Southern Natural Gas Co.

76 FERC ¶ 61,122 (1996), upheld in relevant part, 198 F.3d 960 (D.C. Cir. 2000)

On January 24, 1996, Southern Natural Gas Company (Southern) filed an application for a certificate of public convenience and necessity authorizing the construction and operation of certain pipeline facilities. Three parties filed protests to the application and Alabama-Tennessee Natural Gas Company (Alabama-Tennessee) filed a motion to dismiss.

*** For all of the reasons discussed below, we will deny the non-environmental portions of the protests and Alabama-Tennessee’s motion to dismiss.

I. Background and Proposal

On April 17, 1995, Southern announced an open season for requests for additional firm transportation services in order to determine whether there was sufficient demand to support an expansion of its pipeline system. Southern received requests for long-term firm transportation services that would require it to expand the capacity of its pipeline system by 76,350 Mcf per day.

As a result, Southern proposes to construct, install and operate 109.53 miles of 16-inch pipeline, 8.47 miles of 12-inch pipeline, two turbine compressor units of 4700 hp and 1600 hp, three meter stations and related appurtenant facilities in order to expand its pipeline system to provide firm transportation services to five customers. Southern proposes to provide service to these customers under its current Rate Schedule FT and subpart G of Part 284 of the Commission’s Regulations as implemented under Southern’s blanket transportation certificate issued in Docket No. CP88-316-000.

Three of the customers are existing shippers on the Southern system who want to increase their firm transportation contract quantities. They are Marshall County Gas District (Marshall County), DeKalb-Cherokee Counties Gas District (DeKalb-Cherokee) and Austell Gas System of Austell, Georgia (Austell). Decatur Utilities, City of Decatur, Alabama (Decatur) and Huntsville Utilities Gas System, City of Huntsville, Alabama (Huntsville), which currently receive all of their natural gas transportation services through Alabama-Tennessee, will be new shippers on the Southern system and will take most of the proposed capacity. They are both municipally-owned local distribution companies (LDCs).

These customers have executed FT Service Agreements for a total of 74,850 Mcf/day as follows:

<table>
<thead>
<tr>
<th>Customer</th>
<th>Transportation Demand</th>
<th>Term of Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Huntsville</td>
<td>40,000 Mcf/day</td>
<td>20 years</td>
</tr>
<tr>
<td>Decatur</td>
<td>25,000 Mcf/day</td>
<td>20 years</td>
</tr>
<tr>
<td>Marshall</td>
<td>4,000 Mcf/day</td>
<td>20 years</td>
</tr>
<tr>
<td>DeKalb-Cherokee</td>
<td>2,350 Mcf/day</td>
<td>10 years</td>
</tr>
<tr>
<td>Austell</td>
<td>3,500 Mcf/day</td>
<td>10 years</td>
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Southern states that even though the facilities will have 1,500 Mcf/day of unused capacity, the revenues from the service contracted for, using the proposed billing determinant usage, will insure that all of Southern’s customers receive the entire economic benefit demonstrated in the application. Southern estimates that the total cost of the facilities will be $52.8 million.
Southern requests assurance that it will be allowed to roll-in this expansion project’s costs in accordance with the terms of its Rate Schedule FT as set forth in the Seventh Revised Volume No. 1 of its FERC Gas Tariff and subpart G of Part 284 of the Commission’s Regulations. Southern advanced the following reasons to support its rolled-in rate proposal:

1. The Southern system is somewhat unique in the way it has developed to serve its markets. The proposed pipeline is consistent with the historical growth of the Southern system through mainline extensions off of two parallel mainline systems. Southern further states that the proposed pipeline is indistinguishable, in every respect, from the other mainline extensions which received rolled-in rate treatment.

2. Southern states that the proposed pipeline will provide a significant long-term benefit to the Southern system. Exhibit N of the application shows that estimated revenues generated from the incremental firm transportation services will exceed the estimated cost of service of the facilities in the second year of operation. Thus, Southern claims that the proposed pipeline satisfies the financial criteria required by the Commission for rolled-in rate treatment in its statement of policy issued in Docket No. PL94-4-000 (pricing policy).

3. Southern asserts that there are several monetary system benefits that existing shippers will realize from the expansion project. First, over the primary terms of the firm transportation service agreements associated with the system expansion, the revenues generated will exceed the costs incurred by approximately $39 million. In addition, the expansion of the Southern system into the new north Alabama market will mitigate the impact of any potential future rate increases attributable to any future reductions in transportation services by existing firm shippers. Finally, Southern contends that the expansion will produce economies of scale as the north Alabama market continues to grow. The capacity of the 16-inch pipeline can be increased by 70,000 Mcf per day with the addition of compression at an estimated cost of $10 million. Exhibit N-3 shows that realization of this growth potential would increase the benefit to the system by $5.9 million per year and would result in a 2.5 percent rate reduction to Southern’s existing customers.

4. Southern maintains that existing shippers will realize operational system benefits from the expansion project such as a (i) significant enhancement to system reliability for all shippers delivering gas in Rate Zones 2 and 3, (ii) the increased availability of interruptible transportation service for shippers delivering gas in Rate Zone 2 since the capacity may be available to existing shippers if it is not being utilized by the expansion shippers, (iii) access to the North Alabama Market creating substantial new opportunities for marketers and shippers on the Southern system, and (iv) DeKalb-Cherokee and Marshall County customers’ obtaining firm service to serve their increasing requirements.

On July 9, 1996, Alabama-Tennessee filed a motion to dismiss Southern’s certificate application or, in the alternative, to set Southern’s application for hearing. ***

In its motion to dismiss, Alabama-Tennessee urges the Commission to find that: (1) Southern’s proposed extension is a lateral and that Southern must charge shippers on the lateral Part 284 rates for the mainline transportation service plus an incremental rate to recover the costs of the bypassing lateral; (2) Southern’s proposed displacement of Alabama-Tennessee’s markets would be unlawfully achieved through predatory
pricing and other exclusionary and anticompetitive devices intended to extend Southern’s monopoly power and eliminate Alabama-Tennessee as a competitor; and (3) Southern’s proposed displacement of Alabama-Tennessee’s markets could have serious adverse effects—on Alabama-Tennessee, its customers, Southern’s existing customers, and the environment of Northern Alabama—that would far outweigh any potential benefits. ***

IV. Discussion

A. The Public Convenience and Necessity

1. PROTESTS AND ANSWERS

Alabama-Tennessee, Atlanta and Chattanooga, and Cullman-Jefferson contend that the proposed facilities are not required by the present or future public convenience and necessity. For example, Alabama-Tennessee submits, Southern’s proposal does not represent a logical and economical choice for those customers that have signed up for long-term firm service. Alabama-Tennessee points to joint offers by it and Tennessee to Huntsville and Decatur to supply firm service for a term of the customers’ choosing at a rate less than Southern’s. Alabama-Tennessee contends that an independent analysis by an outside accounting firm for Huntsville estimated that Huntsville would save $13.2 million through the year 2005 under the joint offer instead of taking service under Southern’s project. Alabama-Tennessee contends that its joint proposal to Decatur and Huntsville would achieve most of the competitive advantages that normally flow from introducing a new competitor into a market without the negative consequences caused by the construction of a major new pipeline project.

Alabama-Tennessee also disputes Southern’s assertion that the project will provide gas sellers with access to new markets and gas consumers with new sources of supply. Alabama-Tennessee maintains that the sources feeding into the Southern system are only a fraction of the gas production sources that supply customers of Tennessee and Alabama-Tennessee and, since Alabama-Tennessee and Tennessee are open-access transporters, there is no merit to Southern’s claims that there would be greater access for customers and suppliers through Southern’s system. ***

Alabama-Tennessee also maintains that the Commission must consider that Southern’s project would likely have an adverse economic impact on Alabama-Tennessee’s system since Decatur and Huntsville take nearly half of Alabama-Tennessee’s total contract demand. Further, argues Alabama-Tennessee, granting authorization for Southern’s project could adversely affect Alabama-Tennessee’s ability to provide reliable service to its remaining customers—part of the public whose convenience and necessity must be served by an NGA section 7(c) certificate. ***

Decatur and Huntsville dispute Alabama-Tennessee’s assertion that the Commission must consider whether Southern’s proposal represents a logical and economical choice for those customers who have signed up for long-term firm service with Southern. Huntsville maintains that the market dominance of Alabama-Tennessee, in combination with Tennessee, in the relevant part of northern Alabama has caused the rate for pipeline transportation service to Huntsville and Decatur to substantially exceed the rate for transportation service provided by other pipeline transporters to other LDCs in the same region.

Decatur and Huntsville contend that Alabama-Tennessee and Tennessee will only discount their above-market based rate when faced with the prospect of a competitive
alternative to its service. Accordingly, they submit, no matter what short-term benefits may be included in the Alabama-Tennessee/Tennessee joint offer, the only way to secure long-term benefits comes from the introduction of interstate pipeline competition in northern Alabama. ***

The proposed project will provide the north central Alabama market with access to another source of supply, which will allow this market to enjoy the full benefits of pipeline-to-pipeline competition for the first time. The prospective shippers have entered into long-term contracts with Southern for virtually all of the capacity thereby demonstrating there is adequate market demand. Two of the shippers, Decatur and Huntsville, have made the business decision that it is in their interest to receive service from a pipeline other than Alabama-Tennessee when their current contracts expire. There have been no questions raised as to either the design and capacity of the proposed facilities or of Southern’s ability to finance the project. ***

In Alabama-Tennessee Natural Gas Co. v. FPC, 417 F.2d 511 (5th Cir. 1969), the court noted that NGA section 7(g) provides that “[n]othing contained in this section shall be construed as a limitation upon the power of the Commission to grant certificates of public convenience and necessity for service of an area already being served by another natural gas company.” The courts have recognized that section 7(g) makes clear that competition from markets is contemplated under the Act. Further, the NGA’s primary criterion for certification is the public interest.

Alabama-Tennessee’s basic argument is that it and its other customers would be better off with Huntsville and Decatur as customers than without them. However, this is not the decisive test in determining the public convenience and necessity, but merely a factor. To permit this consideration to be controlling would inevitably bind a customer to its existing supplier, effectively precluding the realization of the fruits of competition. ***

Alabama-Tennessee’s assertion that the Commission must consider whether or not shippers have made a logical and economical choice in selecting service from Southern over service from Alabama-Tennessee is without merit. As Huntsville and Decatur note, the Commission has repeatedly emphasized its disinclination to second-guess the business decisions of end users. The Commission has recognized that it is not the proper forum in which to challenge the business decision of an end-user on whether it is economic to undertake direct service from a pipeline supplier, particularly when that decision has been approved by the appropriate state regulatory bodies (in this case the Huntsville Utilities Gas Board and the Huntsville City Council and the Decatur Municipal Utility Board and the Decatur City Council).

B. Rate Issues

1. Advanced Determination of Rates

In its protest and its motion to dismiss, Alabama-Tennessee cites Commission precedent and policy for the proposition that pipelines must charge incremental rates for (a) market-area delivery laterals and (b) pipeline facilities that would bypass or otherwise displace a competitor’s markets. Since Southern’s proposed extension would be a market-area lateral that would displace Alabama-Tennessee’s markets, Alabama-Tennessee contends, Southern’s proposed rolled-in rates would flout the Commission’s policies on both accounts. Further, Alabama-Tennessee argues, Southern is required
to charge shippers on the lateral Part 284 rates for the mainline transportation service in addition to the incremental rate.

Alabama-Tennessee contends that Algonquin Gas Transmission Company (Algonquin), 71 FERC ¶ 61,069, clarified, 71 FERC ¶ 61,366 (1995), controls the result in this proceeding. In Algonquin, the Commission concluded that the two customers to be served by a new lateral should pay both an incremental rate for service on the lateral and a rolled-in rate for service on Algonquin’s mainline. ** *

In its protest, Alabama-Tennessee cites the Commission’s policy statement on pricing the cost of new gas transmission facilities (pricing policy) to support its argument that Southern’s proposed facilities are laterals whose costs must be recovered on an incremental basis from the shippers who use them. Alabama-Tennessee points out that the Commission stated in the pricing policy that it will presume that a project involving the construction of a downstream lateral for the benefit of one or only a small number of customers should be priced incrementally. In addition, Alabama-Tennessee contends, Southern’s proposed extension would not be integrated into its existing mainline system as required for rolled-in rates under the pricing policy. ** *

Alabama-Tennessee also alleges that Southern’s request for rolled-in rate treatment is inconsistent with Southern’s tariff which provides that unless new facilities provide a benefit to all shippers using Southern’s system, the cost of any such facilities necessary to serve a shipper must be paid by that shipper. However, Southern’s exhibit N shows that the four shippers who would receive the sole benefit would pay for only about 40 percent of the $52.8 million estimated cost of the new facilities over the 20-year contract term.

Further, Alabama-Tennessee contends that the Commission must consider the impact of rolled-in rates on Alabama-Tennessee’s other customers. Mr. Williams states that approval of rolled-in rates for Southern’s proposal would create unsubscribed capacity on Alabama-Tennessee’s system that could increase Alabama-Tennessee’s rates by as much as 69 percent.

Southern has shown that any rate increase will be well below 5 percent and its existing customers will receive financial and operational system benefits. Therefore, we find that absent significant changes, it may roll-in the costs of the facilities in its next rate case.

