percentage by which the valuation rate base has increased during "the time period that was looked to in order to derive the appropriate nominal rate of return." [32]

This adjusted rate of return is applied not to book equity, nor to the percentage of the valuation rate base represented by the

Oil Pipeline Regulation, 2 Energy L.J. 291 (1981).

30. *Id.* at 61,636–37. FERC noted that this court had similarly criticized the ICC *rate base* methodology in strong terms. FERC downplayed this aspect of the *Farmers Union I* opinion, saying "We take a different view. We think the rate base methodology is still serviceable." *Id.* at 61,706 n. 418.

31. *Id.* at 61,644. FERC rejected adopting as a guidepost for reasonable rate of return the standard set out in a 1941 consent decree that deemed any return on equity in excess of seven percent of valuation to be an illegal rebate. *See United States v. Atlantic Refining Co.,* No. 14060 (D.D.C. Dec. 23, 1941) (consent decree), *vacated per settlement, United States v. Atlantic Refining Co.,* No. 14060 (D.D.C. Dec. 13, 1982). FERC ruled that "rebativeness has no bearing on reasonableness." 21 FERC at 61,640; *see also Mobil Alaska Pipeline Co. v. United States,* 557 F.2d 775, 786 (5th Cir.1977) (ICC order appended to opinion) ("we do not accept the 1941 consent decree as a standard of reasonableness under the Interstate Commerce Act"), *aff'd sub nom. Trans Alaska Pipeline Rate Cases,* 436 U.S. 631, 98 S.Ct. 2053, 56 L.Ed.2d 591 (1978).

32. *Id.* at 61,646. FERC noted that, without a deflator for the rate of return, the effects of inflation would be double counted in the rate base, which increases along with the cost of reproduction new, as well as in the rate of return, which includes a component to compensate for inflation and inflation risk.

proportion of equity relative to debt in the oil pipeline's overall capitalization structure. Rather, this rate is the allowed return on what FERC considers to be the "equity component of the valuation rate base"—the *entire valuation* rate base, less the *face* amount of debt. *See id.* at 61,647–48.

This method, FERC concedes, would result in "handsome rate base writeups," followed by "creamy returns on book equity." *Id.* at 61,650. FERC, however, believed that such high returns comported with its general ratemaking principles for oil pipelines: "Here we are setting ceilings that will seldom be reached in actual practice." [33] Moreover, the Commission allowed generous returns in the belief that oil pipeline equityholders were entitled to the full benefit of appreciation in their leveraged assets, *id.* at 61,649, and that the more "austere standard of fairness applied in the utility field cannot be divorced from the stringent regulatory controls on abandonment" which, FERC ruled, do not apply to oil pipelines, *id.* at 61,650.

E. *Other Matters*

FERC made three other rulings in *Williams* that are challenged in this appeal. FERC held that (1) the original cost of transferred pipeline plant—and not its purchase price—should be used in ratemaking, (2) oil pipeline rate regulation should generally take place on a systemwide, rather than point-to-point, basis and (3) the "tax normalization" method of accounting may be employed by the oil pipeline companies if they so wish.

First, FERC set down as a general rule that the "purchase price [for pipeline plant] is not entitled to any recognition at all for any ratemaking purpose." [34] There are two ways in which purchase price might have been used in oil pipeline ratemaking: (1) as a substitute for original cost in the rate base, and (2) in calculating the basis for depreciation expenses. FERC rejected the first use of purchase price because to do so would create a systemic incentive for the sale of pipeline plant and the consequent upward push on rates. *See id.* at 61,634–35. Further, to use purchase price in the rate base would contravene the principle that "a mere change in ownership should not result in an increase in the rate charged for a service if the basic service rendered itself remains unchanged." [35] FERC similarly rejected the use of purchase price as the basis from which depreciation would be computed, citing this court's disapproval in *Farmers Union I* of the practice,[36] and finding no valid justification for what it called "this nonchalant, half a loaf, split the difference" policy of using original cost in the rate base, while calculating depreciation by reference to purchase prices. *Id.* at 61,635.

Second, FERC decided to regulate oil pipeline rates on a systemwide basis. FERC maintained that the alternative—ruling on the reasonableness of particular rates on specific routes—would require cost allocation inquiries that would be "metaphysical inconclusive, and barren." *Id.*

33. *Id.* at 61,649. According to the Commission, oil pipeline regulation "can and should continue to rely far more heavily on the market" and "should continue to be peripheral to the pricing process." FERC continued, "[t]hat peripheral function relates to situations in which monopolistic pockets, short-run disequilibria, or other factors produce market prices that are grossly abusive and socially unacceptable." *Id.*

34. *Id.* at 61,636. According to FERC, exceptions to this general rule involve "situations in which the transfer of ownership promotes efficiency." *Id.* at 61,705 n. 401. On remand, *Williams* remains free to show that it falls within this exception.

35. *Id.* at 61,635 (quoting Shippers' Initial Post-Hearing Brief at 103, *reprinted in* J.A. at 3760) (emphasis omitted).

36. The ICC had calculated depreciation expenses using the purchase price of Williams' pipeline plant. *See Williams Pipe Line Co.*, 355 I.C.C. 479, 487–88 (1976). In *Farmers Union I*, however, this court found this practice to be irrational, based on blind adherence to accounting principles and subjecting rates to dramatic changes overnight once a purchase of assets intervenes. *See Farmers Union I*, 584 F.2d at 420.

at 61,651. Also, FERC believed that systemwide regulation would give freer play to competitive forces in the oil pipeline industry. FERC restricted its ruling to pipeline *systems,* in contrast to pipeline *companies.* The rates of wholly noncontiguous pipeline systems, therefore, would not be computed by averaging companywide costs. FERC further cautioned that a showing that systemwide rates discriminated against nonowners of the pipeline would trigger "strict regulatory scrutiny." *Id.*

Third, FERC permitted, but did not require, oil pipeline companies to "normalize" their accounts that reflect accelerated depreciation on equipment for tax purposes.[37] FERC permitted the use of the tax normalization method because "normalization facilitates the comparable earnings analyses basic to the determination of appropriate rates of return on oil pipeline equity investments." *Id.* at 61,656. However, because "[c]ompetitive considerations may lead some pipelines to prefer lower rates .... now in return for more later," FERC made the use of the method elective rather than compulsory. *Id.*

Finally, FERC prohibited pipelines that choose tax normalization from including the resulting tax reserve accounts in their rate bases. Otherwise, "the rate payer who has paid higher taxes reflecting normalization accounting would be paying the carriers for earnings on the tax differential even though it was the rate payer who contributed the differential in the first place." *Id.* at 61,657 (quoting *San Antonio v. United States,* 631 F.2d 831, 847 (D.C.Cir.1980)).

III. The Standard of Review

[1] The FERC order before us today is an exercise of its general ratemaking authority under 49 U.S.C. § 15(1).[38] As such, the *Williams* proceeding constitutes a rulemaking under the Administrative Procedure Act. *See* 5 U.S.C. § 551(4) (defining "rule" to include "the approval or prescription for the future of rates"). Although section 15(1) provides that the determination as to the reasonableness of rates shall be made "after full hearing," the resulting decision apparently need not be "on the record," 5 U.S.C. § 553(c), and therefore the standards for formal rulemaking do not

37. *See id.* at 61,653–57. Under the "tax normalization" method, "a regulated business accelerates its depreciation schedule for tax purposes, but figures its tax costs for ratemaking purposes as if it were paying the higher taxes required by a straight-line depreciation schedule. The difference between the two amounts is placed in a deferred tax reserve account, out of which taxes are eventually paid, but on which the business in the meantime collects interest." *Farmers Union I,* 584 F.2d at 411 n. 5.

38. We are cognizant that the FERC order did not set a particular pipeline rate, but instead remanded the *Williams* case to the ALJ to set rates in accordance with the ratemaking principles espoused in the opinion. *See* 21 FERC at 61,659; *see also supra* at 1491–92. We nevertheless conclude that this order is ripe for review.

This court has ruled many times that "[t]he test of finality for the purposes of review is ... whether [the order] imposes an obligation or denies a right with consequences sufficient to warrant review." *City of Anaheim & Riverside, Cal. v. FERC,* 692 F.2d 773, 777 (D.C.Cir.1982) (quoting *Environmental Defense Fund v. Ruckelshaus,* 439 F.2d 584, 589 n. 8 (D.C.Cir.1971)). The FERC order in *Williams* alters the legal relations among the parties. While it does not, by itself, impose a duty on the shippers to pay a particular rate or bestow a right upon Williams to charge that rate, the order certainly would have "consequences sufficient to warrant review." The order sets down ratemaking principles that would permit rates within a range significantly different from the range of rates permitted by other ratemaking schemes.

In addition, under *Abbott Laboratories v. Gardner,* 387 U.S. 136, 149, 87 S.Ct. 1507, 1515, 18 L.Ed.2d 681 (1967), we also must evaluate "the hardship to the parties of withholding consideration." In this regard, we need only remember that Williams has been charging rates subject to refund for a dozen years. Over five years ago, this court found it troubling that Williams had "already faced six years of litigation and continues to face the possibility of reparations back to 1972 should its increased rates ultimately be found unreasonable." *Farmers Union I,* 584 F.2d at 421. Accordingly, we see no reason to forestall review of the ratemaking principles developed in Phase I of the *Williams* proceeding. Otherwise, the ALJ and then the entire body of FERC would squander more time in Phase II applying what we find to be legally deficient ratemaking principles.

apply. *See United States v. Florida East Coast Railway Co.*, 410 U.S. 224, 93 S.Ct. 810, 35 L.Ed.2d 223 (1973). Accordingly, we review whether FERC's order in *Williams* was "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A).[39]

[2] Under the "arbitrary and capricious" standard, a reviewing court must conduct a "searching and careful"[40] inquiry into the record in order to assure itself that the agency has examined the relevant data and articulated a reasoned explanation for its action including a "rational connection between the facts found and the choice made." *Burlington Truck Lines v. United States*, 371 U.S. 156, 168, 83 S.Ct. 239, 246, 9 L.Ed.2d 207 (1962). As the Supreme Court recently elaborated:

> Normally, an agency rule would be arbitrary and capricious if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the prob-

39. Under the Administrative Procedure Act, a reviewing court must examine whether an agency action is supported by "substantial evidence" in any case "subject to sections 556 and 557 of [title 5] or otherwise reviewed on the record of an agency hearing provided by statute." 5 U.S.C. § 706(2)(E). In *United States v. Allegheny-Ludlum Steel Corp.*, 406 U.S. 742, 92 S.Ct. 1941, 32 L.Ed.2d 453 (1972), the Supreme Court held that the requirement of section 1(14) of the Interstate Commerce Act that the ICC issue car service rules "after hearing" was not the equivalent of a requirement that such rules be made "on the record after opportunity for an agency hearing," 5 U.S.C. § 553(c), and, consequently, that the trappings of formal proceedings, *id.* §§ 556, 557, need not be followed. *See also United States v. Florida E. Coast Ry. Co.*, 410 U.S. 224, 93 S.Ct. 810, 35 L.Ed.2d 223 (1973). Based upon this holding, this court, speaking *per curiam* and in a footnote, determined that the requirement of section 15(1) of the Interstate Commerce Act that the ICC determine whether rates, classifications or other practices are just, reasonable or nondiscriminatory only "after full hearing" is similarly not equivalent to the requirement of a decision "on the record." *Asphalt Roofing Mfrs. Ass'n v. ICC*, 567 F.2d 994, 1002 n. 5 (D.C.Cir.1977) (per curiam); *cf. Food Marketing Institute v. ICC*, 587 F.2d 1285, 1289 (D.C.Cir.1978) (similar analysis of § 316(g) rulemaking for motor common carrier ratemaking). Further, from this finding the court also concluded that the "substantial evidence" standard did not apply to such ICC determinations. *Asphalt Roofing*, 567 F.2d at 1002 n. 5. The parties, apparently following the comments in *Asphalt Roofing*, have not argued that the substantial evidence test applies in this case.

We note, however, that the substantial evidence test applies not only to agency proceedings subject to the formal requirements of sections 556 and 557 of title 5; in addition, the test should be employed whenever judicial review is "on the record of an agency hearing provided by statute." 5 U.S.C. § 706(2)(E). Section 15(1) of title 49 requires FERC to hold a "full hearing" before issuing orders of the sort issued in *Williams*. Also, we conduct this review pursuant to 28 U.S.C. § 2347, *see Earth Resources Co. v. FERC*, 628 F.2d 234 (D.C.Cir.1980), which requires review "on the record of the pleadings, evidence adduced, and proceedings before the agency, when the agency has held a hearing ...." Thus, without addressing the question whether the *Allegheny-Ludlum* holding should apply when the statutory requirement is for a "full hearing," 49 U.S.C. § 15(1), rather than simply a "hearing," 49 U.S.C. § 1(14), a question left open in *Florida East Coast Railway*, 410 U.S. at 243, 93 S.Ct. at 820, we are still troubled by *Asphalt Roofing*'s truncated treatment of the question whether the substantial evidence test should be applied in the review of orders issued pursuant to 49 U.S.C. § 15(1). The relevant statutes suggest to us that our review is "on the record of an agency hearing provided by statute." 5 U.S.C. § 706(2)(E). Furthermore, in *Allegheny-Ludlum* itself, the Supreme Court, while not expressly invoking APA section 706(2)(E), nevertheless discussed for ten pages why the ICC's decision "was supported by substantial evidence," despite its holding that the requirements of APA sections 556 and 557 were inapplicable. *See* 406 U.S. at 746–56, 92 S.Ct. at 1945–50.

Accordingly, we are reluctant to endorse the *Asphalt Roofing* footnote. On the other hand, because (1) the parties did not fully address the question of the proper standard of review, (2) the difference, if any, between the "arbitrary and capricious" standard and the "substantial evidence" standard is limited, especially in a regulatory field as empirically-based as ratemaking, *see Ethyl Corp. v. EPA*, 541 F.2d 1, 36–37 & n. 79 (D.C.Cir.) (en banc), *cert. denied sub nom. E.I. DuPont de Nemours & Co. v. EPA*, 426 U.S. 941, 96 S.Ct. 2663, 49 L.Ed.2d 394 (1976), and (3) the "arbitrary and capricious" standard is not satisfied in any event, we need not resolve the issue in this case. *See Dana Corp. v. ICC*, 703 F.2d 1297, 1301 (D.C.Cir.1983).

40. *Small Refiners Lead Phase-Down Task Force v. EPA*, 705 F.2d 506, 520 (D.C.Cir.1983) (quoting *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 416, 91 S.Ct. 814, 823, 28 L.Ed.2d 136 (1971)).

> lem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.

Motor Vehicles Manufacturers Association v. State Farm Mutual Automobile Insurance Co., — U.S. —, 103 S.Ct. 2856, 2867, 77 L.Ed.2d 443 (1983). Most fundamentally, our task is "to ensure that the [agency] engaged in reasoned decisionmaking." *International Ladies' Garment Workers' Union v. Donovan*, 722 F.2d 795, 815 (D.C.Cir.1983); *see American Gas Association v. FPC*, 567 F.2d 1016, 1029–30 (D.C.Cir.1977), *cert. denied*, 435 U.S. 907, 98 S.Ct. 1457, 55 L.Ed.2d 499 (1978).

[3] Agency decisionmaking, of course, must be more than "reasoned" in light of the record. It must also be true to the congressional mandate from which it derives authority. Therefore, a reviewing court must be satisfied that the agency's reasons and actions "do not deviate from or ignore the ascertainable legislative intent." *Ethyl Corp. v. EPA*, 541 F.2d 1, 36 (D.C. Cir.) (en banc) (quoting *Greater Boston Television Corp. v. FCC*, 444 F.2d 841 (D.C.Cir.1970)), *cert. denied sub nom. E.I. Du Pont de Nemours & Co. v. EPA*, 426 U.S. 941, 96 S.Ct. 2662, 49 L.Ed.2d 394 (1976); *see* 5 U.S.C. § 706(2)(C) ("The reviewing court shall ... hold unlawful and set aside agency action ... in excess of statutory jurisdiction, authority, or limitations."). Beyond that, however, we are not at liberty to substitute our own judgment in the place of the agency's. In this sense, the "arbitrary and capricious" standard is narrow and restricted. *See Small Refiner Lead Phase-Down Task Force*, 705 F.2d at 520–21.