We have reviewed both Southern’s and Alabama-Tennessee’s cost/revenue studies, and believe that Southern’s cost/benefit analysis, with the adjustments discussed below, will properly reflect the level of system benefits of the proposed project. ** *

For the same reason, the appropriate rate of return should be the system rate of return which is 10.77 percent approved by the Commission as part of Southern’s March 15, 1995 settlement in Docket No. RP89-224, et al., rather than the 9.25 percent overall rate of return used by Southern in its application which is project specific.

Our cost/revenue analysis, with the above adjustments, shows that the project’s long-term (20 years) system benefit is $25 million rather than the $39 million estimated by Southern. ** * Alabama-Tennessee’s assertion that the proposed project is a lateral and thus does not qualify for rolled-in treatment under the policy statement is without merit. As Southern notes, its system generally consists of two parallel mainlines with 15 mainline extensions totaling nearly 1350 miles and serving 66 firm shippers at 196
delivery points. The proposed facilities are similar to Southern’s other mainline extensions that have been granted rolled-in rate treatment. Since Southern has demonstrated that the project will increase its rates by less than 5 percent and provide system benefits for existing customers, we see no reason to require a rate treatment different from the rolled-in rate treatment applied to Southern’s other expansion projects. ***

Alabama-Tennessee argues that incremental rates are required for a pipeline bypass project like the Southern proposal as a matter of Commission policy. Citing Kansas Power and Light Co. v. FERC (KP&L), Alabama-Tennessee maintains that a presumption in favor of incremental rates for bypass projects is a corollary of the Commission’s responsibility to ensure that bypass projects do not entail wasteful duplication of facilities and cause unnecessary costs to be passed on to consumers. 891 F.2d 939, 943 (D.C. Cir. 1989) Citing Mojave Pipeline Company (Mojave), 72 FERC ¶ 61,172 (1995). Alabama-Tennessee argues that the Commission should deny Southern’s proposed bypass which would be subsidized at the expense of captive ratepayers through rolled-in rates.

Alabama-Tennessee argues that incremental rates are required for a pipeline bypass project citing among other cases Mojave. However, in the rehearing of Mojave the Commission pointed out that the principles of the pricing policy apply to bypass facilities. The Commission also stated that bypass facilities will not automatically be deemed to be a wasteful duplication of effort in the event that the end-user does not reimburse the pipeline for all of the facilities. The court has upheld the Commission’s determination on this issue.

C. Anticompetitive Arguments

In its protest, Alabama-Tennessee notes that the Commission’s approvals of bypass projects have always been based on the assumption that market forces operating in an environment of fair competition will promote the most efficient allocation of supplies and transportation capacity. Alabama-Tennessee maintains that no such assumption is possible here given Southern’s rolled-in rate proposal. Alabama-Tennessee contends that, in a bypass case such as this one, the Commission must be especially watchful because “unrestrained competition in a case of natural monopoly may lead to wasteful duplication of facilities, and unnecessary costs will be passed on to customers.”

Alabama-Tennessee argues that the recently approved incremental rates for a mainline expansion to displace a portion of Southern’s existing market in Transcontinental Gas Pipe Line Corporation (Transco) 75 FERC ¶ 61,072, at p. 61,225, 61,227 (1996) and principles of fair competition suggest that the Commission should similarly require Southern to charge incremental rates for its proposed extension that would displace almost half of Alabama-Tennessee’s existing market.

In its motion to dismiss, Alabama-Tennessee states that the Commission has recognized that it may only approve proposed bypass projects that are not anticompetitive or unduly discriminatory. Further, it maintains, the Commission must consider antitrust issues in determining the public convenience and necessity. Alabama-Tennessee argues that Southern’s proposed displacement of Alabama-Tennessee’s markets would be unlawfully achieved through predatory pricing and other exclusionary and anticompetitive devices intended to extend Southern’s monopoly power and eliminate Alabama-Tennessee as a competitor.
Alabama-Tennessee contends that Southern’s proposal is consistent with its past behavior of taking extraordinary steps over the years to limit competition including adamant opposition to the Commission’s bypass policies and its refusal to interconnect with other competitor pipelines. Alabama-Tennessee alleges that Southern is using its monopoly position in other markets to subsidize, through rolled-in rates and other related anticompetitive devices, a project that cannot compete on its own merits.

According to Alabama-Tennessee, if Southern’s proposed extension were priced on an incremental basis, it would not be economic or competitive with the service being provided by Alabama-Tennessee. Mr. Williams testifies that Southern is offering transportation services to Decatur and Huntsville at a price below the cost of those services. Alabama-Tennessee argues that Southern’s proposal to compete for Alabama-Tennessee’s market is the epitome of unlawful below-cost, predatory pricing by a monopolist. Alabama-Tennessee contends that this predatory pricing violates antitrust laws.

Furthermore, Alabama-Tennessee contends, Southern’s use of long-term contracts is a related anticompetitive device designed to lock up the firm demand of Alabama-Tennessee’s two largest customers for 20 years. Such contracts, it maintains, exclude competition and thus violate antitrust laws. For example, submits Alabama-Tennessee, contracts in excess of ten years that “locked up a large portion of the [relevant] market” from competitors were found to “represent classic examples of artificially created barriers to effective entry into and competition within the market” in violation of sections 1 and 2 of the Sherman Act in *Twin City Sportservice, Inc. v. Charles O. Finley & Company (Twin City)*. 676 F.2d 1291, 1391, 1304 (9th Cir. 1982).

Alabama-Tennessee argues that Southern’s proposal would preclude Alabama-Tennessee from competing for the business of its two largest customers for 20 years, completely locking it out of a substantial portion of its existing market for that entire period. Furthermore, by using below-cost pricing in combination with long-term contracts, Southern would position itself not only to lock up Alabama-Tennessee’s largest customers, but also, over the next ten years as Alabama-Tennessee’s other contracts expire, to undermine Alabama-Tennessee’s ability to compete and thereby potentially to monopolize the Northern Alabama market. Having lost its two largest customers, Alabama-Tennessee would have substantial stranded costs. Any attempt by Alabama-Tennessee to recover those stranded costs by raising the rates of its remaining customers would almost certainly be met by further customer defections to Southern, giving it a monopoly. Furthermore, Southern’s proposed extension has a capacity that exceeds the firm contracted capacity and could be doubled with minimum cost raising the possibility that the excess capacity is intended to permit Southern to capitalize on its predatory conduct by establishing a monopoly in the Northern Alabama market.

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Alabama-Tennessee alleges that Southern’s proposal to roll-in the costs of its proposed facilities amounts to predatory pricing and thus violates federal antitrust laws. This allegation is without merit. Southern’s rate proposal has met the Commission’s requirement under the pricing policy. Under the Commission’s pricing policy, the Commission applies a presumption in favor of rolled-in rates when the rate increases to existing customers from rolling-in the new facilities’ cost is five percent or less and the pipeline makes a showing of system benefits. Southern has made such a showing. Further, the antitrust laws were enacted for “the protection of competition, not com-
petitors.” In this regard, Alabama-Tennessee states that it made a better offer to Decatur and Huntsville than did Southern. Yet these LDCs accepted Southern’s offer and rejected Alabama-Tennessee’s. If Southern’s rates meet the requirements of Commission regulation and policy and its prospective customers freely choose Southern’s offer over Alabama-Tennessee’s, it is difficult to see where any anticompetitive behavior exists. Further, Decatur and Huntsville currently are captive customers of Alabama-Tennessee and welcome the competition for their business represented by Southern’s proposal. ***

Furthermore, although Alabama-Tennessee argues that without Southern’s alleged below-cost pricing there would be no valid business reason for pipeline customers to enter into such long-term contracts under present industry conditions, long-term contracts are traditional in the natural gas industry for contracts involving the construction of new facilities. ***

Finally, we cannot help but note that Alabama-Tennessee has vigorously opposed bypass proposals in the past and in this proceeding is seeking to deprive end-users along the route of Southern’s proposed extension from the benefits associated with pipeline to pipeline competition in Northern Alabama. Nevertheless, the Commission has consistently approved the construction of duplicate facilities to effectuate the commercial choices that customers have made. This reflects the Commission’s belief that competition ultimately benefits natural gas consumers by resulting in improved services at lower costs.

G. Stranded Costs

In its motion to dismiss, Alabama-Tennessee argues that Southern’s proposed displacement of Alabama-Tennessee’s markets could have serious adverse effects—on Alabama-Tennessee, its customers, Southern’s existing customers (described above), and the affected environment of Northern Alabama—that would far outweigh any potential benefits.

Mr. Williams states that if the Commission approves Southern’s proposal, Alabama-Tennessee would lose 47 percent of its total system contract demand and annual revenues. The stranded costs of the unsubscribed capacity that would be created would total almost $2.7 million per year and more than $50 million over the proposed 20-year term of service. Mr. Williams states that a significant part of the projected revenue losses could not be mitigated since Alabama-Tennessee is a small pipeline with an effective mainline length of only 130 miles and just four firm shippers, including Decatur and Huntsville, with contract demands in excess of 10,000 Dth per day.

Alabama-Tennessee submits that the Commission should decide whether and how the stranded costs should be imposed and the consequences of any such decision before it takes any action that would result in such unsubscribed capacity and stranded costs. Alabama-Tennessee maintains that the stranded costs could not be imposed on the defecting shippers or its remaining customers, since the Commission has not approved unilateral exit fees. The remaining customers of Alabama-Tennessee are small municipalities and industrial end-users and would be either unable or unwilling to shoulder these costs as a practical matter. In any event, points out Alabama-Tennessee, the Commission has not permitted a pipeline with unsubscribed capacity to shift such stranded costs to the remaining customers.
Nor, according to Alabama-Tennessee, could the stranded costs be reasonably or responsibly imposed on Alabama-Tennessee. First, there would be little opportunity for Alabama-Tennessee to make use of the unsubscribed capacity since it is surrounded by other major pipelines and has few potential markets adjacent to its pipeline. The ability of Alabama-Tennessee and captive customers to absorb all of the stranded costs is also problematic in view of Alabama-Tennessee’s relatively small size and the high costs of its compliance with Commission-imposed operating and reporting requirements.

These, argues Alabama-Tennessee, are precisely the circumstances in which the Commission must control market entry to protect consumers from wasteful duplication of facilities and concomitant unnecessary costs. Alabama-Tennessee maintains that to ensure that the unnecessary costs will not be passed on to consumers, the Commission should dismiss Southern’s application. ***

In *El Paso Natural Gas Company*, the Commission held that when historic customers terminate service at the end of their contracts it is not appropriate to expect the remaining customers to pay for all of the remaining costs of the pipeline. 72 FERC ¶ 61,083 (1995). Since Alabama-Tennessee has not filed to shift stranded costs to its other customers, Reynolds should address this issue if Alabama-Tennessee files a request with the Commission to shift stranded capacity costs to its other customers.

The Commission’s longstanding policy has been to allow pipelines to compete for markets and to uphold the results of that competition absent a showing of anticompetitive or unfair competition. As indicated elsewhere, we find no evidence of unfair competition in the record here. As to Alabama-Tennessee’s arguments regarding stranded costs, it presents a worst-case scenario in predicting the possible outcome of our approval of Southern’s proposal. Rather than shifting the costs of unsubscribed capacity to the remaining shippers, Alabama-Tennessee has some obligation to attempt to develop new business opportunities to make use of its unused capacity. Alabama-Tennessee may also attempt to recoup some of its costs by marketing its turned-back capacity. Although there is nothing in Alabama-Tennessee’s filings to indicate that it has pursued such an approach or done anything to mitigate the impact of the costs of the unsubscribed capacity, Huntsville and Decatur point to a number of new business opportunities for Alabama-Tennessee in northern Alabama. Under the circumstances, the Commission will not intervene to protect Alabama-Tennessee from the economic results of fair competition in the marketplace. In that regard, we note that both Huntsville and Decatur state that they intend to maintain their existing interconnects with Alabama-Tennessee on a permanent basis so that Alabama-Tennessee will be able to compete to provide any additional requirements that they may have that are not covered by the contract with Southern. ***

V. Conclusion

Upon consideration of the record, the Commission makes a preliminary finding that Southern’s proposal, as modified and conditioned herein, is required by the public convenience and necessity. Southern’s proposal, as it relates to all nonenvironmental aspects, satisfies the requirements for issuance under the Commission’s regulations. ***
Certification of New Interstate Natural Gas Pipeline Facilities


Accordingly, the Commission is issuing this policy statement to provide the industry with guidance as to how the Commission will evaluate proposals for certifying new construction. This should provide more certainty about how the Commission will evaluate new construction projects that are proposed to meet growth in the demand for natural gas at the same time that some existing pipelines are concerned about the potential for capacity turnback. In considering the impact of new construction projects on existing pipelines, the Commission’s goal is to appropriately consider the enhancement of competitive transportation alternatives, the possibility of overbuilding, the avoidance of unnecessary disruption of the environment, and the unneeded exercise of eminent domain.

I. Comments Received on the NOPR

The Commission asked commenters to offer views on three options: One option would be for the Commission to authorize all applications that at a minimum meet the regulatory requirements, then let the market pick winners and losers. Another would be for the Commission to select a single project to serve a given market and exclude all other competitors. Another possible option would be for the Commission to approve an environmentally acceptable right-of-way and let potential builders compete for a certificate.

III. Evaluation of Current Policy

A. Current Policy

Section 1(b) of the Natural Gas Act (NGA), 15 U.S.C. § 717, gives the Commission jurisdiction over the transportation of natural gas in interstate commerce and the natural gas companies providing that transportation. Section 7(c) of the NGA, 15 U.S.C. § 717h, provides that no natural gas company shall transport natural gas or construct any facilities for such transportation without a certificate of public convenience and necessity issued by the Commission.

In reaching a final determination on whether a project will be in the public convenience and necessity, the Commission performs a flexible balancing process during which it weighs the factors presented in a particular application. Among the factors that the Commission considers in the balancing process are the proposal’s market support, economic, operational, and competitive benefits, and environmental impact.

Under the Commission’s current certificate policy, an applicant for a certificate of public convenience and necessity to construct a new pipeline project must show market support through contractual commitments for at least 25 percent of the capacity for the application to be processed by the Commission. An applicant showing 10-year firm commitments for all of its capacity, and/or that revenues will exceed costs is eligible to receive a traditional certificate of public convenience and necessity.

An applicant unable to show the required level of commitment may still receive a certificate but it will be subject to a condition putting the applicant “at risk.” In other words, if the project revenues fail to recover the costs, the pipeline rather than its customers will be responsible for the unrecovered costs.

Generally, under the current policy, the Commission does not deny an application because of the possible economic impact of a proposed project on existing pipelines.
the same market or on the existing pipelines’ customers. In addition, the Commission gives equal weight to contracts between an applicant and its affiliates and an applicant and unrelated third parties and does not look behind the contracts to determine whether the customer commitments represent genuine growth in market demand.

Under section 7(h) of the NGA, 15 U.S.C. § 717f(h), a pipeline with a Commission-issued certificate has the right to exercise eminent domain to acquire the land necessary to construct and operate its proposed new pipeline when it cannot reach a voluntary agreement with the landowner. In recent years, this has resulted in landowners becoming increasingly active before the Commission. Landowners and communities often object both to the taking of land and to the reduction of their land’s value due to a pipeline’s right-of-way running through the property. As part of its environmental review of pipeline projects, the Commission’s environmental staff works to take these landowners’ concerns into account, and to mitigate adverse impacts where possible and feasible.

Under the pricing policy for new facilities in Docket No. PL94-4-000, see Pricing Policy for New and Existing Facilities Constructed by Interstate Natural Gas Pipelines, 71 FERC ¶ 61,241 (1995), the Commission determines, in the certificate proceeding authorizing the facilities’ construction, the appropriate pricing for the facilities. Generally, the Commission applies a presumption in favor of rolled-in rates (rolling-in the expansion costs with the existing facilities’ costs) when the cost impact of the new facilities would result in a rate impact on existing customers of five percent or less, and some system benefits would occur. Existing customers generally bear these rate increases without being allowed to adjust their volumes.

When a pipeline proposes to charge a cost-based incremental rate (establishing separate costs-of-service and separate rates for the existing and expansion facilities) higher than its existing generally applicable rates, the Commission usually approves the proposal. However, the Commission generally will not accept a proposed incremental rate that is lower than the pipeline’s existing generally applicable Part 284 rate.

B. Drawbacks of the Current Policy

1. Reliance on Contracts to Demonstrate Demand

Currently, the Commission uses the percentage of capacity under long-term contracts as the only measure of the demand for a proposed project. Many of the commenters have argued that this is too narrow a test. The reliance solely on long-term contracts to demonstrate demand does not test for all the public benefits that can be achieved by a proposed project. The public benefits may include such factors as the environmental advantages of gas over other fuels, lower fuel costs, access to new supply sources or the connection of new supply to the interstate grid, the elimination of pipeline facility constraints, better service from access to competitive transportation options, and the need for an adequate pipeline infrastructure. The amount of capacity under contract is not a good indicator of all these benefits.

The amount of capacity under contract also is not a sufficient indicator by itself of the need for a project, because the industry has been moving to a practice of relying on short-term contracts, and pipeline capacity is often managed by an entity that is not the actual purchaser of the gas. Using contracts as the primary indicator of market support for the proposed pipeline project also raises additional issues when the contracts are held by pipeline affiliates. Thus, the test relying on the percent of capacity
contracted does not reflect the reality of the natural gas industry’s structure and presents difficult issues.

In addition, the current policy’s preference for contracts with 10-year terms biases customer choices toward longer term contracts. Of course, there are other elements of the Commission’s policies that also have this effect. However, eliminating a specific requirement for a contract of a particular length is more consistent with the Commission’s regulatory objective to provide appropriate incentives for efficient customer choices and the optimal level of construction, without biasing those choices through regulatory policies.

Finally, by relying almost exclusively on contract standards to establish the market need for a new project, the current policy makes it difficult to articulate to landowners and community interests why their land must be used for a new pipeline project.

All of these concerns raise difficult questions of establishing the public need for the project.

2. The Pricing of New Facilities

As the industry becomes more competitive the Commission needs to adapt its policies to ensure that they provide the correct regulatory incentives to achieve the Commission’s policy goals and objectives. All of the Commission’s natural gas policy goals and objectives are affected by its pricing policy, but directly affected are the goals of fostering competitive markets, protecting captive customers, and providing incentives for the optimal level of construction and efficient customer choice. The current pricing policy focuses primarily on the interests of the expanding pipeline and its existing and new shippers, giving little weight to the interests of competing pipelines or their captive customers. As a result, it no longer fits well with an industry that is increasingly characterized by competition between pipelines.

The current pricing policy sends the wrong price signals, as some commenters have argued, by masking the real cost of the expansions. This can result in overbuilding of capacity and subsidization of an incumbent pipeline in its competition with potential new entrants for expanding markets. The pricing policy’s bias for rolled-in pricing also is inconsistent with a policy that encourages competition while seeking to provide incentives for the optimal level of construction and customer choice. This is because rolled-in pricing often results in projects that are subsidized by existing ratepayers. Under this policy the true costs of the project are not seen by the market or the new customers, leading to inefficient investment and contracting decisions. This in turn can exacerbate adverse environmental impacts, distort competition between pipelines for new customers, and financially penalize existing customers of expanding pipelines and of pipelines affected by the expansion.

Under existing policy, shippers’ rates may change for a number of reasons. These include rolling-in of an expansion’s costs, changes in the discounts given other customers, or changes in the contract quantities flowing on the system. As a customer’s rates change in a rate case, it is generally unable to change its volumes, even though it may be paying more for capacity. This results in shippers bearing substantial risks of rate changes which they may be ill equipped to bear.
III. The New Policy

A. Summary of the Policy

As a result of the Commission’s reassessment of its current policy, the Commission has decided to announce the criteria, set forth below, that it will use in deciding whether to authorize the construction of major new pipeline facilities. This section summarizes the analytical steps the Commission will use under this policy to balance the public benefits against the potential adverse consequences of an application for new pipeline construction. Each of these steps is described in greater detail in the later sections of this policy statement.

Once a certificate application is filed, the threshold question applicable to existing pipelines is whether the project can proceed without subsidies from their existing customers. As discussed below, this will usually mean that the project would be incrementally priced, if but by an existing pipeline, but there are cases where rolled in pricing would prevent subsidization of the project by the existing customers. If the project cannot be built without subsidies, the Commission will deny the application.

The next step is to determine whether the applicant has made efforts to eliminate or minimize any adverse effects the project might have on the existing customers of the pipeline proposing the project, existing pipelines in the market and their captive customers, or landowners and communities affected by the route of the new pipeline. These three interests are discussed in more detail below. This is not intended to be a decisional step in the process for the Commission. Rather, this is a point where the Commission will review the efforts made by the applicant and could assist the applicant in finding ways to mitigate the effects, but the choice of how to structure the project at this stage is left to the applicant’s discretion.

If the proposed project will not have any adverse effect on the existing customers of the expanding pipeline, existing pipelines in the market and their captive customers, or the economic interests of landowners and communities affected by the route of the new pipeline, then no balancing of benefits against adverse effects would be necessary. The Commission would proceed, as it does under current practice, to a preliminary determination or a final order depending on the time required to complete an environmental assessment (EA) or environmental impact statement (EIS) (whichever is required in the case).

If residual adverse effects on the three interests are identified, after efforts have been made to minimize them, then the Commission will proceed to evaluate the project by balancing the evidence of public benefits to be achieved against the residual adverse effects. This is essentially an economic test. Only when the benefits outweigh the adverse effects on economic interests will the Commission then proceed to complete the environmental analysis where other interests are considered. It is possible at this stage for the Commission to identify conditions that it could impose on the certificate that would further minimize or eliminate adverse impacts and take those into account in balancing the benefits against the adverse effects. If the result of the balancing is a conclusion that the public benefits outweigh the adverse effects then the next steps would be the same as for a project that had no adverse effects. That is, if the EA or EIS would take more than approximately 180 days then a preliminary determination could be issued, followed by the EA or EIS and the final order. If the EA would take less time, then it would be combined with the final order.
B. The Threshold Requirement—No Financial Subsidies

The threshold requirement in establishing the public convenience and necessity for existing pipelines proposing an expansion project is that the pipeline must be prepared to financially support the project without relying on subsidization from its existing customers. This does not mean that the project sponsor has to bear all the financial risk of the project; the risk can be shared with the new customers in preconstruction contracts, but it cannot be shifted to existing customers. For new pipeline companies, without existing customers, this requirement will have no application.

The requirement that the project be able to stand on its own financially without subsidies changes the current pricing policy which has a presumption in favor of rolled-in pricing. Eliminating the subsidization usually inherent in rolled-in rates recognizes that a policy of incrementally pricing facilities sends the proper price signals to the market. With a policy of incremental pricing, the market will then decide whether a project is financially viable. The commenters were divided on whether the Commission should change its current pricing policy. A number of commenters, however, urged the Commission to allow the market to decide which projects should be built, and this requirement is a way of accomplishing that result.

The requirement helps to address all of the interests that could be adversely affected. Existing customers of the expanding pipeline should not have to subsidize a project that does not serve them. Landowners should not be subject to eminent domain for projects that are not financially viable and therefore may not be viable in the marketplace. Existing pipelines should not have to compete against new entrants into their markets whose projects receive a financial subsidy (via rolled-in rates), and neither pipeline’s captive customers should have to shoulder the costs of unused capacity that results from competing projects that are not financially viable.

This is the only condition that uniformly serves to avoid adverse effects on all of the relevant interests and therefore should be a test for all proposed expansion projects by existing pipelines. It will be the predicate for the rest of the evaluation of a new project by an existing pipeline.

A requirement that the new project must be financially viable without subsidies does not eliminate the possibility that in some instances the project costs should be rolled into the rates of existing customers. In most instances incremental pricing will avoid subsidies for the new project, but the situation may be different in cases of inexpensive expansibility that is made possible because of earlier, costly construction. In that instance, because the existing customers bear the cost of the earlier, more costly construction in their rates, incremental pricing could result in the new customers receiving a subsidy from the existing customers because the new customers would not face the full cost of the construction that makes their new service possible. The issue of the rate treatment for such cheap expansibility is one that always should be resolved in advance, before the construction of the pipeline.

This policy leaves the pipeline responsible for the costs of new capacity that is not fully utilized and obviates the need for an “at risk” condition because it accomplishes the same purpose. Under this policy the pipeline bears the risk for any new capacity that is under-utilized, unless, as recommended by a number of commenters, it contracts with the new customers to share that risk by specifying what will happen to rates and volumes under specific circumstances. If the pipeline finds that new shippers are unwilling to share this risk, this may indicate to the pipeline that others do not share
its vision of future demand. Similarly, the risks of construction cost over-runs should not be the responsibility of the pipeline’s existing customers but should be apportioned between the pipeline and the new customers in their service contracts. Thus, in pipeline contracts for service on newly constructed facilities, pipelines should not rely on standard “Memphis clauses”, but should reach agreement with new shippers concerning who will bear the risks of underutilization of capacity and cost overruns and the rate treatment for “cheap expansibility.”

In sum, if an applicant can show that the project is financially viable without subsidies, then it will have established the first indicator of public benefit. Companies willing to invest in a project, without financial subsidies, will have shown an important indicator of market-based need for a project. Incremental pricing will also lead to the correct price signals for the new project and provide the appropriate incentive for the optimal level of construction. This can avoid unnecessary adverse impacts on landowners or existing pipelines and their captive customers. Therefore, this will be the threshold requirement for establishing that a project will satisfy the public convenience and necessity standard.

C. Factors to be Balanced in Assessing the Public Convenience and Necessity

*** Depending on the type of project, there are three major interests that may be adversely affected by approval of major certificate projects, and that must be considered by the Commission. These are: the interests of the applicant’s existing customers, the interests of competing existing pipelines and their captive customers, and the interests of landowners and surrounding communities. There are other interests that may need to be separately considered in a certificate proceeding, such as environmental interests. ***

a. Interests of existing customers of the pipeline applicant

The interests of the existing customers of the expanding pipeline may be adversely affected if the expansion results in their rates being increased or if the expansion causes a degradation in service.

b. Interests of Existing Pipelines that Already Serve the Market and their Captive Customers

Pipelines that already serve the market into which the new capacity would be built are affected by the potential loss of market share and the possibility that they may be left with unsubscribed capacity investment. The Commission need not protect pipeline competitors from the effects of competition, but it does have an obligation to ensure fair competition. Recognizing the impact of a new project on existing pipelines serving the market is not synonymous with protecting incumbent pipelines from the risk of loss of market share to a new entrant, but rather, is a recognition that the impact on the incumbent pipeline is an interest to be taken into account in deciding whether to certificate a new project. The interests of the existing pipeline’s captive customers are slightly different from the interests of the pipeline. The interests of the captive customers of the existing pipelines are affected because, under the Commission’s current rate model, they can be asked to pay for the unsubscribed capacity in their rates.