[4] The "arbitrary and capricious" standard demands that an agency give a reasoned justification for its decision to alter an existing regulatory scheme. *See Motor Vehicle Manufacturers Association*, 103 S.Ct. at 2866. We are well aware that changed circumstances may justify the revision of regulatory standards over time. Indeed, our initial remand in *Farmers Union I* was impelled by our suspicion that prior ICC methods might no longer be useful. *See* 584 F.2d at 412–20. To acknowledge that circumstances have changed, however, is not to eliminate the burden upon the agency to set forth a reasoned analysis in support of the particular changes finally adopted. Furthermore, in light of the purpose of the remand in *Farmers Union I*—"to build a viable modern precedent for use in future cases that not only reaches the right result, but does so by way of ratemaking criteria free of the problems that appear to exist in the ICC's approach" [41]—we believe that FERC's adherence to the old ICC rate base method also demands a reasoned justification. *Cf. Food Marketing Institute v. ICC*, 587 F.2d 1285, 1290 (D.C.Cir.1978) (courts reviewing agency action after remand should ensure that "genuine reconsideration of the issues" took place).

Thus we take up the task of reviewing the *Williams* opinion with two objectives in mind. First, we will examine whether FERC's actions and supporting rationale comport with its delegated authority to set oil pipeline rates at a "just and reasonable" level. Second, we then will scrutinize the *Williams* opinion to see whether FERC considered all relevant factors and demonstrated a reasonable basis for its decision. *See Sierra Club v. Costle*, 657 F.2d 298, 323 (D.C.Cir.1981).

IV. FERC's Action Contravenes the Statutory Directive to Determine Whether Rates Are "Just and Reasonable"

Under section 1(5) of the Interstate Commerce Act, all rates charged for oil pipeline transportation "shall be just and reasonable." Similarly, under section 15(1), Congress authorized FERC "to determine and prescribe what will be the just and reasonable" rate for such transportation services.

41. *Farmers Union I*, 584 F.2d at 421.

We find that FERC in the *Williams* decision failed to satisfy that statutory mandate. We also find unconvincing FERC's attempts at justifying its novel interpretation of "just and reasonable" rates. First, FERC sought to establish maximum rate ceilings at a level far above the "zone of reasonableness" required by the statute. Second, FERC failed to specify in any detail how "non-cost" factors, such as the need to stimulate additional pipeline capacity, might justify its decision to set maximum rates at such high levels. Third, the legislative history of the Hepburn Act betrays FERC's belief that the "climate of opinion" in 1906 shaped a congressional purpose to impose only very lighthanded rate regulation on the oil pipelines. Finally, FERC's reliance on its findings that oil pipeline rate regulation is (1) unimportant to consumers at large, and (2) best left to "regulation" by market forces in most cases, constitutes an improper departure from the basic congressional mandate to ensure that oil pipeline charges are "just and reasonable."

[5] Congress delegated ratemaking authority to FERC in broad terms. Accordingly, "the breadth and complexity of the Commission's responsibilities demand that it be given every reasonable opportunity to formulate methods of regulation appropriate for the solution of its intensely practical difficulties." *Permian Basin Area Rate Cases*, 390 U.S. 747, 790, 88 S.Ct. 1344, 1372, 20 L.Ed.2d 312 (1968). In arriving at a just and reasonable rate, "no single method need be followed." *Wisconsin v. FPC*, 373 U.S. 294, 309, 83 S.Ct. 1266, 1274, 10 L.Ed.2d 357 (1963). Indeed, and more specifically, FERC is not required "to adhere 'rigidly to a cost-based determination of rates, much less to one that base[s] each producer's rates on his own costs.'" *FERC v. Pennzoil Producing Co.*, 439 U.S. 508, 517, 99 S.Ct. 765, 771, 58 L.Ed.2d 773 (1979) (quoting *Mobil Oil Corp. v. FPC*, 417 U.S. 283, 308, 94 S.Ct. 2328, 2346, 41 L.Ed.2d 72 (1974)).

On the other hand, the delegation of the power to prescribe rates is accompanied by standards to which FERC, as delegate, must conform. As Judge Leventhal observed, "Congress has been willing to delegate its legislative powers broadly—and courts have upheld such delegation—because there is court review to assure that the agency exercises the delegated power within statutory limits...." *Ethyl Corp. v. EPA*, 541 F.2d at 68 (Leventhal, J., concurring). Surely, FERC enjoys substantial discretion in its ratemaking determinations; but, by the same token, this discretion must be bridled in accordance with the statutory mandate that the resulting rates be "just and reasonable." *See FPC v. Texaco, Inc.*, 417 U.S. 380, 394, 94 S.Ct. 2315, 2324, 41 L.Ed.2d 141 (1974); *Atchison, Topeka & Sante Fe Railway Co. v. Wichita Board of Trade*, 412 U.S. 800, 806, 93 S.Ct. 2367, 2374, 37 L.Ed.2d 350 (1973).

The "just and reasonable" statutory standard is, of course, not very precise, and does not unduly confine FERC's ratemaking authority. As this court once explained, "[t]he necessity for an anchor to 'hold the terms "just and reasonable" to some recognizable meaning' is plain, for the words themselves have no intrinsic meaning applicable alike to all situations." *City of Chicago v. FPC*, 458 F.2d 731, 750 (D.C.Cir.1971) (quoting *City of Detroit v. FPC*, 230 F.2d 810, 815 (D.C.Cir.1955)), *cert. denied*, 405 U.S. 1074, 92 S.Ct. 1495, 31 L.Ed.2d 808 (1972). We therefore seek guidance from basic principles developed by the judiciary in furtherance of its task of assuring that ratemaking agencies conform to their duty to prescribe just and reasonable rates.[42]

42. During the Hepburn Act debates, Senator Elkins observed: "The words 'just and reasonable' furnish a standard by which the Commission is to be guided or to which it must adhere.... This standard is vague, but still it is a standard because it is a thing judicially ascertainable which the courts have always recognized it was their right and duty to ascertain in proper cases." *The Economic Regulation of Business and Industry: A Legislative History of U.S. Regulatory Agencies* 881 (B. Schwartz ed. 1973) (hereinafter "Legislative History"); *see also id.* at 857 (remarks of Senator Clay) ("We delegate to the Commission the right to act. We fix a standard

[6] We begin from this basic principle, well established by decades of judicial review of agency determinations of "just and reasonable" rates: an agency may issue, and courts are without authority to invalidate, rate orders that fall within a "zone of reasonableness," where rates are neither "less than compensatory" nor "excessive." *See, e.g., FERC v. Pennzoil Producing Co.*, 439 U.S. at 517, 99 S.Ct. at 771; *Permian Basin Area Rate Cases*, 390 U.S. at 797, 88 S.Ct. at 1375.

> When the inquiry is on whether the rate is reasonable to a producer, the underlying focus of concern is on the question of whether it is *high* enough to both maintain the producer's credit and attract capital. To do this, it must, *inter alia*, yield to equity owners a return "commensurate with returns on investments in other enterprises having corresponding risks," as well as cover the cost of debt and other expenses.... [W]hen the inquiry is whether a given rate is just and reasonable to the consumer, the underlying concern is whether it is *low* enough so that exploitation by the [regulated business] is prevented.

City of Chicago, 458 F.2d at 750–51 (emphasis in original). The "zone of reasonableness" is delineated by striking a fair balance between the financial interests of the regulated company and "the relevant public interests, both existing and foreseeable." *Permian Basin Area Rate Cases*, 390 U.S. at 792, 88 S.Ct. at 1373; *see, e.g., FERC v. Pennzoil Products Co.*, 439 U.S. at 519, 99 S.Ct. at 772; *Trans Alaska Pipeline Rate Cases*, 436 U.S. 631, 653, 98 S.Ct. 2053, 2066, 56 L.Ed.2d 591 (1978).

[7] The delineation of the "zone of reasonableness" in a particular case may, of course, involve a complex inquiry into a myriad of factors. Because the relevant costs, including the cost of capital, often offer the principal points of reference for whether the resulting rate is "less than compensatory" or "excessive," the most useful and reliable starting point for rate regulation is an inquiry into costs. *See, e.g., Mobil Oil Corp. v. FPC*, 417 U.S. at 305–06, 316, 94 S.Ct. at 2344–45, 2349; *FPC v. Hope Natural Gas Co.*, 320 U.S. at 602–03, 64 S.Ct. at 287–88. At the same time, non-cost factors may legitimate a departure from a rigid cost-based approach. *See, e.g., Pennzoil Products*, 439 U.S. at 518, 99 S.Ct. at 771; *Mobil Oil*, 417 U.S. at 308, 94 S.Ct. at 2345. The mere invocation of a non-cost factor, however, does not alleviate a reviewing court of its duty to assure itself that the Commission has given reasoned consideration to each of the pertinent factors. On the contrary, "each deviation from cost-based pricing [must be] found not to be unreasonable and to be consistent with the Commission's [statutory] responsibility." *Mobil Oil*, 417 U.S. at 308, 94 S.Ct. at 2346; *see Pennzoil Products*, 439 U.S. at 518, 99 S.Ct. at 772. Thus, when FERC chooses to refer to non-cost factors in ratesetting, it must specify the nature of the relevant non-cost factor and offer a reasoned explanation of how the factor justifies the resulting rates.

[8] In *Williams*, FERC departed from these established ratemaking principles. At the outset, we cannot square FERC's statutory responsibilities with its own, quite novel principle that oil pipeline ratemaking should protect against only "*egregious* exploitation and *gross* abuse," 21 FERC at 61,649 (emphasis added), "*gross* overreaching and *unconscionable* gouging," *id.* at 61,597 (emphasis added). Rates that permit exploitation, abuse, overreaching or gouging are *by themselves* not "just and reasonable." FERC itself overreaches the bounds of its statutory authority when it permits such oil pipeline rates, so long as they are not "egregious," "gross" or "unconscionable." Ratemaking principles that permit "profits too huge to be reconcilable with the legislative command" cannot produce just and reasonable

for the Commission—that the rate must be reasonable and just—and we say to the Commission, 'You must not go beyond that standard.' ").

rates. *Public Service Commission v. FERC,* 589 F.2d 542, 550 (D.C.Cir.1978).

We recognize, of course, that "non-cost" factors may play a legitimate rôle in the setting of just and reasonable rates. In *Williams,* FERC invoked the need to stimulate additional oil pipeline capacity as one reason for setting maximum rates at such high levels. *See supra* at 1494–95. As this court has observed before, "[r]eliance on non-cost factors has been endorsed by the courts primarily in recognition of the need to stimulate new supplies." *Consumers Union v. FPC,* 510 F.2d 656, 660 (D.C. Cir.1974) (footnote omitted) (discussing *Permian* and *Mobil Oil*). However, in this case FERC failed to forecast or otherwise estimate the dimensions of the need for additional capacity, and did not even attempt to calibrate the relationship between increased rates and the attraction of new capital. *See supra* note 27.

In the absence of such a reasoned inquiry, we cannot countenance FERC's approval of oil pipeline rates which, by FERC's own admission, ensure "creamy returns" to the carriers, 21 FERC at 61,650, and are "far more generous than those [rates] that [FERC] or other regulators give elsewhere," *id.* at 61,646. In a similar context, this court explained:

> If the Commission contemplates increasing rates for the purpose of encouraging exploration and development ... it must see to it that the increase is in fact needed, and is no more than is needed, for the purpose. Further than this we think the Commission cannot go without additional authority from Congress.

City of Detroit v. FPC, 230 F.2d 810, 817 (D.C.Cir.1955), *cert. denied sub nom. Panhandle Eastern Pipe Line Co. v. City of Detroit,* 352 U.S. 829, 77 S.Ct. 34, 1 L.Ed.2d 48 (1956); *see San Antonio v. United States,* 631 F.2d 831, 851–52 (D.C. Cir.1980) (ICC action, adding seven percent above costs in setting rates, is arbitrary and capricious because it lacks "adequate justification for [the] choice of a particular increment above fully allocated costs"), *rev'd on other grounds sub nom. Burlington Northern, Inc. v. United States,* 459 U.S. 1229, 103 S.Ct. 1238, 75 L.Ed.2d 471 (1983); *Public Service Commission v. FERC,* 589 F.2d at 553–54 (citing cases). In the *Williams* proceeding, FERC "made no attempt at all to verify the accuracy of its prediction that granting pipeline [rate] incentives will spur increased investment." *City of Charlottesville v. FERC,* 661 F.2d 945, 955 (D.C.Cir.1981) (Wald, J., concurring). Indeed, FERC here failed to make its prediction with any specificity beyond the bald statement that "[e]verybody agrees that the nation needs and will need more pipeline plant." 21 FERC at 61,614.

FERC also found another basis for its new and liberal interpretation of "just and reasonable" rates in what it labeled the "climate of opinion," prevalent in the early twentieth century, in favor of dismantling the Standard Oil trust. FERC believed that Congress initiated rate regulation of the oil pipelines out of a desire to eliminate prohibitive pricing practices by the Standard Oil Company, and from this belief concluded that the "just and reasonable" standard requires far less stringent rate regulation than the same statutory standard requires for other regulated industries, including those industries once regulated under the very same section of the Interstate Commerce Act. *See supra* at 1492–93; 21 FERC at 61,578–99; FERC Brief at 29–44. Accordingly, FERC felt that the Interstate Commerce Act permitted ratesetting at levels so high that they would "seldom be reached in actual practice." 21 FERC at 61,649. We cannot endorse this interpretation of FERC's statutory duties.

In some circumstances, the contrasting or changing characteristics of regulated industries may justify the agency's decision to take a new approach to the determination of "just and reasonable" rates. *See, e.g., Permian Basin Area Rate Cases, supra.* We find, however, that in this case FERC has not merely developed a new method for determining whether a rate is "just and reasonable"; rather, it has abdicated its statutory responsibilities in favor of a method that, by its own description, guards against only grossly exploitative pricing practices. *See supra* at 1502. FERC wrongly assumed that the statutory phrase " 'just and reasonable' ... is a mere vessel into which meaning must be poured." 21 FERC at 61,594. While we agree that the statutory phrase sets down a flexible standard, an agency may not supersede well established judicial interpretation that structures administrative discretion under the statute. An agency may not "pour any meaning" it desires into the statute. To accept FERC's view of its own latitude would be tantamount to holding that *no* standards accompany the delegation of ratemaking authority to FERC, and we think such a delegation would be impermissible. From the outset, however, we noted that the statute prohibits more than grossly abusive rates.

Furthermore, an examination of the relevant legislative history reveals that Congress intended to subject oil pipelines to the same general ratemaking principles that applied to other common carriers. The Hepburn Act of 1906 was enacted primarily to remedy defects in the original Interstate Commerce Act of 1887. Although the Act as passed in 1887 provided that "[a]ll charges made for any service rendered in the transportation of passengers or property ... shall be reasonable and just; and every unjust and unreasonable charge for such service is prohibited and declared to be unlawful," 24 Stat. 379, the Supreme Court ten years later held that the ICC lacked authority to prescribe rates, but instead could only declare whether charges set by the carriers were unreasonable or unjust in the context of granting reparations to injured shippers. *ICC v. Cincinnati, New Orleans & Texas Pacific Railway Co.*, 167 U.S. 479, 17 S.Ct. 896, 42 L.Ed. 243 (1897) (the *Maximum Rate Case*); *see Trans Alaska Pipeline Rate Cases*, 436 U.S. at 639, 98 S.Ct. at 2059. The Hepburn Act remedied this shortcoming by granting to the ICC express authority to set maximum rates to be observed by carriers prospectively. *See* 49 U.S.C. § 15. In this context, the Congress, by amendment originating in the Senate, adopted the Lodge Amendment, which conferred common carrier status upon oil pipelines, thus subjecting oil pipelines to the ratemaking jurisdiction of the ICC.

It appears evident from the floor debates that oil pipelines were intended to be treated in the same fashion as other common carriers under the Interstate Commerce Act. "It appears to me," Senator Lodge said in support of his amendment, "that it is a plain injustice to the railroads of this country to put them all under the Interstate Commerce Commission, to make the most drastic regulations to control and supervise them, and leave out one of the greatest article of interstate commerce [i.e., oil transported through pipelines]." 40 Cong.Rec. 6365 (1906). "This amendment," he said a few days later, "makes the pipelines and the oil companies subject to all the provisions to the bill." *Id.* at 7009. Thus Congress chose consciously to regulate oil pipeline rates in accordance with the same principles devised contemporaneously in other provisions of the Hepburn Act, which, as we noted above, augmented the ICC's authority over all common carriers.