13 “Memphis clause” refers to an agreement that the pipeline may change the rate during the term of the contract by making rate filings under NGA section 4.
c. Interests of landowners and the surrounding communities

Landowners whose land would be condemned for the new pipeline right-of-way, under eminent domain rights conveyed by the Commission’s certificate, have an interest as does the community surrounding the right-of-way. The interest of these groups is to avoid unnecessary construction, and any adverse effects on their property associated with a permanent right-of-way. In some cases, the interests of the surrounding community may be represented by state or local agencies. Traditionally, the interests of the landowners and the surrounding community have been considered synonymous with the environmental impacts of a project; however, these interests can be distinct. Landowner property rights issues are different in character from other environmental issues considered under the National Environmental Policy Act of 1969 (NEPA).

2. Indicators of Public Benefit

To demonstrate that its proposal is in the public convenience and necessity, an applicant must show public benefits that would be achieved by the project that are proportional to the project’s adverse impacts. The objective is for the applicant to create a record that will enable the Commission to find that the benefits to be achieved by the project will outweigh the potential adverse effects, after efforts have been made by the applicant to mitigate these adverse effects. The types of public benefits that might be shown are quite diverse but could include meeting unserved demand, eliminating bottlenecks, access to new supplies, lower costs to consumers, providing new interconnects that improve the interstate grid, providing competitive alternatives, increasing electric reliability, or advancing clean air objectives. Any relevant evidence could be presented to support any public benefit the applicant may identify. This is a change from the current policy which relies primarily on one test to establish the need for the project.

The amount of evidence necessary to establish the need for a proposed project will depend on the potential adverse effects of the proposed project on the relevant interests. Thus, projects to serve new demand might be approved on a lesser showing of need and public benefits than those to serve markets already served by another pipeline. However, the evidence necessary to establish the need for the project will usually include a market study. There is no reason for an applicant to do a new market study of its own in every instance. An applicant could rely on generally available studies by EIA or GRI, for example, showing projections of market growth. If one of the benefits of a proposed project would be to lower gas or electric rates for consumers, then the applicant’s market study would need to explain the basis for that projection. Vague assertions of public benefits will not be sufficient.

Although the Commission traditionally has required an applicant to present contracts to demonstrate need, that policy, as discussed above, no longer reflects the reality of the natural gas industry’s structure, nor does it appear to minimize the adverse impacts on any of the relevant interests. Therefore, although contracts or precedent agreements always will be important evidence of demand for a project, the Commission will no longer require an applicant to present contracts for any specific percentage of the new capacity. Of course, if an applicant has entered into contracts or precedent agreements for the capacity, it will be expected to file the agreements in support of the project, and they would constitute significant evidence of demand for the project.

Eliminating a specific contract requirement reduces the significance of whether the contracts are with affiliated or unaffiliated shippers, which was the subject of a number
of comments. A project that has precedent agreements with multiple new customers may present a greater indication of need than a project with only a precedent agreement with an affiliate. The new focus, however, will be on the impact of the project on the relevant interests balanced against the benefits to be gained from the project. As long as the project is built without subsidies from the existing ratepayers, the fact that it would be used by affiliated shippers is unlikely to create a rate impact on existing ratepayers. With respect to the impact on the other relevant interests, a project built on speculation (whether or not it will be used by affiliated shippers) will usually require more justification than a project built for a specific new market when balanced against the impact on the affected interests.

3. Assessing Public Benefits and Adverse Effects

The more interests adversely affected or the more adverse impact a project would have on a particular interest, the greater the showing of public benefits from the project required to balance the adverse impact. The objective is for the applicant to develop whatever record is necessary, and for the Commission to impose whatever conditions are necessary, for the Commission to be able to find that the benefits to the public from the project outweigh the adverse impact on the relevant interests.

It is difficult to construct helpful bright line standards or tests for this area. Bright line tests are unlikely to be flexible enough to resolve specific cases and to allow the Commission to take into account the different interests that must be considered. Indeed, the current contract test has become problematic. However, the analytical framework described here should give applicants more certainty and sufficient guidance to anticipate how to structure their projects and develop the record to facilitate the Commission’s decisional process.

Under this policy, if project sponsors, proposing a new pipeline company, are able to acquire all, or substantially all, of the necessary right-of-way by negotiation prior to filing the application, and the proposal is to serve a new, previously unserved market, it would not adversely affect any of the three interests. Such a project would not need any additional indicators of need and may be readily approved if there are no environmental considerations. Under these circumstances landowners would not be subject to eminent domain proceedings, and because the pipeline was new, there would be no existing customers who might be called upon to subsidize the project. A similar result might be achieved by an existing pipeline extending into a new unserved market by negotiating for a right-of-way for the proposed expansion and following the first requirement for showing need, financing the project without financial subsidies. It would avoid adverse impacts to existing customers by pricing its new capacity incrementally and it is unlikely that other relevant interests would be adversely affected if the pipeline obtained the right-of-way by negotiation.

It may not be possible to acquire all the necessary right-of-way by negotiation. However, the company might minimize the effect of the project on landowners by acquiring as much right-of-way as possible. In that case, the applicant may be called upon to present some evidence of market demand, but under this sliding scale approach the benefits needed to be shown would be less than in a case where no land rights had been previously acquired by negotiation. For example, if an applicant had precedent agreements with multiple parties for most of the new capacity, that would be strong evidence of market demand and potential public benefits that could outweigh the inability to negotiate right-of-way agreements with some landowners. Similarly, a project
to attach major new gas supplies to the interstate grid would have benefits that may outweigh the lack of some right-of-way agreements. A showing of significant public benefit would outweigh the modest use of federal eminent domain authority in this example.

In most cases it will not be possible to acquire all the necessary right-of-way by negotiation. Under this policy, a few holdout landowners cannot veto a project, as feared by some commenters, if the applicant provides support for the benefits of its proposal that justifies the issuance of a certificate and the exercise of the corresponding eminent domain rights. The strength of the benefit showing will need to be proportional to the applicant’s proposed exercise of eminent domain procedures.

Of course, the Commission will continue to do an independent environmental review of projects, even if the project does not rely on the use of eminent domain and the applicant structures the project to avoid or minimize adverse impacts on any of the identified interests. The Commission anticipates no change to this aspect of its certificate policies. However, to the extent applicants minimize the adverse impacts of projects in advance, this should also lessen the adverse environmental impacts as well, making the NEPA analysis easier. The balancing of interests and benefits that will precede the environmental analysis will largely focus on economic interests such as the property rights of landowners. The other interests of landowners and the surrounding community, such as noise reduction or esthetic concerns will continue to be taken into account in the environmental analysis. If the environmental analysis following a preliminary determination indicates a preferred route other than the one proposed by the applicant, the earlier balancing of the public benefits of the project against its adverse effects would be reopened to take into account the adverse effects on landowners who would be affected by the changed route.

In another example of the proportional approach, a proposal that may have adverse impacts on customers of another pipeline may require evidence of additional benefits to consumers, such as lower rates for the customers to be served. The Commission might also consider how the proposal would affect the cost recovery of the existing pipeline, particularly the amount of unsubscribed capacity that would be created and who would bear that risk, before approving the project. This evaluation would be needed to ensure consideration of the interests of the existing pipeline and particularly its captive customers. Such consideration does not mean that the Commission would always favor existing pipelines and their captive customers. For instance, a proposed project may be so efficient and offer substantial benefits, such as significant service flexibility, so that the benefits would outweigh the adverse impact on existing pipelines and their captive customers.

A number of commenters were concerned that the Commission might give too much weight to the impact on the existing pipeline and its captive customers and undervalue the benefits that can arise from competitive alternatives. The Commission’s focus is not to protect incumbent pipelines from the risk of loss of market share to a new entrant, but rather to take the impact into account in balancing the interests. In such a case the evidence of benefits will need to be more specific and detailed than the generalized benefits that arise from the availability of competitive alternatives. The interests of the captive customers are slightly different from the interests of the incumbent pipeline. The captive customers are affected if the incumbent pipeline shifts to the captive customers the costs associated with its unsubscribed capacity. Under the
Commission’s current rate model captive customers can be asked to pay for unsubscribed capacity in their rates, but the Commission has indicated that it will not permit all costs resulting from the loss of market share to be shifted to captive customers. Whether and to what extent costs can be shifted is an issue to be resolved in the incumbent pipeline’s rate case, but the potential impact on these captive customers is a factor to be taken into account in the certificate proceeding of the new entrant.

In sum, the Commission will approve an application for a certificate only if the public benefits from the project outweigh any adverse effects. Under this policy, pipelines seeking a certificate of public convenience and necessity authorizing the construction of facilities are encouraged to submit applications designed to avoid or minimize adverse effects on relevant interests including effects on existing customers of the applicant, existing pipelines serving the market and their captive customers, and affected landowners and communities. The threshold requirement for approval, that project sponsors must be prepared to develop the project without relying on subsidization by the sponsor’s existing customers, protects all of the relevant interests. Applicants also must submit evidence of the public benefits to be achieved by the proposed project such as contracts, precedent agreements, studies of projected demand in the market to be served, or other evidence of public benefit of the project.

V. Conclusion

At a time when the Commission is urged to authorize new pipeline capacity to meet an anticipated increase in the demand for natural gas, the Commission is also urged to act with caution to avoid unnecessary rights-of-way and the potential for overbuilding with the consequent effects on existing pipelines and their captive customers. This policy statement is intended to provide more certainty as to how the Commission will analyze certificate applications to balance these concerns. By encouraging applicants to devote more effort in advance of filing to minimize the adverse effects of a project, the policy gives them the ability to expedite the decisional process by working out contentious issues in advance. Thus, this policy will provide more guidance about the Commission’s analytical process and provide participants in certificate proceedings with a framework for shaping the record that is needed by the Commission to expedite its decisional process.

Finally, this new policy will not be applied retroactively. A major purpose of the policy statement is to provide certainty about the decisionmaking process and the impacts that would result from approval of the project. This includes providing participants in a certificate proceeding certainty as to economic impacts that will result from the certificate. It is important for the participants to know the economic consequences that can result before construction begins. After the economic decisions have been made it is difficult to undo those choices. Therefore, the new policy will not be applied retroactively to cases where the certificate has already issued and the investment decisions have been made.
California Power Exchange Corp. v. FERC (In re California Power Exchange Corp.)
245 F.3d 1110 (9th Cir. 2001)

O’SCANNLAIN, Circuit Judge: *** In 1996, the California legislature embarked upon a major restructuring of the California power industry with the passage of Assembly Bill 1890 (“AB 1890” or “Electricity Restructuring Act”). Act of September 23, 1996 (A.B. 1890). Several features of this complex legislation and the decisions of the California Public Utilities Commission (“CPUC”) implementing the restructuring are relevant to the petitions before us.

First, AB 1890 provided for the creation of the California Power Exchange (“CalPX”), a nonprofit entity that would provide an auction market for the trading of electricity. Electricity Restructuring Act § 1(c). CalPX commenced operations in March 1998. Initially, it operated only a single-price auction for day-ahead and day-of electricity trading (the “CalPX spot markets” or the “CalPX Core markets”). CalPX would determine, on an hourly basis, a single market clearing price which all electricity suppliers would be paid based on short term demand and supply bids submitted by CalPX participants. In the summer of 1999, CalPX opened its CalPX Trading Services (“CTS”) division to operate a block forward market by matching supply and demand bids for long term electricity contracts (“CTS forwards market”). The CalPX is deemed a public utility under the Federal Power Act (“FPA”); hence, it is subject to the jurisdiction of the Federal Energy Regulatory Commission (“FERC”) and operates pursuant to a FERC-approved tariff and FERC wholesale rate schedules.¹

California’s restructuring plan called for the electricity generation assets of the state’s three main investor-owned utilities (“IOUs”), San Diego Gas and Electric Company (“SDG & E”), Southern California Edison (“SCE”), and Pacific Gas and Electric Company (“PG & E”), to undergo a process of market valuation, which resulted in the IOUs’ divestiture of a substantial portion of their electricity generation facilities. In turn, for a transition period, the IOUs were required to sell all of their remaining generation capacity into, and to purchase all of their required electricity supply from, the CalPX spot markets, and such purchases were deemed to be “prudent per se” by the CPUC. San Diego Gas & Elec. Co., 93 FERC § 61,294, at 62,000-01, 2000 WL 1840337 (Dec. 15, 2000), reh’g pending (the “December 15 Order”). (We henceforth refer to this obligation as the “buy/sell requirement.”)

In 1999, the CPUC permitted the IOUs to purchase a limited percentage of their combined load in the CTS forward contract market; the balance of their load was to be purchased in the CalPX spot market. But CalPX was to continue to operate as the exclusive market for the IOUs’ electricity needs and its spot markets would continue to provide the benchmark for the CPUC’s prudence review. See Act of July 10, 2000, 2000 Cal. Legis. Serv. 127 (A.B. 2866), codified at Cal. Pub. Util. Code § 355.1, repealed by Act of February 1, 2001, 2001 Cal. Legis. Serv. 1st Ex. Sess. 4 (A.B. 1).

¹ Under the FPA, FERC has jurisdiction over “the sale of electric energy at wholesale in interstate commerce,” i.e., sales of electricity for resale. 16 U.S.C. § 824(b), (d). A “public utility” is defined under the FPA as “any person who owns or operates facilities subject to the jurisdiction of the Commission under this part.” Id. § 824(e). The CPUC has jurisdiction over all retail sales of electricity in California.
AB 1890 also called for the creation of the California Independent System Operator (“Cal-ISO”), a nonprofit entity charged with managing the state’s electricity transmission grid. Electricity Restructuring Act § 1(c). As manager of the grid, the Cal-ISO also operates a real time imbalance energy market to ensure that electricity supply meets demand at the time of delivery.

Finally, AB 1890 provided that the deregulation of the California power industry would proceed in several phases. The deregulation of the wholesale market—or, more properly, the partial deregulation of the wholesale market, considering that the IOUs’ wholesale purchases were constrained by the buy/sell requirement, the CPUC’s limitations on forward contracting, and the CalPX monopoly—was the first phase of the scheme. Deregulation of the retail market was to come later. AB 1890 provided for a ten percent retail rate reduction for certain customers and a retail rate cap through 2002, or until the IOUs recovered their stranded costs, whichever came first. Electricity Restructuring Act § 1(b)(2), (e).

The summer of 2000 witnessed significant increases in the wholesale price of electricity. Prices in the CalPX spot markets spiked particularly sharply.\(^2\) San Diego Gas & Electric Co., 93 FERC § 61,121, at 61,353 (Nov. 1, 2000) (the “November 1 Order”). Retail rates for SDG & E customers rose 200 to 300 percent, while PG & E and SCE, which were still subject to the AB 1890 rate freeze, incurred billions of dollars of debt because they were unable to pass their wholesale power costs onto their customers.\(^3\) In addition, the Cal-ISO declared 39 system emergencies during the course of the summer.

A series of FERC proceedings followed, culminating in several orders directly relevant to the petitions before us. In its November 1 Order, FERC specifically found that, under certain conditions, short-term wholesale power rates in the California market were “unjust and unreasonable” within the meaning of § 206(a) of the FPA, 16 U.S.C. § 824e(a). While observing that certain external factors, such as an increase in natural gas costs and a general electricity supply shortage, contributed to the summer 2000 wholesale electricity price spikes, FERC concluded that the electricity market structure and market rules devised by California’s restructuring plan were “seriously flawed” and a significant cause of the unjust and unreasonable short-term rates in California. Further, FERC found “clear evidence” that California’s market rules and structures provided electricity wholesale sellers the opportunity to exercise market power during periods of tight supply, although there was insufficient evidence at the time for FERC to come to definitive conclusions concerning the actions of individual sellers.

The central structural flaw of the California restructuring plan, according to FERC, was its over-reliance on the spot market. The CPUC’s mandatory buy/sell requirement, which forced the IOUs to sell all of their generation capacity into, and to pur-

\(^2\) For example, the monthly average market clearing price for May 2000 in the CalPX spot market represented a 100 percent increase over May 1999. The CalPX’s constrained day-ahead price peaked at $1,099/MWh on June 28, 2000—an astounding 15-fold increase over the pre-restructuring average cost of $74/MWh.

\(^3\) The AB 1890 rate freeze terminated for SDG & E customers when the utility recovered its stranded costs in 1999. In response to the extraordinary increases in SDG & E customers’ rates, however, the California legislature passed AB 265, which imposed a temporary retroactive retail rate cap of 6.5 cents/kWh for certain retail customers. See Cal. Pub. Util. Code § 332.1(2).
chase all of their electricity supply needs from, CalPX, coupled with the CPUC’s limitations on the IOUs’ forward contracting, exposed the IOUs to volatile spot market price spikes and prevented them from managing their risks more effectively through long-term contracting. Over-reliance on the spot market also exposed the IOUs to the possible exercise of market power in the CalPX by wholesale sellers during periods of short supply. Finally, CPUC limitations on long-term contracting in favor of the CalPX day-ahead and day-of markets produced a chronic underscheduling of electricity supplies, turning the Cal-ISO’s real time imbalance energy market, the market of last resort, into a significant market participant by forcing the Cal-ISO to make last minute purchases for up to 15 percent of total statewide electricity needs—far in excess of the maximum five percent total statewide load which the Cal-ISO’s imbalance market was originally intended to handle.

In its December 15 Order, FERC adopted a number of remedies to address these flaws in the California electricity market rules and structures. First, and most importantly, it eliminated the CalPX buy/sell requirement. FERC stated that “eliminating any mandated reliance on the spot market represents the single most important aspect of wholesale market reform and is one of the most critical components of all the immediate market reforms necessary to correct the problems in California electric markets and provide long-term protection of customers.” Id. at 61,999. This measure, which took effect immediately, permitted the IOUs to manage their risks more effectively through forward contracting, decreasing their exposure to spot market price spikes. In addition, it further reduced the IOUs’ exposure to the spot market by returning to them 25,000 megawatt hours (“MWh”) of their own generation capacity. Indeed, the December 15 Order actually precluded the IOUs from selling all but their surplus generation into the CalPX (or any other wholesale) markets.

Because the IOUs participate in both the California retail as well as interstate wholesale markets, however, they fall within the jurisdiction of both the CPUC as well as FERC. FERC noted that its proposal to eliminate the mandatory buy/sell requirement had received overwhelming support from almost all interested parties except the CPUC. In fact, the CPUC specifically declared that FERC’s “elimination of its ‘Buy’ requirement does not eliminate the California Commission’s ‘Buy’ requirement,” and emphasized that its buy requirement would remain in place until the CPUC itself removed it. Id. at 61,999.

Faced with the CPUC’s refusal to abandon its reliance on the spot market—indeed, in the face of the CPUC’s explicit declaration that it would continue to require, whether directly or indirectly, that the IOUs continue to procure the bulk of their

4 The IOUs’ peak load is 40,000 MWh.

5 By declaring IOUs’ purchases of electricity in the CalPX spot market as presumptively prudent—essentially immunizing such purchases from further CPUC prudence review—the CPUC effectively imposed an additional indirect requirement that the IOUs continue to procure the bulk of their power needs through the CalPX spot market. FERC’s termination of CalPX’s wholesale tariffs was thus designed to prevent either a direct or indirect CPUC requirement in favor of such market. Following FERC’s December 15 Order, the CPUC issued a decision on December 21, 2000, in which it reaffirmed its position that “reasonableness review of the [IOUs’] portfolio of bilateral forward contracts continues to be necessary” and submitted for comment certain criteria the IOUs should consider when entering into long-term electricity contracts. Order Proposing Clarifications And Modifications of D.00-08-023 And D.00-09-075, and Establishing Prudency Standards for Forward Electricity Contracts (Cal. Pub. Util. Comm’n Decision 00-
power needs through the CalPX spot markets—FERC was forced to take “the unusual step” of terminating the CalPX’s wholesale tariff and rate schedules, including its CTS forwards market rate schedule, effective April 30, 2001. In this way, FERC eliminated CalPX’s ability to operate as an exclusive mandatory exchange. At the same time, FERC explicitly invited CalPX to reconstitute itself as an “independent exchange with no regulatory mandated products and offer the services needed by market participants.” Id. at 62,000, n. 46. See also Order Clarifying Order Directing Remedies for California Wholesale Electric Markets, 94 FERC 61,005 (Jan. 8, 2001) (explaining that “[t]he PX is free to revise its CTS tariffs to remove the spot market components of its existing rate schedules, and to file them pursuant to FPA section 205 and, if appropriate, to seek waiver of the ... 60-day notice period”).

One other prospective structural remedy instituted by FERC in its December 15 order is relevant to the petitions before us: its imposition of a temporary $150 MWh breakpoint in the CalPX spot markets and the Cal-ISO real time imbalance energy market through April 2001. Rejecting SDG & E’s request for a $250 MWh wholesale price cap, FERC instead imposed a “soft cap” in the CalPX and Cal-ISO short-term markets as both a price mitigation measure and a market monitoring device. Under the soft cap, any trades above $150/MWh will not set the single market clearing price for all buyers. The $150 breakpoint thus represents a limitation on the single price auction format of the CalPX spot markets. The soft cap does not, however, preclude individual suppliers and purchasers from entering into transactions in excess of $150/MWh, and sellers will continue to receive their as-bid amounts. At the same time, the December 15 order subjects transactions in excess of $150/MWh to certain reporting and monitoring requirements to facilitate FERC’s on-going investigation into exercises of market power by wholesale sellers.

In addition to its prospective structural remedies, FERC intimated in both its November 1 and December 15 orders that retroactive relief—refunds from wholesale sellers of electricity subject to FERC’s jurisdiction—might also be warranted. In its November 1 order, FERC provisionally established October 2, 2000, as the “refund effective date,” i.e., the terminus post quem for the transactions subject to potential refund liability pursuant to the provisions of the FPA. Further, FERC ruled that, henceforth, all sales of electricity into the California market through December 2002 would likewise be subject to potential refund liability. However, FERC declined to require immediate refunds in either order, finding that it could not yet “reach definite conclusions about the actions of individual sellers” and intimating that further fact-gathering would have to be undertaken before it could rule on the refund requests. Id. at 61,350.

On March 9, 2001, FERC issued its first order concerning refunds in the California wholesale power market. See Order Directing Sellers to Provide Refunds Of Excess Amounts Charged, 94 FERC 61,245 (March 9, 2001) (“March 9 Order”). This order was limited to the January 2001 period. Relying largely on Cal-ISO and CalPX filings, FERC for

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6 The California legislature has since repealed Cal. Pub. Util. Code § 355.1, which had prohibited the CPUC from “implement[ing] the part of any decision authorizing electrical corporations to purchase from exchanges other than the Power Exchange.” See Act of February 1, 2001, 2001 Cal. Legis. Serv. 1st Ex. Sess. 4 (A.B.1). The record does not indicate how, if at all, the CPUC has responded in light of the repeal of § 355.1, nor have the parties briefed us on the relevance, if any, of this repeal to the petitions before us.
the first time established a provisional formula governing refunds. The March 9 Order directs wholesale sellers of electricity into the California market to provide refunds or offsets or, alternatively, to justify their charges and costs, for transactions made during Stage 3 emergencies that were above a “rate screen,” which for the January 2001 period FERC calculated at $273/MWh. FERC estimated that some $69 million in January 2001 electricity sales would be subject to refunds and stated that it would use this same methodology to calculate potential refund obligations for the period from February to April 2001. At the same time, FERC again declined to rule on retroactive refund requests for the October 2, 2000, to December 31, 2000, period.

Meanwhile, claiming that it could not comply with the $150 MWh breakpoint or attendant reporting and monitoring requirements in a cost effective manner, CalPX suspended operations in its spot markets at the end of January 2001. In addition, facing the imminent termination of its CTS forwards market rate schedule and unwilling to file new rate schedules which would allow it to operate a bilateral forwards market, CalPX saw trading in its CTS division come to a virtual halt since the December 15 order. On March 9, 2001, CalPX filed for protection under Chapter 11 of the Bankruptcy Act. ***


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Justice SCALIA delivered the opinion of the Court: Under the Mobile-Sierra doctrine, the Federal Energy Regulatory Commission (FERC or Commission) must presume that the rate set out in a freely negotiated wholesale-energy contract meets the “just and reasonable” requirement imposed by law. The presumption may be overcome only if FERC concludes that the contract seriously harms the public interest. These cases present two questions about the scope of the Mobile-Sierra doctrine: First, does the presumption apply only when FERC has had an initial opportunity to review a contract rate without the presumption? Second, does the presumption impose as high a bar to challenges by purchasers of wholesale electricity as it does to challenges by sellers?

I

A

Statutory Background

The Federal Power Act (FPA), 41 Stat. 1063, as amended, gives the Commission the authority to regulate the sale of electricity in interstate commerce—a market historically characterized by natural monopoly and therefore subject to abuses of market power. See 16 U.S.C. § 824 et seq. Modeled on the Interstate Commerce Act, the FPA requires regulated utilities to file compilations of their rate schedules, or “tariffs,” with the Commission, and to provide service to electricity purchasers on the terms and prices there set forth. § 824d(c). Utilities wishing to change their tariffs must notify the Commission 60 days before the change is to go into effect. § 824d(d). Unlike the Interstate Commerce Act, however, the FPA also permits utilities to set rates with individual electricity purchasers through bilateral contracts. § 824d(c), (d). As we have explained elsewhere, the FPA “departed from the scheme of purely tariff-based regulation and acknowledged that contracts between commercial buyers and sellers could be used in ratesetting.” Verizon Communications Inc. v. FCC, 535 U.S. 467, 479 (2002). Like
tariffs, contracts must be filed with the Commission before they go into effect. 16 U.S.C. § 824d(c), (d).

The FPA requires all wholesale-electricity rates to be “just and reasonable.” § 824d(a). When a utility files a new rate with the Commission, through a change to its tariff or a new contract, the Commission may suspend the rate for up to five months while it investigates whether the rate is just and reasonable. § 824d(c). The Commission may, however, decline to investigate and permit the rate to go into effect—which does not amount to a determination that the rate is “just and reasonable.” See 18 CFR § 35.4 (2007). After a rate goes into effect, whether or not the Commission deemed it just and reasonable when filed, the Commission may conclude, in response to a complaint or on its own motion, that the rate is not just and reasonable and replace it with a lawful rate. 16 U.S.C. § 824c(a).