The legislative history furthermore evidences that the "just and reasonable" rates prescribed by the Congress in 1906 meant more than a ban on prohibitive pricing. Congress primarily wanted to authorize the ICC to set enforceable rates that would permit the carriers to earn a fair return, while protecting the shippers and the public from economic harm. As Senator Elkins put it:

> [T]he present laws are executed and they are being enforced vigorously; but this, as I have said before, is no reason why there should not be the strictest regulation against excessive rates and abuses of every kind .... The aim of wise statesmanship should be to so adjust matters by proper legislation that the shipper and producer can make a fair profit on their products, the [carrier] a fair return for the service rendered, and

the consumer get what he buys at a fair price.

Legislative History at 879. Discussions of what constituted a just and reasonable rate focused not upon prohibitive pricing practices, but instead on setting a fair price that would be neither excessive to the shipper nor threatening to the financial integrity of the carrier. *See, e.g., id.* at 854 (remarks of Senator Clay) (Under the "just and reasonable" standard, ICC must determine "whether or not the rate so fixed is confiscatory or not compensatory for the services performed."); *id.* at 859 (remarks of Senator Clay) ("Can the [ICC's] power be exercised either to oppress the roads or the shippers? Can this power be exercised either to wrong or injure the carrier or the shipper? .... Can the Commission fix a rate that would prevent the railroads from making operating expenses and denying to them just compensation for the services performed? I answer, 'No.' ... The object and purpose of this legislation is to make [carriers] do right and to make shippers do right."); *id.* at 880 (remarks of Senator Culberson) ("[T]he Supreme Court has held that the words 'just and reasonable' have relation both to the rights of the public and of the companies, and that the rate must be fixed with reference to the rights of each.").

Additional evidence of congressional intent can be found by examining the decision to delete from the original Hepburn bill the requirement that rates be "fairly remunerative" in addition to "just and reasonable." After quoting the definition of "remunerative" found in a contemporary Standard Dictionary—"Affording, or tending to afford, ample remuneration; giving good or sufficient return; paying; profitable"—Senator Culberson questioned whether the additional phrase served any useful purpose, and worried whether the phrase might "have exclusive reference to the interests of the companies," thus "liberalizing the rule [of 'just and reasonable' rates] rather than narrowing it or keeping it where it is under the common law and under the decisions of the Supreme Court." *See id.* at 880–81. As Senator LaFollette later elaborated:

> The phrase "just and reasonable" has a clear and well defined meaning in the law. It measures what the public must pay. It measures all that the carrier is entitled to receive....
>
> The words "fairly remunerative" are added. What office are they to serve? For what purpose are they introduced? Are they to add something to the rate? If that is the purpose, they should be stricken from the bill. The carrier is entitled to nothing more than a just and reasonable rate. If the words "and fairly remunerative" are not designed to increase the rate, then they serve no purpose and should go out.

Id. at 906. Eventually, the phrase was deleted from the bill, in part because the "fairly remunerative" standard was thought to add nothing to the already established "just and reasonable" standard,[43] and in part out of a fear that the courts might wrongly interpret the phrase to permit *higher* rates.[44]

43. *See, e.g., id.* at 643 (remarks of Representative Adamson) ("The words 'fairly remunerative' ... did not change the sense [of 'just and reasonable'] a particle."); *id.* at 864 (remarks of Senator Carmack) ("I do not like the words 'fairly remunerative' in this bill. They are at best a needless addition to the words of the present law, which may tend to confuse and mystify its meaning."); *id.* at 881 (remarks of Senator Elkins) ("It is difficult to say what the words 'fairly remunerative' mean; whether they lay down a standard by which the courts can determine anything.... The words 'just and reasonable' furnish a standard by which the Commission is to be guided or to which it must adhere."); *id.* at 975 (remarks of Representative Richardson) (discussing conference report) ("Those words 'fairly remunerative,' that were indefinite and without legal definition or construction, have gone out by Senate amendment 31.").

44. *See, e.g., id.* at 864 (remarks of Senator Carmack) ("The very fact that ['fairly remunerative'] ha[s] been carefully added may give [the phrase] more than [its] proper significance. It will be an indication that Congress was not satisfied with the words 'just and reasonable,' which have received judicial interpretation."); *id.* at 880–81 (remarks of Senator Culberson) ("Now the committee, or at least the bill—whoever may be responsible for it—adds the words

If the Congress believed that "fairly remunerative" rates were at best the same as "just and reasonable" rates, and if there was a prevalent concern that "fairly remunerative" rates could *exceed* the proper ratemaking standard applicable to common carriers, we then find it highly unlikely that Congress aimed its ratemaking provisions solely toward preventing extraordinary exploitation or prohibitive pricing practices. After all, no "fairly remunerative" rate would rise to the level of egregious exploitation. How, then, could a Congress, worried that the "fairly remunerative" standard might permit excessive rates, at the same time be willing to permit rates at any level so long as they are not *grossly abusive?* We are convinced that the Congress did not intend such a result.

While we recognize that the legislative history of the Lodge Amendment contains a number of references to the Standard Oil Company,[45] we do not believe that those references somehow alter the meaning of the language in the ratemaking provisions of the Interstate Commerce Act as applied to oil pipelines. First, the nature of the industry to be regulated is a natural topic for discussion during debate, and at that time Standard Oil dominated the industry. Second, there is nothing else in the legislative history to suggest that the Congress intended the meaning of "just and reasonable" to be transfigured when applied to oil pipelines.[46] To rely too heavily on the popular "climate of opinion" in 1906 as evidence of the congressional intent underlying the Interstate Commerce Act would be

'fairly remunerative' .... Now, what I desire to ask the Senator is this: First, what is the purpose of using the additional words 'fairly remunerative,' and if, in his judgment, those words do not have the effect of liberalizing the rule rather than of narrowing it or keeping it where it is under the common law and under the decisions of the Supreme Court, and if the words 'fairly remunerative' do not have exclusive reference to the interests of the companies? And, lastly, I will ask the Senator if he will join with some of us in striking the words 'fairly remunerative' from the bill?"); *id.* (remarks of Senator Elkins) ("I fear in the use of these words ['fairly remunerative'] we get into a wide and unknown sea.").

45. Many of the comments describe Standard Oil's lobbying efforts in opposition to regulation. *See, e.g.,* Legislative History at 915 (remarks of Senator Lodge) ("I heard within twenty-four hours after the introduction of my first amendment, on May 28, from the Standard Oil Company. A representative of that company came to see me on the following day, and represented the uselessness and the injustice of this amendment."); *id.* at 976–77 (remarks of Senator Richardson) ("He [Senator Tillman] did not; because he says he fears somebody will stamp on his forehead the letters 'S.O.'—'Standard Oil.'"); *id.* at 985 (remarks of Senator Tillman) ("I felt that the influences behind this change were sinister, and that the large number of telegrams, I will not say all of them, but a large proportion of them, had been sent here through the instrumentality and at the instance of the Standard Oil Company."). Other comments refer to Standard Oil's dominance of the oil pipeline market. *See, e.g., id.* at 916 (remarks of Senator Lodge) ("There are practically two great companies that control pipe lines engaged in interstate commerce. One is Standard Oil, which is said, roughly, to control 90 per cent. I do not know whether that is correct or not."); *id.* at 917 (remarks of Senator Lodge) ("There is an arrangement of prorating, which I do not profess to understand, but the net result is that no oil can come into the territory of New England, practically, except the Standard Oil, and that, I understand, happens also in regions of the South and the Southwest.").

46. Indeed, the evidence is to the contrary. *See, e.g., id.* at 917 (original language of Lodge Amendment) (oil pipelines "shall be considered and held to be common carriers *within the meaning and purpose of this act*") (emphasis added); *supra* at 1504 (remarks of Senator Lodge) ("This amendment makes the pipelines and the oil companies subject to *all the provisions to the bill*") (emphasis added). Furthermore, when Congress wished to exclude oil pipelines from a provision of the Hepburn Act, it did so expressly. The original prohibition against any "common carrier" transporting its own commodities was deliberately restricted to apply only to "railroads." *See, e.g.,* Legislative History at 966 (conference report); *id.* at 969 (same); *id.* at 978 (remarks of Representative Richardson) ("I do not think, Mr. Speaker, that in the attitude of a conferee I ought to yield when I thought in good judgment and common sense that a pipe line ought to be allowed to carry its own product. We made them common carriers, and that, I thought, was far enough to go."); *id.* at 985 (remarks of Senator Tillman) ("The effect of this change from 'common carrier' to 'railroad' and now to 'railroad company' is easily understood .... The words 'common carrier' embraced pipe lines. The words 'railroad companies,' of course, leaves those out.").

unwise. *See generally* Dickerson, *Statutory Interpretation: Dipping into Legislative History,* 11 Hofstra L.Rev. 1125 (1983). Indeed, the *motives* of legislators are uniformly disregarded in the pursuit for statutory meaning; it is the *purpose* or *intent* behind the statutory provision itself that is relevant. *See* 2A *Sutherland's Statutes and Statutory Construction* § 48 (C. Sands 4th ed. 1973 & 1983 Supp.). Thus, even assuming *arguendo* that it was the popular spirit of trust busting that aroused the 1906 Congress, it does not follow that Congress devised a response directed solely and narrowly toward prohibitive pricing. Congress provided that oil pipelines, as common carriers, could lawfully charge only "just and reasonable" rates; it did not enact a special antitrust or prohibitive pricing provision for oil pipelines. Whatever the historical context of the Hepburn Act, we think that FERC's statutory interpretation overlooks the broad terms of the principal source of legislative intent, the statute itself. Even if the *problem* Congress addressed was prohibitive pricing, the *solution* ultimately devised requires that oil pipeline rates be just and reasonable.

Finally, FERC believed that the changes since 1906 in the economics of oil pipelines also justified its novel interpretation of its statutory responsibilities under the Interstate Commerce Act. FERC determined that the cost of pipeline transportation, relative to the price of oil, had become so insignificant that close regulation was not required. *See supra* at 1493–95. In addition, FERC found that competition in the oil pipeline business had served to keep prices down. *See supra* at 1494. FERC therefore concluded that oil pipeline ratemaking "can and should rely far more heavily on the market" and that rate regulation should be "peripheral to the pricing process." 21 FERC at 61,649. Accordingly, in FERC's opinion, oil pipeline ratemaking should merely set "ceilings that ... will seldom be reached in actual practice."

We believe that this apologia for virtual deregulation of oil pipeline rates oversteps the proper bounds of agency discretion under the "just and reasonable" standard. First, the fact that oil prices have skyrocketed does not repeal the statutory requirement that oil pipeline rates must be just and reasonable.[47] Whether the purpose of oil pipeline rate regulation is "consumer protection" or "producer protection," [48] the statute requires meaningful rate regulation. As the ICC acknowledged, the statutory command controls, despite any dilution in direct impact on the consuming public:

> In determination of the question whether rates are lawful, we cannot attach any controlling weight to the fact that [the pipeline] or their beneficial owners [the parent companies] have seen fit to pay charges from one pocket to the other or to operate their common-carrier and industrial property in such a manner that the carrier system is virtually a plant facility of the larger producing, manufacturing, and selling industry. These facts, if they be facts, are immaterial ... whatever the relations between the pipelines and the oil companies which beneficially own them, Congress requires all rates tendered to the public by these common carriers to be just and reasonable, and no more.

47. FERC emphasized its belief that it was not "free to deregulate this [oil pipeline] industry." 21 FERC at 61,599. As we have noted above, however, FERC's ratemaking principles diverge much too seriously from the "just and reasonable" standard to be in harmony with the statutory mandate. Furthermore, ratemaking that sets charges at levels "seldom ... reached in actual practice" and which is "peripheral to the pricing process" is at best a hair's breadth from total deregulation.

48. On the one hand, FERC declared that "[o]il pipeline rate regulation is not a consumer-protection measure. It probably was never intended to be. It is and was a producer-protection measure." 21 FERC at 61,584. On the other hand, when FERC began its examination of the unimportance to the public of the cost of oil pipeline transportation, FERC stated, "we look at it through the consumer's glasses. We do so because we are ourselves consumers and because they are the people we are here to protect." *Id.* at 61,599.

Reduced Pipe Line Rates and Gathering Charges, 243 I.C.C. 115, 141 (1940). Despite recent legislative proposals to deregulate the oil pipeline industry, Congress has not as yet altered its command to FERC.[49] Accordingly, the fact that the price of oil to the ultimate consumer dwarfs the price of oil pipeline transportation "does not excuse deviation from the just and reasonable standard, for not even 'a little unlawfulness is permitted.'" *Consumers Federation of America*, 515 F.2d at 358 n. 64 (quoting *FPC v. Texaco Inc.*, 417 U.S. 380, 399, 94 S.Ct. 2315, 2327, 41 L.Ed.2d 141 (1974)).

Second, we find FERC's largely undocumented reliance on market forces[50] as the principal means of rate regulation to be similarly misplaced. It is of course elementary that market failure and the control of monopoly power are central rationales for the imposition of rate regulation. *See* S. Breyer, *Regulation and Its Reform* 15–16 (1982). As Representative Knapp expounded in 1906:

> It has been stated that rate making is the most complicated and difficult work connected with transportation. Doubtless that has been correctly stated, but whether so or not, it certainly is one of the most important. The contention that competition is a regulator of freight rates is not, in the main, tenable. That, by reason of combinations, has gradually ceased to be a controlling factor, and can not now, except in limited and exceptional cases, be depended upon, as controlling in regulating rates.

Legislative History at 677. The courts have echoed this observation, noting that

49. In 1982, Congress considered companion bills S. 1626 and H.R. 4488, which would have deregulated oil pipeline rates. The 97th Congress adjourned, however, with the bills still in committee.

50. FERC's evaluation of competition in the oil pipeline industry is not entirely clear:

> It is obvious that something has been holding these rates down. That something must be a marketplace force. The industry labels that force "competition." The parties have spent much time and great energy debating this matter of competition. Each set of protagonists makes valid points. This is a rather "soft" kind of competition. It appears to be of a live and let-live kind. But this does not mean that it is not there. Nor does it necessarily negate a finding of considerable potency.

21 FERC at 61,608. Our task of interpreting FERC's finding is seriously impaired by the Commission's decision to omit an initial decision by the ALJ, *see* 10 FERC (CCH) ¶ 61,023 (Jan. 9, 1980), coupled with its virtually complete failure to make any express references to the extensive record compiled in this case. In fact, FERC pronounced that its "massive record" in which "[e]xperts discoursed on risk, on competition" was "beside the point." 21 FERC at 61,623. Such nonchalance cannot be countenanced when the Commission then goes on to rely on a factual finding as to competition in devising its ratemaking scheme. Judicial review in such circumstances demands that the agency set out the basis in the record for its critical findings. *See, e.g., Motor Vehicles Mfrs. Ass'n*, 103 S.Ct. at 2870; *Permian Basin Area Rate Cases*, 390 U.S. at 792, 88 S.Ct. at 1373.

Moreover, since in the oil pipeline industry "[a] national geographic market leads to meaningless results, since transportation is regional, at least," Coburn, *The Case for Petroleum Pipeline Deregulation*, 3 Energy L.J. 225, 245 (1982), we agree with the Justice Department that to have any relevance at all, competition must be evaluated in terms of discrete regional markets. *See* Justice Dep't Brief at 44. FERC itself acknowledged that "actual and potential" competition in the oil pipeline industry is not "omnipresent," 21 FERC at 61,627 & 61,702 n. 360, and that intramodal competition is "often supplemented"—not "always supplemented"—by intermodal competition, *id.* at 61,627. Our review of the record reveals only anecdotal evidence of intermodal competition on certain pipeline routes. Furthermore, the principal evidence put forward by FERC in its brief to support its finding of intermodal competition—the decrease in oil pipelines' market share for petroleum transportation—can be explained chiefly by the increase in *foreign imports* transported by water. *See* J.A. at 939 (testimony of Richard J. Barber Assocs.). This trend therefore appears to reflect world oil resource availability more than true intermodal competition.

Finally, we note that when Congress amended the Interstate Commerce Act to account for competition in the rail carrier industry, the amendment required the ICC to make a specific finding that a particular rail carrier did not have "market dominance" before deregulating the carrier. *See* 49 U.S.C. § 10709. We do not believe that the unamended oil pipeline rate provisions of the Interstate Commerce Act, which do not make any provision for deregulation, would require any less of a particularized showing before competition might be properly taken into account.