The statutory requirement that rates be “just and reasonable” is obviously incapable of precise judicial definition, and we afford great deference to the Commission in its rate decisions. See FPC v. Texaco Inc., 417 U.S. 380, 389 (1974); Permian Basin Area Rate Cases, 390 U.S. 747, 767 (1968). *** In exercising its broad discretion, the Commission traditionally reviewed and set tariff rates under the “cost-of-service” method, which ensures that a seller of electricity recovers its costs plus a rate of return sufficient to attract necessary capital.

In two cases decided on the same day in 1956, we addressed the authority of the Commission to modify rates set bilaterally by contract rather than unilaterally by tariff. In United Gas Pipe Line Co. v. Mobile Gas Service Corp., 350 U.S. 332, we rejected a natural-gas utility’s argument that the Natural Gas Act’s requirement that it file all new rates with the Commission authorized it to abrogate a lawful contract with a purchaser simply by filing a new tariff, see id., at 336-337. The filing requirement, we explained, is merely a precondition to changing a rate, not an authorization to change rates in violation of a lawful contract (i.e., a contract that sets a just and reasonable rate).

In FPC v. Sierra Pacific Power Co., 350 U.S. 348, 352-353 (1956), we applied the holding of Mobile to the analogous provisions of the FPA, concluding that the complaining utility could not supersede a contract rate simply by filing a new tariff. In Sierra, however, the Commission had concluded not only (contrary to our holding) that the newly filed tariff superseded the contract, but also that the contract rate itself was not just and reasonable, “solely because it yield[ed] less than a fair return on the net invested capital” of the utility. Id., at 355. Thus, we were confronted with the question of how the Commission may evaluate whether a contract rate is just and reasonable.

We answered that question in the following way:

“[T]he Commission’s conclusion appears on its face to be based on an erroneous standard.... [W]hile it may be that the Commission may not normally impose upon a public utility a rate which would produce less than a fair return, it does not follow that the public utility may not itself agree by contract to a rate affording less than a fair return or that, if it does so, it is entitled to be relieved of its improvident bargain.... In such circumstances the sole concern of the Commission would seem to be whether the rate is so low as to adversely affect the public interest—as where it might impair the financial ability of the public utility to continue its service, cast upon other consumers an excessive burden, or be unduly discriminatory.” Id., at 354-355 (emphasis deleted).
Over the past 50 years, decisions of this Court and the Courts of Appeals have refined the Mobile-Sierra presumption to allow greater freedom of contract. In United Gas Pipe Line Co. v. Memphis Light, Gas and Water Div., 358 U.S. 103, 110-113 (1958), we held that parties could contract out of the Mobile-Sierra presumption by specifying in their contracts that a new rate filed with the Commission would supersede the contract rate. Courts of Appeals have held that contracting parties may also agree to a middle option between Mobile-Sierra and Memphis Light: A contract that does not allow the seller to supersede the contract rate by filing a new rate may nonetheless permit the Commission to set aside the contract rate if it results in an unfair rate of return, not just if it violates the public interest. See, e.g., Papago Tribal Util. Auth. v. FERC, 723 F.2d 950, 953 (C.A.D.C. 1983); Louisiana Power & Light Co. v. FERC, 587 F.2d 671, 675-676 (C.A.5 1979). Thus, as the Mobile-Sierra doctrine has developed, regulated parties have retained broad authority to specify whether FERC can review a contract rate solely for whether it violates the public interest or also for whether it results in an unfair rate of return. But the Mobile-Sierra presumption remains the default rule.

Moreover, even though the challenges in Mobile and Sierra were brought by sellers, lower courts have concluded that the Mobile-Sierra presumption also applies where a purchaser, rather than a seller, asks FERC to modify a contract. Over the years, the Commission began to refer to the two modes of review—one with the Mobile-Sierra presumption and the other without—as the “public interest standard” and the “just and reasonable standard.” See, e.g., Southern Co. Servs., Inc. Gulf States Util. Co. v. Southern Co. Servs., Inc., 39 FERC ¶ 63,026, pp. 65,134, 65,141 (1987). We do not take this nomenclature to stand for the obviously indefensible proposition that a standard different from the statutory just-and-reasonable standard applies to contract rates. Rather, the term “public interest standard” refers to the differing application of that just-and-reasonable standard to contract rates. See Philadelphia Elec. Co., 58 F.P.C. 88, 90 (1977). (It would be less confusing to adopt the Solicitor General’s terminology, referring to the two differing applications of the just-and-reasonable standard as the “ordinary” just and reasonable standard” and the “public interest standard.” See Reply Brief for Respondent FERC 6.)

B

Recent FERC Innovations; Market-Based Tariffs

In recent decades, the Commission has undertaken an ambitious program of market-based reforms. Part of the impetus for those changes was technological evolution. Historically, electric utilities had been vertically integrated monopolies. For a particular geographic area, a single utility would control the generation of electricity, its transmission, and its distribution to consumers. See Midwest ISO Transmission Owners v. FERC, 373 F.3d 1361, 1363 (C.A.D.C. 2004). Since the 1970’s, however, engineering innovations have lowered the cost of generating electricity and transmitting it over long distances, enabling new entrants to challenge the regional generating monopolies of traditional utilities.

To take advantage of these changes, the Commission has attempted to break down regulatory and economic barriers that hinder a free market in wholesale electricity. It has sought to promote competition in those areas of the industry amenable to competition, such as the segment that generates electric power, while ensuring that the segment of the industry characterized by natural monopoly—namely, the transmission grid that conveys the generated electricity—cannot exert monopolistic influence over
other areas. To that end, FERC required in Order No. 888 that each transmission provider offer transmission service to all customers on an equal basis by filing an “open access transmission tariff.” *Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities*, 61 Fed. Reg. 21540 (1996). That requirement prevents the utilities that own the grid from offering more favorable transmission terms to their own affiliates and thereby extending their monopoly power to other areas of the industry.

To further pry open the wholesale-electricity market and to reduce technical inefficiencies caused when different utilities operate different portions of the grid independently, the Commission has encouraged transmission providers to establish “Regional Transmission Organizations”—entities to which transmission providers would transfer operational control of their facilities for the purpose of efficient coordination. Order No. 2000, 65 Fed. Reg. 810, 811-812 (2000). It has encouraged the management of those entities by “Independent System Operators,” not-for-profit entities that operate transmission facilities in a nondiscriminatory manner. In addition to coordinating transmission service, Regional Transmission Organizations perform other functions, such as running auction markets for electricity sales and offering contracts for hedging against potential grid congestion.

Against this backdrop of technological change and market-based reforms, the Commission over the past two decades has begun to permit sellers of wholesale electricity to file “market-based” tariffs. These tariffs, instead of setting forth rate schedules or rate-fixing contracts, simply state that the seller will enter into freely negotiated contracts with purchasers. See generally *Market-Based Rates For Wholesale Sales Of Electric Energy, Capacity And Ancillary Services By Public Utilities*, Order No. 697, 72 Fed. Reg. 39904 (2007) (hereinafter *Market-Based Rates*). FERC does not subject the contracts entered into under these tariffs (as it subjected traditional wholesale-power contracts) to § 824d’s requirement of immediate filing, apparently on the theory that the requirement has been satisfied by the initial filing of the market-based tariffs themselves.

FERC will grant approval of a market-based tariff only if a utility demonstrates that it lacks or has adequately mitigated market power, lacks the capacity to erect other barriers to entry, and has avoided giving preferences to its affiliates. In addition to the initial authorization of a market-based tariff, FERC imposes ongoing reporting requirements. A seller must file quarterly reports summarizing the contracts that it has entered into, even extremely short-term contracts. See *California ex rel. Lockyer v. FERC*, 383 F.3d 1006, 1013 (C.A.9 2004). It must also demonstrate every four months that it still lacks or has adequately mitigated market power. If FERC determines from these filings that a seller has reattained market power, it may revoke the authority prospectively. And if the Commission finds that a seller has violated its Regional Transmission Organization’s market rules, its tariff, or Commission orders, the Commission may take appropriate remedial action, such as ordering refunds, requiring disgorgement of profits, and imposing civil penalties.

Both the Ninth Circuit and the D.C. Circuit have generally approved FERC’s scheme of market-based tariffs. See *Lockyer*, supra, at 1011-1013; *Louisiana Energy & Power Auth. v. FERC*, 141 F.3d 364, 365 (C.A.D.C. 1998). We have not hitherto approved, and express no opinion today, on the lawfulness of the market-based-tariff system, which is not one of the issues before us. It suffices for the present cases to recognize that when a seller files a market-based tariff, purchasers no longer have the
option of buying electricity at a rate set by tariff and contracts no longer need to be filed with FERC (and subjected to its investigatory power) before going into effect.

C

California’s Electricity Regulation and Its Consequences

In 1996, California enacted Assembly Bill 1890 (AB 1890), which massively restructured the California electricity market. See 1996 Cal. Stat. ch. 854 (codified at Cal. Pub. Util. Code Ann. §§ 330-398.5). The bill transferred operational control of the transmission facilities of California’s three largest investor-owned utilities to an Independent Service Operator (Cal-ISO). See Pacific Gas & Elec. Co. v. FERC, 464 F.3d 861, 864 (C.A.9 2006). It also established the California Power Exchange (CalPX), a nonprofit entity that operated a short-term market—or “spot market”—for electricity. The bill required California’s three largest investor-owned utilities to divest most of their electricity-generation facilities. It then required those utilities to purchase and sell the bulk of their electricity from and to the CalPX’s spot market, permitting only limited leeway for them to enter into long-term contracts.

In 1997, FERC approved the Cal-ISO as consistent with the requirements for an Independent Service Operator established in Order No. 888. FERC also approved the CalPX and the investor-owned utilities’ authority to make sales at market-based rates in the CalPX, finding that, in light of the divesture of their generation units and other conditions imposed under the restructuring plan, those utilities had adequately mitigated their market power.

The CalPX opened for business in March 1998. In the summer of 1999, it expanded to include an auction for sales of electricity under “forward contracts”—contracts in which sellers promise to deliver electricity more than one day in the future (sometimes many years). But the participation of California’s large investor-owned utilities in that forward market was limited because, as we have said, AB 1890 strictly capped the amount of power that they could purchase outside of the spot market.

That diminishment of the role of long-term contracts in the California electricity market turned out to be one of the seeds of an energy crisis. In the summer of 2000, the price of electricity in the CalPX’s spot market jumped dramatically—more than fifteenfold. The increase was the result of a combination of natural, economic, and regulatory factors: “flawed market rules; inadequate addition of generating facilities in the preceding years; a drop in available hydropower due to drought conditions; a rupture of a major pipeline supplying natural gas into California; strong growth in the economy and in electricity demand; unusually high temperatures; an increase in unplanned outages of extremely old generating facilities; and market manipulation.” Californians for Renewable Energy, Inc. v. Sellers of Energy and Ancillary Servs., 119 FERC ¶ 61,058, pp. 61,243, 61,246 (2007). Because California’s investor-owned utilities had for the most part been forbidden to obtain their power through long-term contracts, the turmoil in the spot market hit them hard. The high prices led to rolling blackouts and saddled utilities with mounting debt.

In late 2000, the Commission took action. A central plank of its emergency effort was to eliminate the utilities’ reliance on the CalPX’s spot market and to shift their purchases to the forward market. To that end, FERC abolished the requirement that investor-owned utilities purchase and sell all power through the CalPX and encouraged
them to enter into long-term contracts. The Commission also put price caps on wholesale electricity. By June 2001, electricity prices began to decline to normal levels.

D

Genesis of These Cases

The principal respondents in these cases are western utilities that purchased power under long-term contracts during that tumultuous period in 2000 and 2001. Although they are not located in California, the high prices in California spilled over into other Western States. Petitioners are the sellers that entered into the contracts with respondents.

The contracts between the parties included rates that were very high by historical standards. For example, respondent Snohomish signed a 9-year contract to purchase electricity from petitioner Morgan Stanley at a rate of $105/megawatt hour (MWh), whereas prices in the Pacific Northwest have historically averaged $24/MWh. The contract prices were substantially lower, however, than the prices that Snohomish would have paid in the spot market during the energy crisis, when prices peaked at $3,300/MWh.

After the crisis had passed, buyer’s remorse set in and respondents asked FERC to modify the contracts. They contended that the rates in the contracts should not be presumed to be just and reasonable under Mobile-Sierra because, given the sellers’ market-based tariffs, the contracts had never been initially approved by the Commission without the presumption. Respondents also argued that contract modification was warranted even under the Mobile-Sierra presumption because the contract rates were so high that they violated the public interest.

FERC first held that the Mobile-Sierra presumption did apply to the contracts at issue. Although agreeing with respondents that the presumption applies only where FERC has had an initial opportunity to review a contract rate, the Commission relied on the somewhat metaphysical ground that the grant of market-based authority to petitioners qualified as that initial opportunity. The Commission then held that respondents could not overcome the Mobile-Sierra presumption because the contract rates were so high that they violated the public interest.

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“a finding that the unjust and unreasonable spot market caused forward bilateral prices to be unjust and unreasonable would be relevant to contract modification only where there is a ‘just and reasonable’ standard of review .... Under the ‘public interest’ standard, to justify contract modification it is not enough to show that forward prices became unjust and unreasonable due to the impact of spot market dysfunctions; it must be shown that the rates, terms and conditions are contrary to the public interest.” Id., at 62,397.