"[i]n subjecting producers to regulation because of anti-competitive conditions in the industry, Congress could not have assumed that 'just and reasonable' rates could conclusively be determined by reference to market price." *FPC v. Texaco,* 417 U.S. at 399, 94 S.Ct. at 2327; *see, e.g., Tennessee Gas Pipeline v. FERC,* 606 F.2d at 1114.

We recognize that the market price of oil could, "in an individual case, coincide with just and reasonable rates" and may "be a relevant consideration in the setting of area rates; it may certainly be taken into account along with other factors." *FPC v. Texaco,* 417 U.S. at 399, 94 S.Ct. at 2327 (citations omitted). The *Williams* opinion, however, goes far beyond what we regard as rational or permissible assumptions about the relationship between "just and reasonable" rates and the market price.[51]

FERC's methodology, by its own admission, merely sets "ceilings seldom reached in actual practice," and permits "creamy returns" to oil pipelines. As we have explained above, such ratemaking does not comport with FERC's statutory responsibilities. FERC's methodology, therefore, exposes a range of permissible prices that would exceed the "zone of reasonableness" by definition, unless competition in the oil pipeline market drives the actual prices back down into the zone. But nothing in the regulatory scheme itself acts as a monitor to see if this occurs or to check rates if it does not. That is the fundamental flaw in the Commission's scheme. *See Texaco, Inc. v. FPC,* 474 F.2d 416, 422 (D.C.Cir. 1972), *approved in relevant part and vacated on other grounds,* 417 U.S. 380, 94 S.Ct. 2315, 41 L.Ed.2d 141 (1974).

51. In *Farmers Union I,* this court noted that oil pipelines "have none of the special obligations imposed upon the vehicular regulatees under the Act [e.g., railroads and motor carriers] concerning acquisitions, mergers, corporate affiliates, uniform cost and revenue accounting, issuance of securities, and corporate or financial reorganizations." 584 F.2d at 413. Accordingly, we found that "we may infer a congressional intent to allow a freer play of competitive forces among oil pipeline companies than in other common carrier industries and, as such, we should be especially loath uncritically to import public utilities notions into this area without taking note of the degree of regulation and of the nature of the regulated business." *Id.* FERC cited this passage in support of its approach to oil pipeline ratemaking. *See* 21 FERC at 61,599; FERC Brief at 43. In addition, FERC noted its lack of authority over abandonment of service, and argued:

> To begin with, it is fairly obvious that a regulatory scheme that permits the regulatees to abandon service whenever they find the regulators' decisions about prices unpalatable isn't worth very much. That kind of regulation gives the regulatees a veto power over the actions of the regulators. It is as full of holes as a Swiss cheese and is arguably tantamount to no regulation at all.

21 FERC at 61,690 n. 217. We think FERC misconstrued the significance of the *Farmers Union I* passage and overstated the significance of its lack of abandonment authority.

First, the passage from *Farmers Union I* concludes that there is no "mandatory approach to ratemaking" discernible from the Interstate Commerce Act. In context, therefore, the passage reflects the principle, followed here, *see supra* at 1501; *infra* at 1520, 1527, that neither strict original cost-based "public utilities notions" nor the valuation methods suggested by the Valuation Act, 49 U.S.C. § 19a, must necessarily be adhered to in deriving oil pipeline rates. Furthermore, giving "freer play [to] competitive forces" is *not* equivalent to permitting rates that fall outside the "zone of reasonableness." *See supra* at 1502–03. Competitive forces are given freer play by permitting companies to decide for themselves whether to enter a geographic territory already served by another pipeline company (which would be unlawful without regulatory consent in a utility industry having exclusive service territories). Similarly, pipeline companies may abandon service at will (which would be unlawful for many other utilities). But *Farmers Union I* should not be read to support a theory that market forces can be a complete *substitute* for regulation of the oil pipeline rates.

Second, we disagree with FERC's appraisal that regulation without abandonment control "is arguably tantamount to no regulation at all." The extremely high sunk costs involved with initiating oil pipeline service render a decision to abandon that service a weighty one indeed. So long as the pipeline receives a just and reasonable rate for its service, it will be afforded an opportunity to derive a fair profit. Even if the oil pipelines do not receive everything they would like—even if they do not make "creamy returns" on their investment—they are still unlikely to "abandon service whenever they find the regulators' decisions unpalatable," especially considering FERC's view that oil pipeline capacity is needed to serve the oil companies which, in turn, own many of the pipelines. In this context, FERC is too modest about its own powers; the oil companies do not possess "veto power" over FERC's rate decisions.

Congress may indeed have imposed the requirement that rates be "just and reasonable" in order to restore the "true" market price—the price that would result through the mechanism of a truly competitive market—for purchasers of the regulated service or goods. *See, e.g., FPC v. Texaco,* 417 U.S. at 397–98, 94 S.Ct. at 2326–27; *FPC v. Sunray DX Oil Co.,* 391 U.S. 9, 25, 88 S.Ct. 1526, 1535, 20 L.Ed.2d 388 (1968). In setting extraordinarily high price ceilings as a substitute for close regulation, FERC assumed that, with the wide exposed zone between the ceiling and the "true" market rate, existing competition would ensure that the actual price is just and reasonable. Without empirical proof that it would, this regulatory scheme, however, runs counter to the basic assumption of statutory regulation, that "Congress rejected the identity between the 'true' and the 'actual' market price." *FPC v. Texaco,* 417 U.S. at 399, 94 S.Ct. at 2327. In fact, FERC's " 'regulation' by such novel 'standards' is worse than an exemption simpliciter. Such an approach retains the false illusion that a government agency is keeping watch over rates, pursuant to the statute's mandate, when it is in fact doing no such thing." *Texaco v. FPC,* 474 F.2d at 422.

Moving from heavy to lighthanded regulation within the boundaries set by an unchanged statute can, of course, be justified by a showing that under current circumstances the goals and purposes of the statute will be accomplished through substantially less regulatory oversight. *See Black Citizens for a Fair Media v. FCC,* 719 F.2d 407, 413 (D.C.Cir.1983). We recognize that this court has sanctioned dramatic reductions in regulatory oversight under, for example, the FCC and ICC licensing provisions, both of which require that the licensee operate in accordance with the "public interest." *See id.; National Tours Brokers Association v. ICC,* 671 F.2d 528, 531–32 (D.C.Cir.1982). In both cases, this court found that the agency adequately assured meaningful enforcement of the public interest standard. *See Black Citizens,* 719 F.2d at 413–14; *National Tours,* 671 F.2d at 533. In other cases, this court has refused to sanction administrative attempts to reduce regulation in the absence of a showing that the goals and dictates of statutes were not being honored. *See International Ladies' Garment Workers' Union v. Donovan,* 722 F.2d 795 (D.C.Cir. 1983); *Action on Smoking and Health v. CAB,* 699 F.2d 1209 (D.C.Cir.), *supplemented,* 713 F.2d 795 (D.C.Cir.1983).

In this case, FERC failed to show that the rates resulting from its newly articulated ratemaking principles would necessarily satisfy the "just and reasonable" standard. FERC set rate ceilings which, if reached in practice, would admittedly be egregiously extortionate and then failed to demonstrate that market forces could be relied upon to keep prices at reasonable levels throughout the oil pipeline industry. As a result, we find that FERC's action contravenes its statutory responsibilities under the Interstate Commerce Act.

V. FERC's Decision Lacks a Reasoned Basis

[9] In the foregoing analysis, we found the general ratemaking principles that guided FERC in the *Williams* opinion to be "in excess of statutory jurisdiction, authority, or limitations," 5 U.S.C. § 706(2)(C), and "not in accordance with law," *id.* § 706(2)(A). Because "an agency's action must be upheld, if at all, on the basis articulated by the agency itself," we would remand this case to FERC on the basis of the foregoing considerations alone. *Motor Vehicle Manufacturers Association,* 103 S.Ct. at 2870; *see SEC v. Chenery Corp.,* 332 U.S. 194, 196, 67 S.Ct. 1575, 1577, 91 L.Ed. 1995 (1947). As independent grounds for our decision today, however, and in light of the apparent need for judicial guidance in this case,[52] we further hold

52. At oral argument, counsel for Farmers Union specifically asked this court to provide better guidance to FERC in the event of a remand. We hope that the following discussion will assist FERC in the speedy disposition of this case,

that the *Williams* opinion was not "the product of reasoned thought and based upon a consideration of relevant factors." *Specialty Equipment Market Association v. Ruckelshaus,* 720 F.2d 124, 132 (D.C.Cir. 1983). Accordingly, we now turn to examine the particulars of FERC's oil pipeline ratemaking formula.

A. *Rate Base*

In *Williams,* FERC decided to adhere to the rate base formula it inherited from the ICC. *See* 21 FERC at 61,632. It gave no rational justification for doing so, however. FERC acknowledged that "rigorous logic and Euclidean consistency are not the system's most striking features," and that the formula is "much too blunt and much too clumsy for close work." It nevertheless concluded that the ICC method is "usable" because oil pipeline ratemaking "is not close work." *Id.* at 61,616. This is not a sufficient justification.[53]

[10] It is well established that an agency has a duty to consider responsible alternatives to its chosen policy [54] and to give a reasoned explanation for its rejection of such alternatives. *See, e.g., Motor Vehicle Manufacturers Association,* 103 S.Ct. at 2869–71; *International Ladies' Garment Workers' Union,* 722 F.2d at 815. This responsibility becomes especially important when the agency admits its own choice is substantially flawed. We find that FERC failed to satisfy this duty with respect to certain proposed modifications in the rate base formula.

1. *Original Cost Rate Base*

Many parties to the *Williams* proceeding—including the FERC staff, the Department of Energy, the Justice Department, Farmers Union Central Exchange—advocated the calculation of oil pipeline rate bases by reference to original cost.[55] These witnesses called for the rejection of the old ICC methodology, because its use of a weighted average of original cost and replacement cost, *see supra* at 1495, "lacks any economic rationale." [56]

Despite explicit concessions as to the shortcomings of the ICC rate base formula and the recognized advantages of a rate base formula derived from original cost,[57]

which already has taken far too long. *See supra* at 1492.

53. FERC also thought "it would probably be best to continue to stick to the rate base status quo until Congress addresses itself to the oil pipeline scene as a whole." 21 FERC at 61,632. This purported justification runs contrary to the purposes of remand in *Farmers Union I. See supra* at 1500.

54. The "arbitrary and capricious" standard does not "broadly require an agency to consider *all* policy alternatives in reaching decision." *Motor Vehicle Mfrs. Ass'n,* 103 S.Ct. at 2871 (emphasis added). Agency action "cannot be found wanting simply because the agency failed to include every alternative device and thought conceivable by the mind of man ... regardless of how uncommon or unknown that alternative may have been." *Vermont Yankee Nuclear Power Corp. v. NRDC, Inc.,* 435 U.S. 519, 551, 98 S.Ct. 1197, 1215, 55 L.Ed.2d 460 (1978). The alternatives to the ICC rate base formula discussed herein, however, are significant and viable, and were fully discussed during the *Williams* proceeding.

55. *See, e.g.,* Joint Appendix (J.A.) at 2195 (testimony of Mr. Ileo on behalf of Farmers Union); *id.* at 2266 (testimony of Mr. Roseman on behalf of Justice Dep't); *id.* at 3199, 3203 (testimony of Mr. Manheimer on behalf of FERC staff); *id.* at 3206–07 (testimony of Mr. Maruszewski on behalf of FERC staff); Exhibits 204–1 to 204–13 (testimony of Mr. Liversidge on behalf of Dep't of Energy); Exhibits 205–1 to 205–7 (testimony of Mr. Wilson on behalf of Dep't of Energy).

56. J.A. at 2203 n. 8 (testimony of Mr. Ileo) (quoting testimony of Dr. Charles Phillips in TAPS case); *see also id.* at 2249 (testimony of Mr. Roseman) (It is "hard, if not impossible, to ascribe any specific economic meaning" to rate base calculated by ICC methods); *id.* at 3208 (testimony of Mr. Maruszewski) (ICC method contains "flawed factors," and, therefore, "I think of no circumstances under which I would advocate the application of the I.C.C.'s methodology."). *See generally* Navarro & Stauffer, *supra* note 29, at 309–10 (concluding that "the relationships among the ICC valuation, the FERC depreciated rate base, the replacement cost, and the economic value are capricious").

57. Indeed, FERC acknowledged that the ICC method contained "anomalies and inconsistencies" that render the formula "too clumsy for close work." 21 FERC at 61,616. As to an original cost alternative, FERC acknowledged

FERC rejected the original cost alternative. FERC offered four reasons for this decision. First, FERC wished to avoid the "headache" of analyzing the significance of guarantees—given by many parent oil companies to their subsidiary oil pipeline companies—in the estimation of the "true" capital structure of oil pipelines.[58] *See* 21 FERC at 61,620–22. Second, FERC believed that the major regulatory benefit that might be derived from a switch to original cost accounting—the facilitation of comparable earnings analysis in relation to other businesses with a comparable risk to the pipelines—would not be useful in oil pipeline rate regulation, because the oil managers, as "professional risk takers," have ingrained attitudes toward risk and return unlike any other public utility investors. Third, an original cost rate base, without modification for inflation, would result in high initial rates that would decline as the rate base depreciates. FERC believed that competition in the oil pipeline business might prevent the pipelines from collecting the high initial rates, thereby preventing them from reaping their appropriate return on investment. *See id.* at 61,628–29. Finally, FERC found that any benefits resulting from changes in the rate base formula would not "warrant the social costs entailed," *id.* at 61,631, specifically, the construction of "transitional rate bases ... for each of the many common carrier oil pipelines," *id.* at 61,704 n. 376. We find that none of FERC's explanations for its rejection of an original cost rate base satisfies accepted standards of reasoned decisionmaking.[59]

its "'objectivity, which makes it easily ascertainable, and comparative freedom from manipulation—*not inconsiderable virtues.*' Even more important for our purposes," FERC continued, "is the ... fact that the language of American finance is an original cost language." *Id.* at 61,618 (emphasis in original) (quoting H. Kripke, *The SEC and Corporate Disclosure: In Search of a Purpose* 184 (1979)). This feature of original cost ratemaking gives regulators "the best fighting chance of approximating the regulated entities' cost of capital." *Id.* at 61,619; *see* Edelman, *Rate Base Valuation and Its Effect on Rate of Return for Utilities,* Pub.Util.Fort., Sept. 2, 1982, at 40.

58. Under the *Atlantic Refining Co.* consent decree, *see supra* note 31, a shipper-owned pipeline could pay no more than seven percent of pipeline valuation to its parent company in annual dividends on equity. To increase return on total capital, the shipper-owned pipelines began to rely heavily on debt financing, thereby reducing the equity base (and increasing the net return on equity) while treating the interest on the debt as a cost unrestricted by the consent decree. *See* Exxon Pipeline Co./Exxon Co., U.S.A., *An Analysis of the Rates of Return on Petroleum Pipeline Investments, reprinted in Oil Pipelines and Public Policy,* 261, 273–75 (E. Mitchell ed. 1979). In the wake of the consent decree, many pipeline companies had extraordinarily high debt-to-equity ratios; ratios of debt to total assets often reached 80 to 90 percent. *See Hearings Pursuant to S. Res. 45, Market Performance and Competition in the Petroleum Industry Before the Special Subcomm. on Integrated Operations of the Senate Comm. on Interior and Insular Affairs,* 93d Cong., 1st Sess. (statement of Stewart C. Myers).

To expand the debt capacity of its pipelines, the parent oil companies would enter into direct debt guarantees or "throughput and deficiency" agreements with their pipeline subsidiaries. Under a throughput and deficiency agreement, the parent companies promise to ship, or cause to be shipped, through the pipeline their *pro rata* share of oil, sufficient to ensure that the pipeline will generate enough revenue to meet its debt service payments and operating expenses. In addition, these agreements obligate the parent companies to provide the pipeline with cash "deficiency payments" if, for whatever reason—even if the pipeline is inoperable—the pipeline cannot meet its expenses due. *See* 21 FERC at 61,698 n. 323; G. Wolbert, Jr., *U.S. Oil Pipe Lines,* 242–46 (1979). By this method, the parent companies reduce the risk associated with the debt securities of the pipeline, and thereby increase their ability to finance the pipeline with such high levels of debt.

The consent decree was vacated soon after the *Williams* opinion was issued. *See supra* note 31. On remand, FERC can reexamine the issue of parent guarantees in light of any new financing trends that have emerged since the consent degree was vacated.

59. In its brief, FERC stated that it had concluded that "retention of traditional valuation methodology was preferable to original cost to avoid a disincentive for future investment in oil pipelines." FERC Brief at 62. However, the method of rate base calculation does not by itself determine the incentive for future investment; the rate of return also plays a part. Under original cost accounting, the rate of return is set with an eye toward ensuring that an incentive exists to invest in the regulated enterprise. Indeed, FERC stated that "our analysis suggests

a. *Parent Guarantees and Capital Structure*

Because of parent companies' debt guarantees and "throughput and deficiencies" agreements, many shipper-owned pipelines are able to obtain debt financing more cheaply and in greater amounts than would be possible in the absence of such agreements. *See supra* note 58. Further, since cost of equity virtually always exceeds cost of debt, the greater the pipelines' debt ratio, the lower its overall cost of capital. *See United States v. FCC,* 707 F.2d 610, 613 (D.C.Cir.1983). Accordingly, as FERC recognized in its establishment of a "suretyship premium," *see supra* at 1496, the "real" cost of capital to a pipeline that benefits from such parent guarantees is greater than its apparent cost of capital.

Regulatory agencies have often assessed a regulated company's true cost of capital by constructing hypothetical capital structures, and then applying the normal costs of equity and debt to the hypothetical mix of securities. *See Communications Satellite Corp. v. FCC,* 611 F.2d 883, 902–09 (D.C.Cir.1977) (citing numerous cases involving water, gas, electric and telephone utilities). By this method, regulatory agencies ensure that the derived rate is "just and reasonable":

> Although the determination of whether bonds or stocks should be issued is for management, the matter of debt ratio is not exclusively within its province. Debt ratio substantially affects the manner and cost of obtaining new capital. It is therefore an important factor in the rate of return and must necessarily come within the authority of the body charged by law with the duty of fixing a just and reasonable rate of return.

Id. at 903 (quoting *New England Telephone & Telegraph Co. v. State,* 98 N.H. 211, 220, 97 A.2d 213, 220 (1953)). In the case of oil pipelines, the hypothetical capital structure would be approximated by estimating the capacity of the pipeline to support debt in the absence of its parents' guarantees. *See* 21 FERC at 61,621.

FERC refused to adopt an original cost rate base in part because it believed that the attendant necessity for constructing hypothetical capital structures would be "a laborious exercise in guesswork, a venture 'into the unknown and unknowable.'" *Id.* at 61,622 (quoting *Christiana Securities Co.,* 45 SEC 649, 668 (1974)). In FERC's view, such an inquiry would be:

> a perfect field day for regulatory economists. Professor A would testify that he thinks 70% debt and 30% equity right. Professor B would say 53% debt and 47% equity. Professor C would come on strong for 50–50. Miss D from an eminent Wall Street investment banking firm would testify that her computer tells her that 65% equity and 35% debt are the right mix. Mr. E from an even more eminent investment banking firm would have numbers of his own.

Id. at 61,622. In part to avoid such an inquiry, FERC chose to avoid an original cost rate base.

This explanation runs counter not only to the proven practice of FERC and many

that in an appreciable number of instances original cost may very well mean higher rates," and that "[w]ith respect to many existing lines, it is hard to imagine any rate of return short of one that looks like a license to print money that would allow returns commensurate with those now deemed legitimate." 21 FERC at 61,625 & *id.* at 61,701 n. 348. Higher rates translate into greater investment incentives. Moreover, FERC was careful to declare that its discussion was "not [meant] to say that the [original cost] model would not work for oil pipelines." *Id.*

At one point, FERC indeed intimated that, on the contrary, original cost ratemaking *would* result in lower rates (and thus lower investment incentives) over the long run and that "[b]ecause original cost rate bases fall so sharply as properties age and because pipeline plant lasts so long, this will be true however high rates of return may be." *Id.* This problem results from the "front end load" phenomenon, and would be eliminated by trending the rate base. *See infra* at 1516–17. Furthermore, we find it difficult, if not impossible to square this analysis with FERC's previous assertion that original cost ratemaking "may very well mean higher rates."

regulatory agencies[60] but also to FERC's own commentary later in the *Williams* opinion. As we have explained above, the technique of hypothesizing capital structures for oil pipelines would account for the increased capital costs associated with financing a pipeline in the absence of guarantees from the parents. Later in the *Williams* opinion, FERC devises its "suretyship premium" to compensate for the parents' guarantees of pipeline debt. FERC, however, appeared confident that any difficulties with estimating the value of this premium could be surmounted:

> Credible expert testimony by persons associated with the rating services, the investment banking fraternity, and the credit insurance industry as well as by academics who have made a specialty of the bond market [can] establish[ ] that absent the parents' guarantee [what] the pipeline would have had to pay ....

Id. at 61,644.

We cannot square FERC's apparent confidence in its ability to estimate a pipeline's "suretyship premium" with its extreme skepticism about its ability to construct hypothetical capital structures. After all, the "suretyship premium" represents merely the differential between a pipeline's actual cost of capital and what its cost of capital would have been absent the parent guarantees. Thus the "suretyship premium" measures the same incremental cost of capital to the pipeline as the hypothetical capital structures that FERC felt incapable of estimating. The basis for FERC's preference for its "suretyship premium" approach, and for its aversion to hypothetical capital structures is therefore unclear. The decision to reject original cost accounting on the basis of this preference and aversion appears arbitrary, and, in any event, lacks sufficient explanation.

Moreover, even assuming that FERC's preference for its suretyship premium approach could be explained, its rejection of original cost ratemaking *because* of that preference relies on the assumption that original cost ratemaking is necessarily tied to hypothetical capital structures and necessarily incompatible with its newly devised "suretyship premium." However, FERC never gave any reason at all why this assumption is valid. Indeed, we see no reason why FERC could not account for the parent guarantees by using a suretyship premium added to an original cost ratemaking formula.

If FERC, in the exercise of informed discretion, decides that the suretyship premium approach is more reliable or easier to administer than hypothetical capital structures, then it should state why.[61] As of now, neither FERC nor any of the parties has provided such an explanation. Even if they did so, however, we still would not understand why the hypothetical capital structure method *must* be used with original cost ratemaking, or why the "suretyship premium" approach *cannot* be used with original cost ratemaking.

60. For discussions and examples of the use of hypothetical capital structures in the context of utility ratemaking, see *Communications Satellite Corp. v. FCC*, 611 F.2d 883, 902–09 (D.C.Cir. 1977); V. Brudney & M. Chirelstein, *Cases and Materials on Corporate Finance* 372–86 (1979). Also, under 26 U.S.C. § 385, the Secretary of the IRS is authorized to prescribe rules "to determine whether an interest in a corporation is to be treated for [tax] purposes ... as stock or indebtedness."

FERC's discussion in *Williams* appears to contradict summarily its holding in *Kentucky W. Va. Gas. Co.*, 2 FERC ¶ 61,139 (Feb. 16, 1978). In FERC's words, "[w]hen, as in the present case, the use of the actual capital structure would result in excessive costs to the consumer or inadequate returns to the investor, some other capital structure must be used." *Id.* at 61,-325; *see also Michigan Gas Storage*, 56 FPC 3267, 3273 (1976) ("the Commission must exercise its expertise and discretion in choosing the most appropriate capitalization"); *Florida Gas Transmission Co.*, 47 FPC 341, 363 (1972) ("a utility should be regulated on the basis of its being an independent entity; that is a utility should be considered as nearly as possible on its own merits and not on those of its affiliates").

61. In this discussion, we do not review the wisdom or reasonableness of the "suretyship premium" approach. Rather, we review FERC's decision to reject original cost ratemaking on the basis of its aversion to the use of hypothetical capital structures.

b. *Comparable Risk Analyses*

FERC discerned still "more fundamental problems" associated with the use of original cost ratemaking, beyond the estimation of appropriate capital structures. As typically applied under the "just and reasonable" standard, original cost ratemaking attempts to set the rate of return for a regulated enterprise at the same level as the rate of return of an unregulated enterprise with similar associated risks. *See, e.g., FPC v. Hope Natural Gas Co.*, 320 U.S. 591, 603, 64 S.Ct. 281, 288, 88 L.Ed. 333 (1944) ("By that standard [of 'just and reasonable' rates] the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks."); *Bluefield Water Works & Improvement Co. v. Public Service Commission*, 262 U.S. 679, 692, 43 S.Ct. 675, 679, 67 L.Ed. 1176 (1923) ("A public utility is entitled to such rates as will permit it to earn a return ... equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by the same risks and uncertainties."); A. Priest, *Principles of Public Utility Regulation* 191–94 (1969). FERC, however, believed that such a risk inquiry was not useful or relevant to oil pipeline ratemaking. In FERC's view, oil company managers—who own many oil pipelines—are a special breed of risk takers, who demand "a fair chance of earning as much on a pipeline as they would be likely to earn on something else in the unregulated sector" *regardless of risk.* 21 FERC at 61,623.[62] Accordingly, FERC rejected original cost ratemaking in part because the conventional ratemaking inquiry that its use facilitates—the inquiry into risk—was, according to FERC, not helpful in oil pipeline ratemaking.

We think that this argument not only lacks any evidentiary support, it also lacks economic common sense. In neither the *Williams* opinion nor in its briefs to this court does FERC cite any evidentiary basis for its conclusion that oil managers will invest in only high return enterprises. In fact, the record is chock full of testimony regarding the risks of the oil pipeline business and the corresponding appropriate rate of return.[63] Furthermore, major stud-

62. In FERC's opinion, the proper rates for oil pipelines "cannot be gleaned from columns of figures about realized rates of return in this, that, and the other industry." 21 FERC at 61,-624. Instead, FERC believed that in oil pipeline ratemaking, much turns on the "culture," "habits of mind," and "ingrained behavior patterns" inherent in the oil industry and its "attitudes toward risk and return." *Id.* According to FERC, oil company managers:

> are professional risk takers.... Why should they invest in pipelines if pipelines are unlikely to be as remunerative as petrochemicals, filling stations, natural gas exploration, molybdenum mines, mahogany forests, contraceptive pills, mail order chains, department stores, or other outlets for capital that look attractive?
>
> That question is not answered by saying that those businesses are riskier than pipelines.... That oil pipelines are relatively risk-free will not be enough to induce integrated oil companies and profit-maximizing conglomerates to commit funds. They also need some assurance that they have a fair chance of earning as much on a pipeline as they would be likely to earn on something else in the unregulated sector.

Id. at 61,623.

63. *See, e.g.*, J.A. at 254 (testimony of Vernon T. Jones, President and Director of Williams Pipe Line Co.) ("It is my purpose to present this Commission a clear explanation of the need to maintain adequate rates of return that are commensurate with the risks of owning oil pipelines and to differentiate independent oil pipelines and their inherently greater risks."); *id.* at 699–701 (testimony of Charles F. Phillips, Jr. on behalf of Williams) ("the more appropriate approach to determining the cost of common equity is the comparable earnings approach ... it must produce a return on the investment of its equity holders that is at least equal to the return that would be produced by an alternative investment of comparable risk"); *id.* at 719–35 (testimony of Ulysses J. LeGrange, President and Director of Exxon Pipeline Co.) (discussing risks of oil pipelines and calling for a rate of return "on the current value of pipeline assets by comparison with returns on alternative investment opportunities of comparable riskiness"); *id.* at 868–87 (testimony of Dean B. Taylor, President of Phillips Pipe Line Co. and Seaway Pipe Line Co.) ("My testimony will, I believe, demonstrate that oil pipelines experience tremendous risks, and competition, and therefore are entitled to higher returns than monopoly utilities."); *id.* at 995 (testimony of Kenneth J. Arrow on behalf of Ass'n of Oil Pipelines) ("The risky

ies of the oil pipeline industry have concluded that the oil company managers decide whether to invest in a particular pipeline only after an examination of whether the expected returns match the associated risks:

> When appraising the economic viability of a proposed pipeline venture, the approach taken is similar to that used by investors in general; it is what may be termed as required rate of return analysis. An oil company has widespread operations with numerous investment opportunities bearing different degrees of risk. Because of this, each investment, including pipelines, must be examined individually, and its expected rate of return compared with the opportunity rate of return of other prospective investments with comparable risk characteristics.

G. Wolbert, Jr., *U.S. Oil Pipelines*, 156 (1979) (footnotes omitted); *see* Exxon Pipeline Co./Exxon Co., U.S.A., *Rates of Return on Petroleum Pipeline Investments, reprinted in Oil Pipelines and Public Policy* 261, 268–69 (E. Mitchell ed. 1979) (" 'The required rate of return on an investment opportunity depends on the riskiness of the investment. The greater the riskiness of the investment, the more the return demanded by investors.' ") (quoting E. Solomon & J. Pringle, *Introduction to Financial Management* 332 (1977)).

ICC oil pipeline ratemaking precedents also belie FERC's novel notions about the relationship between risk and required return in the industry. FERC's notion that the oil companies demand high returns, no matter how low the risk, represents a radical departure from the ICC practice of evaluating risk and estimating the required return accordingly. *See, e.g., Reduced Pipe Line Rates and Gathering Charges,* 272 I.C.C. 375, 381 (1948); *Minnelusa Oil Corp. v. Continental Pipe Line Co.,* 258 I.C.C. 41, 51 (1944); *Reduced Pipe Line Rates and Gathering Charges,* 243 I.C.C. 115, 131 (1940). Similarly, in 1978 this court called on FERC to reexamine the "complex of relevant factors" in determining the proper rates of return for oil pipelines, including the hazards prevailing in the pipeline business. *See Farmers Union I,* 584 F.2d at 419.

We thus find no basis to support, and overwhelming evidence to contradict, FERC's finding that comparable risk analysis has no important role in oil pipeline rate regulation. We therefore believe that FERC's rejection of original cost ratemaking on the basis of that finding is arbitrary and capricious.

c. *The "Front-End Load" Problem*

FERC next offered another, independent reason for rejecting original cost ratemaking: the "front-end load" problem.[64] *See*

investment will ... be undertaken in preference to the riskless investment when the expected rate of return on it exceeds (or at least equals) the required expected rate of return appropriate to its riskiness."); *id.* at 1027 (testimony of Raymond B. Gary, managing director of Morgan Stanley & Co.) ("The required rate of return for investment in a particular real or financial asset depends solely on the risks associated with the investment."); *id.* at 1340 (testimony of William B. Bush, President of Marathon Oil Co.) ("What we can do is confront and cope with this growing pyramid of 'old' and 'new' risks realistically. To do so, however, the industry must be afforded the opportunity to earn a rate of return that reflects the real world [risks]."). The foregoing list is merely a sampling from a long list of witnesses who testified about risk with an aim to influencing the returns allowed by FERC. While some of these witnesses advocated a continuation of the valuation rate base, *see id.* at 719–35 (testimony of Ulysses J. LeGrange), none of them argued that risk was irrelevant to the investment decisions of oil managers.

64. An untrended cost rate base, which does not increase with inflation, has nowhere to go but down as it is depreciated. Therefore the resulting rates decline, and "since under inflation the dollars are declining in value, the real price is declining even faster." Streiter, *Trending the Rate Base,* Pub.Util.Fort., May 13, 1982, at 32. Consequently, the rates of old pipelines will be lower than the rates of newer pipelines, even though the service they provide is equivalent. *See* 21 FERC at 61,628. Moreover, FERC maintained that under original cost ratemaking the initial high rates could never be recovered because shippers would go elsewhere for transportation at a lower rate. *Id.* Thus the pipelines might never recover their full cost of service as set by original cost ratemaking, which assumes that the rates set will actually be collected. This problem is termed the "front-end load" problem.

supra at 1512. However, FERC itself acknowledged that this problem could be solved by using a *trended*, inflation-sensitive original cost rate base:

> [W]e find the case for an inflation-sensitive oil pipeline rate base strong.
>
> Such a rate base mitigates original cost regulation's income-bunching effect. It does not necessarily follow that the [old ICC rate base formula] is the ideal solution to the front-end load, income-bunching problem. Were we writing on an absolutely clean slate, were we beginning afresh in a brave new world, were pipelines a novelty that had just made their appearance, we would fashion an inflation-sensitive, anti-bunching rate base policy simpler and more logical than the ICC's.