The Commission determined that under the factors identified in Sierra, as well as under a totality-of-the-circumstances test, respondents had not demonstrated that the contracts threatened the public interest. On rehearing, respondents reiterated their complaints, including their charge that “their contracts were the product of market manipulation by Enron, Morgan Stanley and other [sellers].” 105 FERC ¶ 61,185, pp.
61,979, 61,989 (2003). The Commission answered that there was “no evidence to support a finding of market manipulation that specifically affected the contracts at issue.” 

Ibid.

Respondents filed petitions for review in the Ninth Circuit, which granted the petitions and remanded to the Commission, finding two flaws in the Commission’s analysis.2 First, the court agreed with respondents that rates set by contract (whether pursuant to a market-based tariff or not) are presumptively reasonable only where FERC has had an initial opportunity to review the contracts without applying the Mobile-Sierra presumption. To satisfy that prerequisite under the market-based tariff regime, the court said, the Commission must promptly review the terms of contracts after their formation and must modify those that do not appear to be just and reasonable when evaluated without the Mobile-Sierra presumption (rather than merely revoking market-based authority prospectively but leaving pre-existing contracts intact). This initial review must include an inquiry into “the market conditions in which the contracts at issue were formed,” and market “dysfunction” is a ground for finding a contract not to be just and reasonable. 471 F.3d, at 1085-1087. Second, the Ninth Circuit held that even assuming that the Mobile-Sierra presumption applied, the standard for overcoming that presumption is different for a purchaser’s challenge to a contract, namely, whether the contract rate exceeds a “zone of reasonableness.” 471 F.3d, at 1088-1090. **

II

A

Application of Mobile-Sierra Presumption to Contracts Concluded under Market-Based Rate Authority

As noted earlier, the FERC order under review here agreed with the Ninth Circuit’s premise that the Commission must have an initial opportunity to review a contract without the Mobile-Sierra presumption, but maintained that the authorization for market-based rate authority qualified as that initial review. Before this Court, however, FERC changes its tune, arguing that there is no such prerequisite—or at least that FERC could reasonably conclude so and therefore that Chevron deference is in order. See Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc., 467 U.S. 837 (1984). We will not uphold a discretionary agency decision where the agency has offered a justification in court different from what it provided in its opinion. See SEC v. Chenery Corp., 318 U.S. 80, 94-95 (1943). But FERC has lucked out: The Chenery doctrine has no application to these cases, because we conclude that the Commission was required, under our decision in Sierra, to apply the Mobile-Sierra presumption in its evaluation of the contracts here. That it provided a different rationale for the necessary result is no cause for upsetting its ruling. ***

We are in broad agreement with the Ninth Circuit on a central premise: There is only one statutory standard for assessing wholesale electricity rates, whether set by contract or tariff—the just-and-reasonable standard. The plain text of the FPA states that “[a]ll rates ... shall be just and reasonable.” 16 U.S.C. § 824d(a); see also § 824e(a). But we disagree with the Ninth Circuit’s interpretation of Sierra as requiring (contrary

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2 In a holding not challenged before this Court, the Ninth Circuit concluded that the contracts at issue did not contain “Memphis clause[s],” 471 F.3d 1053, 1079 (2006) (citing United Gas Pipe Line Co. v. Memphis Light, Gas and Water Div., 358 U.S. 103 (1958)), that would have precluded application of the Mobile-Sierra presumption.
to the statute) that the Commission apply the standard differently, depending on when a contract rate is challenged. In the Ninth Circuit’s view, *Sierra* was premised on the idea that “as long as the rate was just and reasonable when the contract was formed, there would be a presumption ... that the reasonableness continued throughout the term of the contract.” *471 F.3d*, at 1077. In other words, so long as the Commission concludes (either after a hearing or by allowing a rate to go into effect) that a contract rate is just and reasonable when initially filed, the rate will be presumed just and reasonable in future proceedings.

That is a misreading of *Sierra*. *Sierra* was grounded in the commonsense notion that “[i]n wholesale markets, the party charging the rate and the party charged [are] often sophisticated businesses enjoying presumptively equal bargaining power, who could be expected to negotiate a ‘just and reasonable’ rate as between the two of them.” *Verizon*, 535 U.S., at 479. Therefore, only when the mutually agreed-upon contract rate seriously harms the consuming public may the Commission declare it not to be just and reasonable. *Sierra* thus provided a definition of what it means for a rate to satisfy the just-and-reasonable standard in the contract context—a definition that applies regardless of when the contract is reviewed. The Ninth Circuit, by contrast, essentially read *Sierra* “as the equivalent of an estoppel doctrine,” whereby an initial Commission opportunity for review prevents the Commission from modifying the rates absent serious future harm to the public interest. But *Sierra* said nothing of the sort. And given that the Commission’s passive permission for a rate to go into effect does not constitute a finding that the rate is just and reasonable, it would be odd to treat that initial “opportunity for review” as curtailing later challenges.

Nor do we agree with the Ninth Circuit that FERC must inquire into whether a contract was formed in an environment of market “dysfunction” before applying the Mobile-Sierra presumption. Markets are not perfect, and one of the reasons that parties enter into wholesale-power contracts is precisely to hedge against the volatility that market imperfections produce. That is why one of the Commission’s responses to the energy crisis was to remove regulatory barriers to long-term contracts. It would be a perverse rule that rendered contracts less likely to be enforced when there is volatility in the market. (Such a rule would come into play, after all, only when a contract formed in a period of “dysfunction” did *not* significantly harm the consuming public, since contracts that seriously harm the public should be set aside even under the Mobile-Sierra presumption.) By enabling sophisticated parties who weathered market turmoil by entering long-term contracts to renounce those contracts once the storm has passed, the Ninth Circuit’s holding would reduce the incentive to conclude such contracts in the future. Such a rule has no support in our case law and plainly undermines the role of contracts in the FPA’s statutory scheme.

To be sure, FERC has ample authority to set aside a contract where there is unfair dealing at the contract formation stage—for instance, if it finds traditional grounds for the abrogation of the contract such as fraud or duress. In addition, if the “dysfunctional” market conditions under which the contract was formed were caused by illegal action of one of the parties, FERC should not apply the Mobile-Sierra presumption. But the mere fact that the market is imperfect, or even chaotic, is no reason to undermine the stabilizing force of contracts that the FPA embraced as an alternative to “purely tariff-based regulation.” *Verizon*, 535 U.S., at 479. We may add that evaluating market “dysfunction” is a very difficult and highly speculative task—not one that the FPA
would likely require the agency to engage in before holding sophisticated parties to their bargains.

We reiterate that we do not address the lawfulness of FERC’s market-based-rates scheme, which assuredly has its critics. But any needed revision in that scheme is properly addressed in a challenge to the scheme itself, not through a disfigurement of the venerable Mobile-Sierra doctrine. We hold only that FERC may abrogate a valid contract only if it harms the public interest.

B

Application of “Excessive Burden” Exception to High-Rate Challenges

We turn now to the Ninth Circuit’s second holding: that a “zone of reasonableness” test should be used to evaluate a buyer’s challenge that a rate is too high. In our view that fails to accord an adequate level of protection to contracts. The standard for a buyer’s challenge must be the same, generally speaking, as the standard for a seller’s challenge: The contract rate must seriously harm the public interest. That is the standard that the Commission applied in the proceedings below.

We are again in agreement with the Ninth Circuit on a starting premise: It is clear that the three factors we identified in Sierra—“where [a rate] might impair the financial ability of the public utility to continue its service, cast upon other consumers an excessive burden, or be unduly discriminatory,” 350 U.S., at 355—are not all precisely applicable to the high-rate challenge of a purchaser (where, for example, the relevant question is not whether “other customers” [of the utility] would be excessively burdened, but whether any customers of the purchaser would be); and that those three factors are in any event not the exclusive components of the public interest. In its decision below, the Commission recognized both these realities. ***

Where we disagree with the Ninth Circuit is on the overarching “zone of reasonableness” standard it established for evaluating a high-rate challenge and setting aside a contract rate: whether consumers’ electricity bills “are higher than they would otherwise have been had the challenged contracts called for rates within the just and reasonable range,” i.e., rates that equal “marginal cost.” 471 F.3d, at 1089. The Ninth Circuit derived this test from our statement in Sierra that a contract rate would have to be modified if it were so low that it imposed an “excessive burden” on other wholesale purchasers. The Ninth Circuit took “excessive burden” to mean merely the burden caused when one set of consumers is forced to pay above marginal cost to compensate for below-marginal-cost rates charged other consumers. And it proceeded to apply a similar notion of “excessive burden” to high-rate challenges (where all the burden of the above-marginal-cost contract rate falls on the purchaser’s own customers, and does not affect the customers of third parties). That is a misreading of Sierra and our later cases. A presumption of validity that disappears when the rate is above marginal cost is no presumption of validity at all, but a reinstatement of cost-based rather than contract-based regulation. We have said that, under the Mobile-Sierra presumption, setting aside a contract rate requires a finding of “unequivocal public necessity,” Permian Basin, 390 U.S., at 822, or “extraordinary circumstances,” Arkansas Louisiana Gas Co. v. Hall, 453 U.S. 571, 582 (1981). In no way can these descriptions be thought to refer to the mere exceeding of marginal cost. ***

By the same token, our approval of FERC’s decision not to set prospective area rates solely with reference to pre-existing contract prices, Permian Basin Area Rate Cases, 390
U.S. 747, 792-793 (1968), does not support, as the dissent thinks, the view that the standard for abrogating an existing valid contract is anything less than the Mobile-Sierra standard. That is the standard Permian Basin applied when actually confronted with the issue of contract modification.

The Ninth Circuit’s standard would give short shrift to the important role of contracts in the FPA, as reflected in our decision in Sierra, and would threaten to inject more volatility into the electricity market by undermining a key source of stability. The FPA recognizes that contract stability ultimately benefits consumers, even if short-term rates for a subset of the public might be high by historical standards—which is why it permits rates to be set by contract and not just by tariff. As the Commission has recently put it, its “first and foremost duty is to protect consumers from unjust and unreasonable rates; however, ... uncertainties regarding rate stability and contract sanctity can have a chilling effect on investments and a seller’s willingness to enter into long-term contracts and this, in turn, can harm customers in the long run.” Market-Based Rates, ¶ 6, 72 Fed. Reg. 33906-33907.

Besides being wrong in principle, in its practical effect the Ninth Circuit’s rule would impose an onerous new burden on the Commission, requiring it to calculate the marginal cost of the power sold under a market-based contract. Assuming that FERC even ventured to undertake such an analysis, rather than reverting to the ancien régime of cost-of-service ratesetting, the regulatory costs would be enormous. We think that the FPA intended to reserve the Commission’s contract-abrogation power for those extraordinary circumstances where the public will be severely harmed.

III
Defects in FERC’s Analysis Supporting Remand

Despite our significant disagreement with the Ninth Circuit, we find two errors in the Commission’s analysis, and we therefore affirm the judgment below on alternative grounds.

First, it appears, as the Ninth Circuit concluded, that the Commission may have looked simply to whether consumers’ rates increased immediately upon the relevant contracts’ going into effect, rather than determining whether the contracts imposed an excessive burden on consumers “down the line,” relative to the rates they could have obtained (but for the contracts) after elimination of the dysfunctional market. For example, the Commission concluded that two of the respondents would experience “rate decreases of approximately 20 percent for retail service” during the period covered by the contracts. But the baseline for that computation was the rate they were paying before the contracts went into effect. That disparity is certainly a relevant consideration; but so is the disparity between the contract rate and the rates consumers would have paid (but for the contracts) further down the line, when the open market was no longer dysfunctional. That disparity, past a certain point, could amount to an “excessive burden.” That is what was contemplated by Sierra, which involved a challenge 5 years into a 15-year contract. The “excessive burden” on other customers to which the opinion referred was assuredly the current burden, and not only the burden imposed at the very outset of the contract. The “unequivocal public necessity” that justifies overriding the Mobile-Sierra presumption does not disappear as a factor once the contract enters into force. Thus, FERC’s analysis on this point was flawed—or at least incomplete. As the Ninth Circuit put it, “[i]t is entirely possible that rates had increased so high during the energy crises because of dysfunction in the spot market that, even
with the acknowledged decrease in rates, consumers still paid more under the forward contracts than they otherwise would have.” 471 F.3d, at 1090. If that is so, and if that increase is so great that, even taking into account the desirability of fostering market-stabilizing long-term contracts, the rates impose an excessive burden on consumers or otherwise seriously harm the public interest, the rates must be disallowed.

Second, respondents alleged before FERC that some of the petitioners in these cases had engaged in market manipulation in the spot market. The Staff Report concluded, as we have said, that the abnormally high prices in the spot market during the energy crisis influenced the terms of contracts in the forward market. But the Commission dismissed the relevance of the Staff Report on the ground that it had not demonstrated that forward market prices were so high as to overcome the Mobile-Sierra presumption. We conclude, however, that if it is clear that one party to a contract engaged in such extensive unlawful market manipulation as to alter the playing field for contract negotiations, the Commission should not presume that the contract is just and reasonable. Like fraud and duress, unlawful market activity that directly affects contract negotiations eliminates the premise on which the Mobile-Sierra presumption rests: that the contract rates are the product of fair, arms-length negotiations. The mere fact that the unlawful activity occurred in a different (but related) market does not automatically establish that it had no effect upon the contract—especially given the Staff Report’s (unsurprising) finding that high prices in the one market produced high prices in the other. We are unable to determine from the Commission’s orders whether it found the evidence inadequate to support the claim that respondents’ alleged unlawful activities affected the contracts at issue here. It said in its order on rehearing, 105 FERC, at 61,989, that “[w]e ... found no evidence to support a finding of market manipulation [by respondents] that specifically affected the contracts at issue.” But perhaps that must be read in light of the Commission’s above described rejection of the Staff Report on the ground that high spot market prices caused by manipulation are irrelevant unless the forward market prices fail the Mobile-Sierra standard; and in light of the statement in its initial order, in apparent response to the claim of spot-market manipulation by respondents, 103 FERC, at 62,397, that “a finding that the unjust and unreasonable spot market prices caused forward bilateral prices to be unjust and unreasonable would be relevant to contract modification only where there is a ‘just and reasonable’ standard of review.”