21 FERC at 61,630. According to FERC, this "simpler and more logical" method would "[k]eep[ ] the rate base in tune with the general price level by linking it to the consumer price index or to the gross national product." *Id.* The trended original cost method of calculating rate bases, as discussed by witnesses in the *Williams* proceeding and other experts, fits this description. *See, e.g.*, J.A. at 1508–12 (testimony of Stewart C. Myers on behalf of Marathon Pipe Line Co.); J.A. at 1957 (testimony of David A. Roach on behalf of MAPCO); Streiter, *Trending the Rate Base*, Pub. Util. Fort., May 12, 1982, at 32; *cf.* J.A. at 1677–1702 (testimony of Michael C. Jensen on behalf of ARCO Pipe Line Co.) (describing "inflation-adjusted original cost" method, the results of which are "equivalent to adjusting the rate base and depreciation by the unprojected inflation"). Indeed, at one point, FERC declared that if it were "beginning afresh on a clean slate [it] might be inclined to use something ... along the lines suggested by Marathon's witness Meyers [sic]." 21 FERC at 61,616. Marathon's witness Myers recommended the use of a trended original cost rate base if the old ICC method were to be abandoned. *See* J.A. at 1427, 1499. Thus FERC acknowledged that the front-end load problem could be solved, by adjusting an original cost rate base for inflation. Accordingly, FERC could not have reasonably relied upon the "front-end load" problem as a basis for rejecting the admittedly "simpler and more logical" trended original cost alternative.

d. *The Social Costs and Benefits of Transition to a New Rate Base Formula*

Although a trended original cost approach would evidently be "simpler and more logical than the ICC's," 21 FERC at 61,630, FERC in the end rejected this alternative because of the "social costs entailed" in a transition from one rate base formula to another. *See supra* at 1512. FERC specified these "social costs" in an accompanying footnote:

> Transitional rate bases would have to be constructed for each of the many common carrier oil pipelines. That would be a formidable, a difficult, and a costly endeavor. The task could be by-passed by using the most recent valuation (or in the alternative the cost of reproduction new less depreciation element of that valuation) as the transitional rate base. But then how much substantive change would there really be for existing pipelines? We conclude the change would be far more costly than it is worth.

Id. at 61,704 n. 376. We are reluctant to sanction the rejection of an admittedly more logical and accurate rate base formula on the basis of the conclusionary statement that the construction of "transitional rate bases" would be too costly. First, FERC failed to give a reasoned basis for its assumption that "[t]ransitional rate bases would have to be constructed" at all. Regulated industries have no vested interest in any particular method of rate base calculation. *See FPC v. Natural Gas Pipeline Co.*, 315 U.S. 575, 586, 62 S.Ct. 736, 743, 86 L.Ed. 1037 (1942). Accordingly, as FERC acknowledged, a switch to a new rate base formula would not disrupt protected pipeline property. So long as the resulting rates are reasonable, the oil pipeline companies should have no difficulty maintaining their financial integrity. We are therefore at a loss to understand FERC's trepidation about a change in its regulatory method. Similarly, when this court granted FERC's request to remand this case "so that it may begin its regulatory duties in this area with a clean slate," *Farmers Union I*, 584 F.2d at 421, we specifically advised that the pipelines' reliance on an outdated rate base formula should not justify a continuation of the error. Rather, "the solution is not to perpet[u]ate that reliance but to end it prospectively, without allowing reparations based on its occurrence in the past." *Id.* at 419. We still adhere to that principle today.[65]

Second, FERC never explained *why* the construction of transitional rate bases would be so formidable a task. It is not self-evident why the calculation of such rate bases would entail more regulatory costs than the calculation of rate bases under the arcane ICC formula.[66] Furthermore, the formulation of a method for calculating transitional rate bases involves questions no more complex than those confronting FERC regularly.

Finally, regardless of the regulatory or social costs entailed, FERC appeared to reject alternatives to the ICC formula because it found "no clear showing" that changing the methodology would "produce substantial social benefits." *Id.* at 61,626; *see also id.* at 61,703 n. 373. This finding, however, apparently relies upon FERC's antecedent findings that oil pipeline ratemaking should merely set price ceilings that would seldom be reached in actual practice, and that comparable risk analysis would not be helpful to the ratemaking inquiry for oil pipelines. However, we have found those antecedent findings to be defective. *See supra* at 1502–03, 1515–16. As a result, we likewise disapprove of FERC's finding that a new rate base formula could not produce any substantial social benefit.

After carefully reviewing the bases put forward by FERC for rejecting the original cost alternative, we hold that FERC failed to "examine the relevant data and articulate a satisfactory explanation for its action." *Motor Vehicle Manufacturers Association*, 103 S.Ct. at 2866. In our view it did not offer a reasoned explanation for adhering to an admittedly antiquated and inaccurate formula, but rather a host of unconvincing excuses that fail to add up to a rational choice.

2. *The Association of Oil Pipelines' Recommendations*

The Association of Oil Pipelines (AOPL) endorsed the ICC valuation approach to rate base calculations. *See* J.A. at 3870 (AOPL Opening Brief to FERC). AOPL, however, did not endorse the ICC approach in all its details. Instead, it asked FERC to make the following alterations to the ICC formula:

65. FERC took issue with this court's analysis, declaring that "[w]hatever [FERC's] briefs may have said back in 1977 and 1978 and however jaundiced the court's view of the ICC's methodology, the fact is that that methodology has been in place for a long time and that drastic conceptual changes would be disruptive." 21 FERC at 61,703 n. 373. Needless to say, any departure from the status quo that might limit the pipelines' ability to earn high profits can be expected to frustrate their "entrepreneurial expectations." *Id.* Of course, the idea of rate regulation usually encompasses to some degree the frustration of the desires of the regulated business to make large profits. We therefore do not find compelling the fact that "the people who built the nation's oil pipeline plant must have been influenced in large measure by the presence in this field of a regulatory methodology far more permissive and much more indulgent than anything that we know of elsewhere." *Id.* at 61,626. As FERC observed, the ICC rate methodology was subject to judicial review only once, in *Farmers Union I, supra,* where it received sharp criticism.

We believe FERC's principal duty under the statute is to ensure "just and reasonable" rates. Accordingly, the frustration of the expectation that this excessively "permissive" and "indulgent" methodology would continue in force is a "factor[ ] which Congress has not intended [FERC] to consider." *Motor Vehicles Mfrs. Ass'n,* 103 S.Ct. at 2867. We therefore do not condone FERC's reliance on these expectations.

66. Because original cost is already a part of the old ICC rate base formula, we assume that FERC has original cost data available for the oil pipelines. *See supra* note 28.

(1) calculate reproduction costs for current expenses by reference to the current year's price index, or to an average of the indices for the most recent past year, the current year, and the next future year. Under the ICC method, costs are estimated by reference to a five-year "period index" consisting of the current year, one future year and three past years. APOL contended that this method understates actual current costs in times of inflation.

(2) increase the allowance for interest during construction employed in calculating the reproduction cost of pipeline assets. AOPL believed the six percent allowance was far too low to cover the prevailing rates to be paid during construction.

(3) calculate the present value of land and rights-of-way to account for their real appreciation in value over time. The ICC method calculates the "present value" of land at fifty percent of original cost and rights-of-way at original cost less depreciation. The AOPL claimed that such methods seriously undervalue the real present value of land and rights-of-way.

(4) adjust the construction damage allowance to reflect inflation up to the current year. AOPL argued that the ICC method, which adjusted the figures for inflation only from 1947 to 1953, understates actual costs.

(5) adjust the amounts assigned for pipe coating to reflect present prices. AOPL criticized the ICC method, which adjusted such costs for inflation only from 1947 to 1963.

(6) once the foregoing alterations are made, eliminate the six percent "going concern value" escalator to total valuation.

See J.A. at 3915–17 (AOPL Opening Brief). AOPL argued that these modifications "would improve the accuracy of the valuation rate base." *Id.* at 3917.

FERC rejected AOPL's proposals, finding that (1) only "relatively insubstantial" amounts were at stake, (2) the six percent going concern value roughly compensates for methodological errors elsewhere, and (3) the old ICC method should not be altered without first engaging in a notice and comment rulemaking on the proper method of calculating depreciation. *See supra* at 1496. AOPL argues to this court that FERC's rejection of its proposals was arbitrary and capricious agency action because it was "not supported by reasoned findings based on the evidence of record." AOPL Brief at 35–39. We agree.

We note at the outset that FERC failed, both in the *Williams* opinion and in its briefs to this court, to provide any factual basis in the record for its conclusion that "the sums involved are relatively insubstantial." 21 FERC at 61,631. On the other hand, AOPL cites unrebutted testimony in the record that the use of the ICC's "period indices" results in "consistently and substantially understated current valuations." J.A. at 1180 (testimony of John A. Jeter of Arthur Anderson & Co.). This same witness provided further unrebutted testimony that the ICC's allowance for interest during construction should be "much higher" in order to reflect current interest levels. *See id.* at 1183–85. Furthermore, in its brief, FERC states that the ICC rate base formula "*significantly* undercounts for interest during construction, several other construction-related elements, and the value of land."[67] Indeed, in the *Williams* opinion FERC conceded that the AOPL proposals "may well be warranted" prospectively. 21 FERC at 61,631.

FERC, however, felt that the need for change was "far from pressing" because it believed that the six percent going concern value in a rough way compensated for the other flaws in the ICC methodology. Thus FERC rejected *all* of AOPL's objections on the grounds that the *over*-counting due to the going concern value—which would by itself be "pure water," *id.*—was in effect

67. FERC Brief at 70 (emphasis added). FERC said that this significant undercounting, however, justifies the existence of the six percent going concern value. *But see infra* at 1520.

cancelled out by the *under* counting created by the methodological features that gave rise to the rest of AOPL's objections.

In basic terms, FERC reasoned that a series of inaccuracies is permissible because another inaccuracy systematically compensates for the prior errors. Such an approach, of course, assumes that the two errors are in fact predictably related to one another so that the anticipated self-correction will actually take place. In this case, however, FERC failed to make any finding to assure that the errors will offset each other. Especially when, as here, the proposed methodological adjustments appear easy to make, and the methodological defects are discrete, clear and acknowledged, FERC indulged an unreasonable presumption that its two wrongs would in practice render a right result. In the absence of any explanation of what warrants such an assumption, we find FERC's rejection of the AOPL proposals to be arbitrary and capricious.

Neither did FERC explain why its decision on the AOPL proposals should be delayed until it could conduct a notice and comment rulemaking on depreciation methods. FERC merely declared that "it would be wrong to alter the status quo without looking at the whole picture." *Id.* at 61,632. It is not at all apparent, however, why a decision on the AOPL proposals should be considered so intimately related to depreciation policy. FERC offered no rationale for its assumption that the changes proposed by AOPL should not be made separately from the decisions on depreciation policy. In fact, all of AOPL's proposals would apparently improve the accuracy of the rate base formula, regardless of the particular depreciation method employed. Thus, the adoption of the AOPL proposals would not seem to have any significant bearing on the future consideration of depreciation policy alternatives. FERC also made other similar adjustments to the rate base formula without examining "the whole picture." *See* FERC Brief at 71 n. 81. Moreover, FERC expressly declined to commit itself to ever conducting a rulemaking on depreciation issues:

> To be fruitful, such a rulemaking should be preceded by intensive staff studies. The whole endeavor would be costly and time-consuming. Would it be worth the cost?
>
> This question calls for further reflection. This is neither the time nor the place for that. We can ponder the point on another day.

21 FERC at 61,632. While we recognize that an administrative agency may exercise its informed discretion in deciding whether to proceed on a given issue by way of rulemaking or adjudication, *see, e.g., NLRB v. Bell Aerospace Co.*, 416 U.S. 267, 294, 94 S.Ct. 1757, 1771, 40 L.Ed.2d 134 (1974); *SEC v. Chenery Corp.*, 332 U.S. 194, 203, 67 S.Ct. 1575, 1580, 91 L.Ed. 1995 (1947), we believe that in this case FERC failed entirely to make any such choice. Instead, FERC decided to delay implementation of the AOPL proposals, which it said were "well taken" and were deserving of "a hard look," *id.* at 61,631, until it could conduct a seemingly unrelated depreciation rulemaking, which it then said might never take place. Such self-contradictory, wandering logic does not constitute an adequate explanation for its rejection of admittedly valuable proposals.

In sum, we hold that FERC failed to explain adequately its rejection of both the original cost alternative and AOPL's proposed alterations. We emphasize that this holding does not go to the wisdom or efficacy of the ICC rate base formula, although the *Williams* opinion does not provide a cogent defense of it.[68] Rather, our

68. The ICC rate base formula has also been severely criticized because of its reliance on reproduction cost, which has been called "an economically meaningless application of up-to-date prices to out-of-date properties." Bonbright, *Principles of Public Utility Rates* 277 (1961); *see* 21 FERC at 61,721–22 (Comm'r Hughes, dissenting in part and concurring in part). Reproduction cost neglects technological change, and therefore does not necessarily represent what the owner could receive for selling the plant (because cheaper modern alternatives might be available), nor does it necessarily represent what the owner would spend today to

decision here turns on the inadequacies manifest in the decisionmaking process followed by FERC.

Even in the absence of such infirmities in FERC's method of choice among rate base methods, our review would still include scrutiny of the rate of return methodology, to see whether the selected rate of return, applied in combination with the selected rate base, leads to a reasonable result. As FERC observed, the agency must assure that "the combination of rate base and rate of return provides a[n] ... acceptable end result." 21 FERC at 61,616. We now proceed to examine whether FERC engaged in reasoned decisionmaking when it chose its rates of return for use in oil pipelines ratemaking.

B. *Rate of Return*

FERC divided its rate of return into three components: (1) debt service, (2) the suretyship premium, and (3) the "'*real*' entrepreneurial rate of return on the equity component of the valuation rate base." 21 FERC at 61,644. The debt service element, which represents the cost of interest and repayment of indebtedness, gives rise to no objections from the parties, and need not detain us.

The suretyship premium similarly demands little comment apart from our previous observations that it requires much of the same kind of theorizing involved with the use of hypothetical capital structures. *See supra* at 1513–14. Farmers Union believes that FERC "erred when it assumed that such a premium is an 'add on' to the cost of capital without comparing pipeline and parent company risk." Farmers Union Brief at 59 n. 1. Our reading of the *Williams* opinion, and FERC's representations to this court, however, convince us that FERC made no such assumption, and, accordingly, pipelines must show that the guarantees reduce perceived investor risk in order to establish their entitlement to and extent of a suretyship premium. *See* 21 FERC at 61,621, 61,644, 61,711 nn. 492, 493; FERC Brief at 72–73.

Only the "real entrepreneurial rate of return on the equity component of the valuation rate base" remains. FERC began its discussion of this component from the premise that "[i]t seems obvious to us that allowed real rates of return on oil pipeline equity investments should be appreciably higher than those the Commission awards to natural gas pipelines and to wholesalers of electric energy." 21 FERC at 61,645. Considering that "oil companies [and the

build a plant with the same function. In the past, reproduction cost also has not exhibited a consistent correlation with inflation, as measured by the consumer price index and the gross national product deflator. *See id.* at 61,725. Furthermore, the ICC formula applies *variable* weights to the original cost and reproduction cost components; each component is in effect weighted by itself. *See supra* note 28. As a result of the variable weights, the ICC valuation can never be expected to track true reproduction cost or replacement value, even if the reproduction cost escalation index tracked inflation perfectly. *See* Navarro, Petersen & Stauffer, *A Critical Comparison of Utility-Type Ratemaking Methodologies in Oil Pipeline Regulation*, Bell J.Econ., Spring 1981, at 392, 397; *Farmers Union I*, 584 F.2d at 419 n. 29.

In addition, by retaining the ICC methodology, FERC accepted, at least for the time being, the mismatch between the method of depreciation used to determine the cost of service expense and the "condition percent" method used to determine depreciation for rate base purposes. *See* 21 FERC at 61,632. "Unfortunately, the condition percent does not bear any well-defined relationship to the accounting concept of depreciation ... [n]or does the use of the condition percent track the *economic* concept of depreciation." Navarro & Stauffer, *supra* note 29, at 300 (emphasis in original).

These features of the ICC rate base formula have led experts to call it "nothing less than bizarre; it is a mysterious collection of seemingly unrelated components that, through the wonders of jurists' algebra, miraculously distill into a single sum." *Id.* at 296. These features have been the subject of criticism throughout the most recent *Williams* proceeding, and drew the attention of this court in *Farmers Union I*. FERC, however, failed to provide any reasoned defense to these criticisms, beyond its belief—misguided by its impermissible interpretation of "just and reasonable" rates—that oil pipeline rate regulation can tolerate such "anomalies and inconsistencies." 21 FERC at 61,616. Thus FERC in its *Williams* opinion also "entirely failed to consider an important aspect of the problem" of rate bases. *Motor Vehicle Mfrs. Ass'n*, 103 S.Ct. at 2867.

owners of the independent pipelines] have lots of places to put their money, ... and that the social need in this field is for returns high enough to induce the construction of new pipelines and to avert the premature abandonment of old ones," FERC enumerated the following eight measures of the rate of return on equity:

> (i) Realized nominal rates of return on the book value of shareholders' equity in the oil industry generally over the past 5 years;
> (ii) Realized nominal rates of return on the book value of shareholders' equity in the oil industry generally over the past year;
> (iii) Realized nominal rates of return on shareholders' book equity in American industry generally over the past 5 years;
> (iv) Realized nominal rates of return on shareholders' book equity in American industry generally during the most recent year;
> (v) The particular parent or parents' realized nominal rate of return on total non-pipeline book equity over the past 5 years;
> (vi) The particular parent or parents' realized nominal rate of return on total non-pipeline book equity in most recent fiscal year;
> (vii) Total returns (dividends plus capital gains) on a diversified common stock portfolio over the past 5 years ...; and
> (viii) Total returns (dividends plus capital gains) on a diversified common stock portfolio over the long run—25 years, 50 years, or more. ...

See 21 FERC at 61,645. FERC further held that "it would normally be proper to choose the measure most favorable to the particular carrier or carriers involved." *Id.*

Although most of these rates of return are expressed in terms of return on the *book equity* of unregulated companies, *i.e.*, on the basis of *original cost*,[69] FERC's methodology would nevertheless apply them, after an adjustment for "inflation," to the equity component of the ICC *valuation* rate base. Moreover, under FERC's methodology, the "equity component" is equal to the total valuation rate base, less the *face value* of the outstanding debt. *See supra* at 1496–97. By this approach, the entire amount of appreciation in the rate base is allocated to the "equity component," while none of it is allocated to the debt component.

We frankly cannot locate the rhyme nor reason of this rate of return methodology; nor is it based upon a consideration of all relevant factors in oil pipeline ratemaking. To begin with, FERC offered no rational explanation that linked its regulatory purposes with its chosen rate of return indices. FERC made no attempt to estimate the risks involved with oil pipeline operations, and therefore could not reasonably estimate the rate of return required to maintain a viable oil pipeline industry. Moreover, in summary form, with a more elaborate discussion below, the "inflation adjustment" to the selected rates of return does not reliably compensate for the appreciation to the valuation rate base, and, therefore, overcompensation for inflation is not reliably prevented. FERC's willingness to permit the oil pipeline companies to choose among a wide variety of rate of return indices only makes these defects worse. FERC's method of calculating the "equity component" of the rate base further enlarges the allowable returns without good reason. As a result, the total returns allowable under FERC's methodology have no discernible regulatory significance beyond the fact that they are bound to be very large. FERC does not even offer an explanation of why its ratemaking formula

69. Book equity is the original paid-in capital contribution of equity shareholders plus any retained earnings. It therefore represents the net underlying value of the company's assets in original cost terms. *See, e.g.*, B. Ferst & S. Ferst, *Basic Accounting for Lawyers*, § 2.06, at 73 (3d ed. 1975); J. Gentry, Jr. & G. Johnson, *Finney & Miller's Principles of Accounting* 372 (8th ed. 1980).

sets "a cap of gross abuse," let alone a just and reasonable rate.

1. *Risk and Allowable Rate of Return*

As previously discussed, FERC made no effort to study and estimate the risks associated with oil pipeline operations. Accordingly, FERC offered no reason to believe that the risks associated with the unregulated enterprises from which it derived its rates of return were equivalent to the risks of running an oil pipeline.[70] Because the level of risk associated with an enterprise determines the returns it requires to attract capital, *see supra* at 1515–16, FERC never established a reasonable connection between its stated purpose to preserve the financial integrity and economic viability of oil pipelines and its selected rate of return indices.

FERC attempted to establish such a connection by arguing:

> If the returns do not exceed those being realized somewhere or other in a roughly comparable segment of the economy's unregulated sector, it is hard to see how they can be branded extortionate or abusive.
>
> Our relative permissiveness makes the risk problem more manageable. Can even the riskiest of pipelines argue that it is so hazardous that it is entitled to more than *anyone* makes *any place* else?

21 FERC at 61,645–46 (emphasis in original). The first sentence of this passage lacks any semblance of valid reasoning from the record. FERC never even attempted to establish that the relevant segments of the economy's unregulated sector were in fact "roughly comparable" to the oil pipelines. If the enterprises were "roughly comparable," the reference to them might be justified. FERC, however, assumed, without explanation, the existence of that factual predicate in order to justify its selected rate of return indices. Unfortunately, this assumption is not supported by any sound explanation based on the record, and therefore this attempted justification rests on nothing more than a blind, conclusionary assertion of "rough comparability."

The second paragraph in this passage makes use of a *non sequitur.* In preceding paragraphs, FERC had permitted the oil pipelines to choose a rate of return for themselves from a buffet bedecked with those found in a wide variety of lucrative unregulated enterprises. It is therefore pure illogic to assume that the "risk problem" is the spectre that the oil pipelines might claim entitlement to *even greater* rewards. As we have discussed above, the real "risk problem" with FERC's methodology—the problem FERC entirely failed to address—lies in whether FERC's selected indices grossly *overestimate* the risks and needed returns prevailing in the oil pipeline business.

2. *The "Inflation Adjustment" and the "Double Counting" Problem*

The problem of "double counting" for the effects of inflation, once in the rate base and again in the rate of return, has plagued oil pipeline ratemaking for some

70. For instance, FERC would look to the rate of return of the "particular parent or parents'" total non-pipeline operations. Obviously, there are no assurances that the returns to, say, Exxon's non-pipeline operations—which include its office systems manufacturing, oil exploration, etc.—would reflect the risks of an oil pipeline. Furthermore, because many pipelines are owned jointly by a number of oil companies, it appears that the pipeline could select the "particular parent" with the most lucrative non-pipeline operations over the relevant period. Neither is there any assurance that the profits of the "oil industry generally," or the "total returns (dividends plus capital gains) on a diversified common stock portfolio" in a sustained bull market would reflect a pipeline's properly deserved return. Also, although the rates of return on "American industry generally" would apparently represent the average risk enterprise, FERC did not establish that the risks of oil pipelines fall above or below or around the average level of risk in American industry generally. Finally, because the FERC method permits pipelines to select for themselves the applicable rate of return index, all that is required to throw the method entirely out of kilter with a reasonable rate methodology is merely *one* excessively high index level.

time. *See, e.g., Farmers Union I,* 584 F.2d at 419, 420–21; *Williams Brothers Pipe Line Co.,* 355 I.C.C. at 487. The ICC rate base formula purports to account for inflation in valuing a pipeline's assets. *See* 21 FERC at 61,646; *see also Farmers Union I,* 584 F.2d at 421. If the chosen rate of return also reflected the effects of inflation, then the resulting return might compensate for inflation twice, and so would be excessive.

FERC attempted to eliminate the double counting problem by subtracting an "inflation allowance" from the nominal rate of return before applying it to the "inflation-sensitive" ICC valuation rate base. *See* 21 FERC at 61,646–47. Because the nominal rates of return are derived from original cost accounting, *see supra* at 74, they include a premium to compensate investors for the expected future rate of inflation. However, because the ICC valuation rate base is, according to FERC, already "inflation-sensitive," FERC's method should deduct from the nominal rate of return the percentage by which the valuation rate base has been "written up" during "the relevant period." *Id.* at 61,647. FERC defined "the relevant period" to be "the time period that was looked to in order to derive the appropriate nominal rate of return." *Id.* at 61,712 n. 511. For example, if the nominal rate of return were set by reference to returns on shareholder book equity over the most recent year, that nominal rate would be reduced by the percentage amount that the valuation rate base had increased over the most recent year. In this way FERC believed it could "avoid overcompensation for inflation." *Id.* at 61,646.

Farmers Union, among others, objects to this "inflation adjustment" on the ground that it does not compensate for actual inflation. It put forward strong evidence, including calculations made by Commissioner Hughes in his separate statement, to show that the valuation rate base does not track inflation in any predictable manner.[71] *See* 21 FERC at 61,725 (Hughes, Comm'r, dissenting in part and concurring in part) ("A . . . serious defect [in FERC's decision], and I believe, an uncorrectable one, is the unstated assumption that the trending of the rate base in the valuation formula approximates or should approximate the course of inflation."); [72] *see also Farmers Union I,* 584 F.2d at 519 & n. 29; J.A. at 2455 (testimony of Thomas C. Spavins) (highlighting "the lack of a clear correspondence between [the ICC] valuation returns and any clear system of indexing returns for inflation").

FERC in a footnote anticipated such a criticism, and responded: "Suppose that [the ICC formula] does lead to an overly generous allowance for inflation in the rate base. What of it? The rate of return on equity is reduced by the precise amount of the overstatement." 21 FERC at 61,712 n. 513. This defense is sound, as far as it goes. Speaking precisely, FERC's "inflation adjustment" does not operate as an adjustment to compensate for the effects of inflation; rather, it operates as an adjustment to compensate for the effects of *rate base* appreciation, which, if left in the calculus, would lead to "double counting."

71. Farmers Union and the Justice Department contend that the "inflation adjustment" does not represent the real inflation component of the rate of return for two reasons. First, they show how rate base appreciation in the past has not tracked the inflation rate, as measured by either the consumer price index or the gross national product deflator. *See also infra* note 72. Second, they remind us that the inflation component of the rate of return should compensate investors for *expected future* inflation, not past inflation.

72. Commissioner Hughes continued: "A preliminary review of inflation figures for the period 1970–1981 and of the change in valuation for Williams Company indicates on both a year-to-year and on a total cumulative period significant differences. The [relevant data] shows clearly the unpredictable differences between the rate of inflation, measured by either the Consumer Price Index (CPI) or the Gross National Product deflator (GNP deflator), and the change in valuation of Williams Company by the ICC methodology. In only one year was inflation (measured by either the CPI or the GNP deflator) within 20% of the change in valuation." 21 FERC at 61,725.

The important feature of such a scheme is not that the rate of inflation and the rate of rate base "write up" are the same; instead, it is important only to assure that the increase in the rate base—which is *affected* and indeed *justified* by the fact that present values reflect inflationary effects—is not counted in calculating rates because expected inflation is *already* reflected in the level of rates of return. In simple terms, then, the "inflation adjustment" operates to write off the "write-up" in the valuation rate base through a deduction from the nominal rate of return. *See* 21 FERC at 61,646–47.

Unfortunately, however, and without explanation, FERC decided that the needed adjustment should be determined by reference to rate base appreciation during "the time period that was looked to in order to derive the appropriate nominal rate of return." *See supra* at 1524. This time period could range from "the most recent year" only, to "the long run—25 years, 50 years, or more." 21 FERC at 61,645; *see supra* at 1522. The allowable returns to the pipeline, by contrast, reflect the *entire* appreciation in the rate base over the life of the pipeline's assets. The "inflation adjustment," therefore, will not necessarily reflect the full rate of write up reflected in the rate base. Furthermore, it is *likely* that the "inflation adjustment" will leave in the final rates significant "double counting," because under FERC's method the oil pipelines are empowered to select for themselves the applicable rate of return index, and, as a corollary, they also select the time period relevant to calculating the "inflation adjustment." Accordingly, the FERC methodology allows the oil pipeline companies to select a time period during which the rate base appreciated at a slower rate than average. In this way, the FERC method permits the regulated companies to select the rate of return index that will result in an adjustment that *understates* the actual overall rate base appreciation. In Commissioner Hughes' words, the FERC method "invites an enormous amount of gamesmanship. Eight rate of return options are suggested, some with multiple choices of time periods. The inflation/valuation variance gives an exciting new twist to a pipeline's choice among the candidates. Thus a firm might choose to base its return one year on stock market performance after a bull market, and in its next filing switch to a high oil company comparison which might be offset by a small increase in its own valuation." 21 FERC at 61,726 (Hughes, Comm'r, dissenting in part and concurring in part).

3. *FERC's "Equity Component" Has No Meaningful Relation to the Rates of Return on Book Equity*

Even more capricious was FERC's application of the rates of return, representing revenues on the book equity of unregulated companies, to what FERC called the "equity component of the valuation rate base." As noted above, FERC's notion of the equity component includes the original paid-in equity of the pipeline *plus* the *entire* write up in the rate base. *See supra* at 1522. For example, consider an oil pipeline, originally financed with $900,000 debt and $100,000 equity. The original cost of the pipeline is one million dollars. Over time, the pipeline's valuation rate base increases to, say, $1,500,000. Under FERC's method, the equity component of the rate base amounts to $600,000, *six* times its book equity, even though the valuation rate base as a whole has appreciated *only by half.* Thus, FERC's method magnifies the "equity component" of the rate base to spectacular proportions, especially in an industry as highly debt-leveraged as the oil pipelines.[73]

73. Because the extent of debt leveraging directly increases this magnification effect, an oil pipeline with a greater proportion of debt financing would receive a higher overall return under FERC's methodology than a pipeline, identical in all other respects, that uses less debt financing. In a normal corporate context, the increased return might have been at least partly explained by the increased risks of default associated with using high levels of debt. In the case of oil pipeline companies that benefit from parent guarantees, however, that increased risk is compensated for through FERC's "suretyship premium." Indeed, the presence of such guar-

See supra note 58. At the same time, however, FERC's selected rates of return reflect the revenues of the unregulated companies as a percentage of their book equity. To set allowable revenues for the oil companies, FERC took these rates of return and applied them to a *completely different measure of net worth,* the "equity component of the rate base." Book equity, unlike FERC's newly devised "equity component," represents the underlying net assets in *original cost terms.* Because book value of an equity share has no significance as to the *present value* of the company's assets, the returns on book equity likewise have no significance in relation to the equity component of the valuation rate base. *See, e.g.,* J. Gentry, Jr. & G. Johnson, *Finney & Miller's Principles of Accounting* 367–68 (8th ed. 1980).

Assuming *arguendo* that the "inflation adjustment" accurately compensates for the rate of rate base appreciation, which it does not, *see supra* at 1524–25, such an adjustment would compensate only for the appreciation attributable to the portion of the rate base financed by the paid-in capital of equityholders. It would never compensate for the fact that FERC includes the *entire* appreciation on the rate base—attributable to *both* the equity and debt components of the pipeline—in its "equity component." Accordingly, FERC's method ensures that the allowable revenues for oil pipelines will *exceed* the revenues earned by its selected unregulated companies by the extent to which the pipelines' "equity component" exceeds the portion of the rate base financed through equity investments. *Cf.* 21 FERC at 61,712 n. 519 (under the "more austere standard of fairness," FERC "would trend only the equity portion of the rate base for inflation"). In most cases, this difference will be very large.[74]

Indeed, FERC provides no analysis of why its application of its selected rates of return to an unrelated measure of rate base equity should keep "a cap on gross abuse" in the resulting rates, not to mention the lack of any assurance that the resulting rates will be "just and reasonable." Commissioner Hughes appears to have rightly characterized FERC's game as Dialing for Dollars instead of The Price is Right. *See* 21 FERC at 61,730 n. 4 (Hughes, Comm'r, dissenting in part and concurring in part). We cannot condone such a ratemaking methodology, which assures nothing except that permissible rate levels will be very high.

In an attempt to defend the mismatch between its selected rates of return (on book equity) and its "equity component of the valuation rate base," FERC claimed that its method of calculating the "equity component" gives the equityholders the full benefit of debt leveraging. Just as a seller of a house benefits from the entire appreciation of the value of the house regardless of the amount of debt that financed the original purchase, FERC believed that so, too, should the equityholders in oil pipelines receive an "equity kicker" in their rate base. *See* 21 FERC at 61,648–50. This analysis overlooks the fact that oil pipeline companies are in fact free to sell their assets, and thereby enjoy the full benefit of debt leveraging in the difference

antees places the risk of default squarely upon the equity holders in the *parent companies,* not the equity holders in the pipeline.

Finally, we note that this magnification effect would have been reduced, although not eliminated, if FERC had used hypothetical capital structures instead of the suretyship premium. In the absence of the parent guarantees, the oil pipelines would not have been able to use debt leveraging to such an extraordinary degree; accordingly, the hypothetical capital structure would consist of less debt and more equity, and the leveraging effect would be reduced in the calculation of the "equity component" of the rate base. In this way, then, FERC indirectly failed to meet its traditional purpose of considering each regulated company "as nearly as possible on its own merits and not on those of its affiliates." *Florida Gas Transmission Co.,* 47 F.P.C. 341, 363 (1972). This purpose, of course, formed the rationale for FERC's inclusion of a "suretyship premium" in the rate of return.

74. FERC offered a typical example in which it would have approved an "opportunity to earn 61% (182/300) on the book value of [an oil pipeline's] equity" even though its selected adjusted rate of return was 14%. *See* 21 FERC at 61,647–48.

between the sale price and the original cost of the assets. Such an "equity kicker," however, has no significant relationship with the determination of the cost of capital. A rate of return should set the proper rewards for investors in the form of current income, not asset appreciation and sale. FERC's attempted defense of its use of its "equity component" thus fails to meet minimal standards of reason.[75]

[11, 12] While the determination of a fair rate of return cannot and should not be constrained to the mechanical application of a single formula or combination of formulas, the ratemaking agency has a duty to ensure that the method of selecting appropriate rates of return are reasonably related to the method of calculating the rate base. *See, e.g., FPC v. Hope Natural Gas Co.*, 320 U.S. 591, 605, 64 S.Ct. 281, 289, 88 L.Ed. 333 (1944); *Dayton Power & Light Co. v. Public Utilities Commission*, 292 U.S. 290, 311, 54 S.Ct. 647, 657, 78 L.Ed. 1267 (1934); *NEPCO Municipal Rate Committee v. FERC*, 668 F.2d 1327, 1342 (D.C.Cir.1981), *cert. denied*, 457 U.S. 1117, 102 S.Ct. 2928, 73 L.Ed.2d 1329 (1982). Our disapproval of FERC's decision to retain the ICC rate base formula, *see supra* at 1520–21, did not turn on the substantive validity of the rate base calculations. FERC may adopt any method of valuation for rate base purposes so long as the end result of the ratemaking process is reasonable. *See, e.g., FPC v. Natural Gas Pipeline Co.*, 315 U.S. 575, 586, 62 S.Ct. 736, 743, 86 L.Ed. 1037 (1942); *NEPCO Municipal Rate Committee v. FERC*, 668 F.2d at 1333; *Washington Gas Light Co. v. Baker*, 188 F.2d 11, 18 (D.C.Cir.1950), *cert. denied*, 340 U.S. 952, 71 S.Ct. 571, 95 L.Ed. 686 (1951). Rather, our disapproval arose out of the FERC's failure to give a reasoned explanation for its rejection of responsible rate base alternatives. We now find, however, as a result of the foregoing considerations, that the combination of FERC's rate base and rate of return methodologies does not produce an acceptable "end result." Accordingly, we disapprove FERC's ratemaking methodology on this additional basis.

VI. Miscellaneous Issues

A. *Purchase Price of Williams' Assets*

[13] As discussed *supra* at 1497, FERC rejected the Williams Company's attempts to use the purchase price of its assets in its rate base and depreciation basis calculations. FERC soundly held that the use of purchase price instead of original cost in rate base calculations would engender an undue incentive to trade pipeline assets at a high price, which, under a purchase price regime, would increase allowable rates.[76] *See* 21 FERC at 61,635.

75. The same can be said of the other defenses FERC offered. First, FERC claimed that its lack of authority over abandonments justifies its more generous outlook toward oil pipeline revenues. 21 FERC at 61,650. As we stated *supra* note 51, this explanation lacks a reasoned basis. Second, FERC declared that its allowance of "seemingly outlandish returns" was justified because "the rate of return on equity is a real rate absolutely devoid of any inflation premium of any sort." *Id.* As we have discussed, *supra* at 1523–25, however, inflationary effects are counted in the ratemaking formula. If the rate base appreciates at the rate of inflation or at a higher rate, the effects of inflation are counted in the rate base; if the rate base appreciates at a slower rate than inflation, the "inflation adjustment" reduces the nominal rate of return only by that amount necessary to offset rate base appreciation during the so-called "relevant period," thereby leaving some increment in the rate of return to compensate for inflationary effects not reflected in the rate base. Finally, FERC contended that the "thinness of the equity cushions" in oil pipeline financing, and the associated risks, justifies its methodology. *See id.* at 61,712 n. 522. However, FERC's method *already* compensates for such risks through the suretyship premiums. *See supra* at 1521. When the parent company guarantees the pipeline's debt, the risks associated with the thin equity cushion are shifted away from the pipeline's equityholders.

76. *See also Farmers Union I*, 584 F.2d at 420–21 ("It is true that occasional acquisitions of carriers at prices deemed currently reasonable might serve as a mechanism for accurately reflecting inflation's impact on the value of such enterprises. We have our doubts, however, about either the desirability of encouraging acquisitions solely for this purpose, or of depending on their unpredictable occurrence to serve this function.").

Furthermore, in keeping with this court's remarks in *Farmers Union I*, FERC eliminated the use of purchase price as the basis upon which to calculate depreciation expenses. *See id.* at 61,635–36.[77] As Williams' procedural and substantive objections to these rulings all lack merit, we approve FERC's decision to eliminate purchase price generally from oil pipeline ratemaking.[78]

B. *Systemwide vs. Point-to-Point Rate Regulation*

[14] As discussed *supra* at 1497, FERC decided in *Williams* to regulate oil pipeline rates on a systemwide, rather than a point-to-point basis. FERC did so by way of a short discussion, on the assumption that the ICC had in the past given "scant attention to particular rates on specific routes." 21 FERC at 61,650. Farmers Union objects to this ruling. It challenges FERC's interpretation of past ICC precedents, citing ICC cases in which rates were determined by reference to specific point-to-point movements and their related costs and valuations. *See* Farmers Union Brief at 69. Farmers Union also noted that the Interstate Commerce Act requires "*every* unjust and unreasonable charge ... [to be] prohibited and declared to be unlawful." 49 U.S.C. § 1(5) (emphasis added). Finally, it contends that systemwide rate regulation could shield rate discrimination from proper remedy.

Our review of relevant ICC precedents shows that past oil pipeline proceedings have included attempts to set rates "computed on a detailed allocation of costs to the proper section of the pipe-line system." *Petroleum Rail Shippers' Association v. Alton & Southern Railroad*, 243 I.C.C. 589, 663 (1941); *see Minnelusa Oil Corp. v. Continental Pipe Line Co.*, 258 I.C.C. 41, 54–55 (1944). In both proceedings, the ICC allocated the operational costs of transportation from each originating station, averaged as to distance and weighted as to volume, to every terminal in the relevant system. Because oil pipelines rates are charged on a point-by-point basis, such cost allocation ensures that the costs of providing service over a given territory will be recovered only from the companies that use that particular service. *See Minnelusa Oil Corp.*, 258 I.C.C. at 53 ("Operating conditions of defendant pipe lines in Rocky Mountain territory are more difficult than those of pipe line in territory east thereof,

77. In *Farmers Union I*, this court observed, "The final irrationality is that the depreciation basis used, unlike original cost, valuation and other possible approaches, allows depreciation charges, and thus the rates, to change dramatically from one day to the next—so long as a purchase of the assets intercedes—even though the cost of the carriers' public service has not actually changed." 584 F.2d at 420.

78. First, Williams argues that FERC gave no notice that the issue was to be discussed in Phase I of the *Williams* proceeding. The record, however, shows that such notice was given and that Williams briefed the issue during Phase I. *See, e.g.*, J.A. at 241 (ALJ's Invitation to Submit Comments on Ratemaking Principles for Oil Pipeline Rate Cases); *id.* at 4103–08 (Williams' Opening Brief in Phase I). Second, Williams claims that if its assets were purchased in good faith and at arms length, then the purchase price should be counted in the rate base. Under FERC's rationale, however, "a mere change in ownership should not result in an increase in the rate"; it therefore should not matter whether the purchase price is *bona fide* or instead results from an attempt to inflate the rate base artificially. 21 FERC at 61,635 (quoting Shippers' Initial Post-Hearing Brief at 103). Third, Williams believes that FERC's ruling resulted from FERC's mistaken belief that it was bound by a passage from *Farmers Union I*, when, according to Williams, the passage was dictum. However, even assuming that the passage was dictum, FERC should properly consider the force of its reasoning. Besides, FERC expressly made its ruling a matter of independent administrative judgment. *See id.* at 61,636 ("[*Farmers Union I*] binds us. Moreover, we agree with it."). Fourth, Williams contends that FERC's rejection of purchase price as a ratemaking element constitutes an impermissible extension of FERC's jurisdiction in order "to regulate a purchase." Williams Brief at 29. This contention is plainly frivolous; FERC merely decided not to consider the purchase price as relevant for ratemaking purposes. Finally, Williams says the ruling represents an unconstitutional taking. This contention, too, is frivolous; regulated companies have no protected property interest in any given method of calculating a rate base so long as the resulting rates are "just and reasonable." *See supra* at 1517.

as hereinabove explained, but these are reflected for the most part in operating expenses."). We also find disturbing the apparent tension between FERC's action and the language of section 1(5). While FERC made assurances in *Williams* that patently discriminatory tactics will not be immunized from searching regulatory scrutiny, the FERC's systemwide approach would apparently tolerate substantial variance in allowable returns among pipeline segments without any justification, cost-based or otherwise.

However, we need not decide this issue at this time, because FERC made its decision prematurely. The ALJ identified the following issue for consideration during Phase I of the *Williams* proceeding:

> Which unit should the Commission regulate (*i.e.*, should the Commission *determine rate base* upon a system-wide or upon a segmented basis (*e.g.*, petroleum products pipeline v. fertilizer pipeline))?

J.A. at 242 (Invitation to Submit Comments) (emphasis added). The ALJ designated this question as a "rate base issue." *Id.* at 241. FERC's ruling, however, went well beyond the determination of the rate base issue, and decided further to abandon *all cost allocation* to particular pipeline segments, calling the allocation inquiry "metaphysical, inconclusive and barren." 21 FERC at 61,651. Previous ICC cases make clear that the question whether to "determine rate base upon a system-wide or upon a segmented basis" is separate from the question whether costs should be allocated to particular pipeline segments. In those prior ICC cases, the *rate base valuation* was not broken down into line sections, but the ICC nevertheless proceeded to allocate *costs* to the proper sections of the pipeline. *See Minnelusa Oil Corp.*, 258 I.C.C. at 54; *Petroleum Rail Shippers' Association*, 243 I.C.C. at 663. The rate base issue goes to the determination of the proper valuation units upon which a rate of return will be earned, and accordingly constitutes a proper element of the Phase I inquiry, which centered on how to calculate allowable revenue requirements for an oil pipeline. The cost allocation issue, by contrast, determines the fair distribution of the burdens of meeting those revenue requirements among the oil pipeline's customers. *See* Bonbright, *Principles of Public Utility Rates* 291–93 (1961). Thus, the cost allocation issue is more properly characterized as a question of rate design. *See, e.g., Second Taxing District v. FERC*, 683 F.2d 477, 480 (D.C.Cir.1982); *Cities of Batavia v. FERC*, 672 F.2d 64, 80 (D.C.Cir. 1982).

The ALJ, however, expressly deferred rate design issues until Phase II of the proceedings. *See* J.A. at 243 (Invitation to Submit Comments) ("A number of additional issues, such as 'rate design' ... were suggested .... Those suggestions were not adopted because, in most instances, the issues raised appear to be more appropriate for consideration in Phase II of this proceeding."); *id.* at 245 (remarks of ALJ at outset of prehearing conference) ("Someone also raised the question of rate design. I consider those Phase II issues. Those issues tend to vary with the particular pipeline."). Accordingly, we find that FERC decided an issue not properly before it.[79] On remand, FERC, if it so desired, could consider the cost allocation issue as a part of Phase I, but if it does so it should give adequate notice to the parties so that the issue can be fully debated before determination. In making a decision on cost allocation principles, FERC should be cognizant of the ICC's past cost allocation practices, and should accord appropriate consideration to the mandate of section 1(5).

C. *Tax Normalization*

[15] As discussed *supra* at 1498, FERC decided in *Williams* to permit oil pipeline companies to decide for themselves whether or not to use tax normalization accounting, but in any event prohibited companies that choose normalization from including the resulting tax reserve accounts in their

79. Insofar as petitioner challenges FERC's decision to determine *rate base* on a systemwide basis, we uphold FERC's continuation of the ICC's longstanding practice.

rate bases. AOPL challenges the latter ruling in the belief that the exclusion of deferred tax amounts from the rate base "would *completely eliminate* any benefits that would otherwise result from a carrier's election of accelerated depreciation." AOPL Brief at 42 (emphasis in original).

We think that this challenge misses the mark. Regardless of whether an oil pipeline may include tax reserve accounts in its rate base, tax normalization accounting would permit it to benefit from accelerated depreciation without having to flow those benefits through to its customers. Unregulated companies, of course, do not concern themselves with rate bases, and yet they choose accelerated depreciation solely because it permits them to defer a tax burden. The oil pipeline companies that choose normalization accounting also enjoy the benefit of tax deferral. The amount in the resulting deferred tax account can earn interest even if it is not included in the rate base. Accordingly, we reject AOPL's notion that FERC's ruling "completely eliminates" any normalization benefit.[80]

VII. CONCLUSION

For the reasons set forth above, we remand this case to FERC. We hope and expect that FERC will accord to this case the high priority that it deserves. In light of its excessive long pendency, this case should be disposed of in a reasonably speedy manner. FERC may find it necessary to take additional evidence in light of this court's opinion, but in any event, FERC already has the benefit of an extensive record and should be able to issue a new order within the next twelve months.

We emphasize that FERC should give serious and thoughtful consideration to the admittedly difficult problems presented by this case. Throughout this opinion we intended to provide some important and basic guideposts to assist FERC in that mission. Most fundamentally, FERC's statutory mandate under the Interstate Commerce Act requires oil pipeline rates to be set within the "zone of reasonableness"; presumed market forces may not comprise the principal regulatory constraint. Departures from cost-based rates must be made, if at all, only when the non-cost factors are clearly identified and the substitute or supplemental ratemaking methods ensure that the resulting rate levels are justified by those factors. In addition, the rate of return methodology should take account of the risks associated with the regulated enterprise. It should not be forgotten, too, that the choice of a proper rate of return is only part of what should be an integrated ratemaking method, and accordingly FERC must carefully scrutinize the rate base and rate of return methodologies to see that they will operate together to produce a just and reasonable rate.

In all these respects, the original cost methodology, a proven alternative, enjoys advantages that should not be underestimated. FERC should reexamine this alternative, and others, in this proceeding which, after all, was instituted in order to take a fresh and searching inquiry into the proper ratemaking method for oil pipelines. In this way, we hope that FERC can meet its statutory responsibilities without any further undue delay.

So ordered.

80. However, we note other inconsistencies in FERC's rationale for its normalization policies. The Commission opted to allow normalization for "the essential reason ... that normalization facilitates the comparable earnings analysis basic to the determination of appropriate rates of return." 21 FERC at 61,656. Apparently, FERC opted for normalization in order to bring oil pipeline accounting into line with generally accepted financial reporting practices, so that meaningful comparisons could be made. Yet, as we discussed earlier, FERC effectively abandoned comparable earnings analysis in its opinion. *See supra* at 1515–16. FERC also undermined its stated purpose of meaningful comparison when it announced that pipelines may choose for themselves which accounting method to use. While FERC's normalization policy may be justified on other grounds, on remand it should articulate its reasons therefor and perhaps reexamine those policies in light of any new ratemaking methods it adopts.

Farmers Union II
Certiorari Denied November 26, 1984
105 S. Ct. 507, 469 U.S. 1034 (1984)

469 U.S. 1034, 83 L.Ed.2d 398

TEXAS EASTERN TRANSMISSION CORPORATION, petitioner, v. FARMERS UNION CENTRAL EXCHANGE, INC., et al. No. 84-185.

Case below, *Farmers Union Central Exchange v. F.E.R.C.*, 189 U.S.App.D.C. 250, 584 F.2d 408; 236 U.S.App.D.C. 203, 734 F.2d 1486.

Petition for writ of certiorari to the United States Court of Appeals for the District of Columbia Circuit.

Nov. 26, 1984. Denied.