We emphasize that the mere fact of a party’s engaging in unlawful activity in the spot market does not deprive its forward contracts of the benefit of the Mobile-Sierra presumption. There is no reason why FERC should be able to abrogate a contract on these grounds without finding a causal connection between unlawful activity and the contract rate. Where, however, causality has been established, the Mobile-Sierra presumption should not apply.

On remand, the Commission should amplify or clarify its findings on these two points. The judgment of the Court of Appeals is affirmed, and the cases are remanded for proceedings consistent with this opinion.

It is so ordered.

[THE CHIEF JUSTICE and Justice BREYER took no part in the consideration or decision of these cases. Opinion of Justice GINSBURG, concurring in part and concurring in the judgment, omitted.]
Justice STEVENS, with whom Justice SOUTER joins, dissenting: The basic question presented by these complicated cases is whether “the Federal Energy Regulatory Commission (FERC or Commission) must presume that the rate set out in a freely negotiated wholesale-energy contract meets the ‘just and reasonable’ requirement imposed by law.” Ante. The opening sentence of the Court’s opinion tells us that the “Mobile-Sierra doctrine”—a term that makes its first appearance in the United States Reports today—mandates an affirmative answer. This holding finds no support in either case that lends its name to the doctrine. Nevertheless, in the interest of guarding against “disfigurement of the venerable Mobile-Sierra doctrine,” ante, the Court mangles both the governing statute and precedent.

I

Under the Federal Power Act (FPA), 41 Stat. 1063, 16 U.S.C. § 791a et seq., wholesale electricity prices are established in the first instance by public utilities, either via tariffs or in contracts with purchasers, § 824d(c). Whether set by tariff or contract, all rates must be filed with the Commission. Section 205(a) of the FPA provides, “All rates and charges ... shall be just and reasonable, and any such rate or charge that is not just and reasonable is hereby declared to be unlawful.” 16 U.S.C. § 824d(a). Pursuant to § 206(a), if FERC determines “that any rate ... or that any rule, regulation, practice, or contract affect[ing] such rate ... is unjust [or] unreasonable ..., the Commission shall determine the just and reasonable rate, ... rule, regulation, practice, or contract to be thereafter observed and in force, and shall fix the same by order.” 16 U.S.C. § 824e(a). These provisions distinguish between the rate-setting roles of utilities (which initially set rates) and the Commission (which may override utility-set rates that are not just and reasonable), but they do not distinguish between rates set unilaterally by tariff and rates set bilaterally by contract. However the utility sets its prices, the standard of review is the same—rates must be just and reasonable.

The Court purports to acknowledge that “[t]here is only one statutory standard for assessing wholesale electricity rates, whether set by contract or tariff—the just-and-reasonable standard.” Ante. Unlike rates set by tariff, however, the Court holds that any “freely negotiated” contract rate is presumptively just and reasonable unless it “seriously harms” the public interest. Ante. According to the Court, this presumption represents a “differing application of [the] just-and-reasonable standard,” but not a different standard altogether. Ante. I disagree. There is no significant difference between requiring a heightened showing to overcome an otherwise conclusive presumption and imposing a heightened standard of review. I agree that applying a separate standard of review to contract rates is “obviously indefensible,” ibid., but that is also true with respect to the Court’s presumption.

Even if the “Mobile-Sierra presumption” were not tantamount to a separate standard, nothing in the statute mandates “differing application” of the statutory standard to rates set by contract. Ibid. Section 206(a) of the FPA provides, “without qualification or exception,” that FERC may replace any unjust or unreasonable contract with a lawful contract. The statute does not say anything about a mandatory presumption for contracts, much less define the burden of proof for overcoming it or delineate the circumstances for its nonapplication. Nor does the statute prohibit FERC from considering marginal cost when reviewing rates set by contract.

If Congress had intended to impose such detailed constraints on the Commission’s authority to review contract rates, it would have done so itself in the FPA. Congress
instead used the general words “just and reasonable” because it wanted to give FERC, not the courts, wide latitude in setting policy. *** [O]ur cases interpreting the FPA have invariably “emphasized that courts are without authority to set aside any rate adopted by the Commission which is within a ‘zone of reasonableness.’” Permian Basin, 390 U.S., at 797. This deference makes eminent sense because “rate-making agencies are not bound to the service of any single regulatory formula; they are permitted, unless their statutory authority otherwise plainly indicates, ‘to make the pragmatic adjustments which may be called for by particular circumstances.’” Permian Basin, 390 U.S., at 776-777. Despite paying lip service to this principle, the Court binds the Commission to a rigid formula of the Court’s own making.

Having found no statutory text that supports its vision of the Mobile-Sierra doctrine, the Court invokes the “important role of contracts in the FPA.” Ante. But contracts play an “important role” in the FPA only insofar as the statute “departed from the scheme of purely tariff-based regulation.” Verizon Communications Inc. v. FCC, 535 U.S. 467, 479 (2002). In allowing parties to establish rates by contract, Congress did not intend to immunize such rates from just-andreasonable review. Accordingly, the fact that the FPA tolerates contracts does not make it subservient to contracts.

II

Neither of the eponymous cases in the “Mobile-Sierra presumption,” nor any of our subsequent decisions, substantiates the Court’s atextual reading of §§ 205 and 206.

As the Court acknowledges, Mobile itself says nothing about what standard of review applies to rates established by contract. Rather, Mobile merely held that utilities cannot unilaterally abrogate contracts with purchasers by filing new rate schedules with the Commission. See 350 U.S., at 339-341. The Court neglects to mention, however, that although Mobile had no occasion to comment on the standard of review, it did imply that Congress would not have permitted parties to establish rates by contract but for “the protection of the public interest being afforded by supervision of the individual contracts, which to that end must be filed with the Commission and made public.” Id., at 339.

In Sierra, a public utility entered into a long-term contract to sell electricity “at a special low rate” in order to forestall potential competition. See 350 U.S., at 351-352. Several years later the utility complained that the rate provided too little profit and was therefore not “just and reasonable.” The Commission agreed and set aside the rate “solely because it yield[ed] less than a fair return on the net invested capital.” See id., at 354-355. The Court vacated and remanded on the ground that the Commission had applied an erroneous standard. “[W]hile it may be that the Commission may not normally impose upon a public utility a rate which would produce less than a fair return,” the Court reasoned, “it does not follow that the public utility may not itself agree by contract to a rate affording less than a fair return or that, if it does so, it is entitled to be relieved of its improvident bargain.” Id., at 355. When the seller has agreed to a rate that it later challenges as too low, “the sole concern of the Commission would seem to be whether the rate is so low as to adversely affect the public interest—as where it might impair the financial ability of the public utility to continue its service, cast upon other consumers an excessive burden, or be unduly discriminatory.” Ibid. The Court further elaborated on what it meant by the “public interest”:

“That the purpose of the power given the Commission by § 206(a) is the protection of the public interest, as distinguished from the private interests of the utilities,
is evidenced by the recital in § 201 of the Act that the scheme of regulation imposed ‘is necessary in the public interest.’ When § 206(a) is read in the light of this purpose, it is clear that a contract may not be said to be either ‘unjust’ or ‘unreasonable’ simply because it is unprofitable to the public utility.” Ibid.

Sierra therefore held that, in accordance with the statement of policy in the FPA, 16 U.S.C. § 824(a), whether a rate is “just and reasonable” is measured against the public interest, not the private interests of regulated sellers. Contrary to the opinion of the Court, Sierra instructs that the public interest is the touchstone for just-and-reasonable review of all rates, not just contract rates. Sierra drew a distinction between the Commission’s authority to impose low rates on utilities and its authority to abrogate low rates agreed to by utilities because these actions impact the public interest differently, not because the public interest governs rates set bilaterally but not rates set unilaterally. When the Commission imposes rates that afford less than a fair return, it compromises the public’s interest in attracting necessary capital. The impact is different, however, if a utility has agreed to a low rate because investors recognize that the utility, not the regulator, is responsible for the unattractive rate of return.

Sierra used “public interest” as shorthand for the interest of consumers in paying “the lowest possible reasonable rate consistent with the maintenance of adequate service in the public interest.” Permian Basin, 390 U.S., at 793 (quoting Atlantic Refining Co. v. Public Serv. Comm’n of N.Y., 360 U.S. 378, 388 (1959)). Whereas high rates directly implicate this interest, low rates do so only indirectly, such as when the rate is so low that it “might impair the financial ability of the public utility to continue its service, cast upon other consumers an excessive burden, or be unduly discriminatory.” Sierra, 350 U.S., at 355. Nothing in Sierra purports to mandate a “serious harm” standard of review, or to require any assumption that high rates and low rates impose symmetric burdens on the public interest. ***

III

Lacking any grounding in the FPA or precedent, the Court concludes, as a matter of policy, that the Mobile-Sierra presumption is necessary to ensure stability in volatile energy markets and to reduce regulatory costs. Of course, “the desirability of fostering market-stabilizing long-term contracts,” ante, plays into the public interest insofar as the “Commission’s responsibilities include the protection of future, as well as present, consumer interests,” Permian Basin, 390 U.S., at 798. But under the FPA, Congress has charged FERC, not the courts, with balancing the short-term and long-term interests of consumers.

Moreover, not even FERC has the authority to endorse the rule announced by the Court today. The FPA does not indulge, much less require, a “practically insurmountable” presumption, see Papago Tribal Util. Auth. v. FERC, 723 F.2d 950, 954 (C.A.D.C. 1983) (opinion for the court by Scalia, J.), that all rates set by contract comport with the public interest and are therefore just and reasonable. Congress enacted the FPA precisely because it concluded that regulation was necessary to protect consumers from deficient markets. It follows, then, that “the Commission lacks the authority to place exclusive reliance on market prices.” Texaco, 417 U.S., at 400. For this reason, we have already rejected the policy rationale proferred by the Court today:

“It may be, as some economists have persuasively argued, that the assumptions of the 1930’s about the competitive structure of the natural gas industry, if true then, are no longer true today. It may also be that control of prices in this industry, in a
time of shortage, if such there be, is counterproductive to the interests of the consumer in increasing the production of natural gas. It is not the Court's role, however, to overturn congressional assumptions embedded into the framework of regulation established by the Act. This is a proper task for the Legislature where the public interest may be considered from the multifaceted points of view of the representational process.” *Id.*, at 400 (footnote omitted).

Balancing the short-term and long-term interests of consumers entails difficult judgment calls, and to the extent FERC actually engages in this balancing, its reasoned determination is entitled to deference. But FERC cannot abdicate its statutory responsibility to ensure just and reasonable rates through the expedient of a heavy-handed presumption. This is not to say that the Commission should abrogate any contract that increases rates, but to underscore that the agency is “obliged at each step of its regulatory process to assess the requirements of the broad public interests entrusted to its protection by Congress.” *Permian Basin*, 390 U.S., at 791.

IV

Even if, as the Court holds today, the “Mobile-Sierra presumption” is merely a “differing application” of the statutory just-and-reasonable standard, FERC’s orders must be set aside because they were not decided on this basis.

The FERC orders repeatedly aver that the agency is applying a “public interest” standard different from and distinctly more demanding than the statutory standard. Indeed, the Commission’s misunderstanding of our cases is so egregious that the sellers, concerned that the orders would be overturned, asked the Commission for “clarification that the public interest standard of review does not authorize unjust and unreasonable rates.” App. 1506a, 1567a. FERC clarified as follows:

“[I]f rates ... become unjust and unreasonable and the contract at issue is subject to the Mobile-Sierra standard of review, the Commission under court precedent may not change the contract simply because it is no longer just and reasonable. If parties’ market-based rate contracts provide for the public interest standard of review, the Commission is bound to a higher burden to support modification of such contracts.” *Id.*, at 1506a, 1567a.

Whereas in *Texaco* we faulted the Commission for failing to “expressly mention the just-and-reasonable standard,” 417 U.S., at 396, in these cases FERC refused outright to apply that standard.

In addition to misrepresenting FERC’s understanding of the *Mobile-Sierra* doctrine as a presumption rather than a separate standard, the Court overstates the extent to which FERC considered the lawfulness of the rates. The Court recognizes, as it must, that the three factors identified in *Sierra* are neither exclusive nor “precisely applicable to the high-rate challenge of a purchaser.” Although FERC applied what it termed the “*Sierra* Three-Prong Test,” App. 1276a, the Court contends the agency did not err because it also evaluated the “‘totality of the circumstances,’”. But FERC’s totality-of-the-circumstances review was infected by its misapprehension of the standard “dictated by the U.S. Supreme Court under the *Mobile-Sierra* doctrine.” App. 1229a.

Whereas the focus of §§ 205(a) and 206(a) is on the reasonableness of the rates charged, not the conduct of the contracting parties, FERC restricted its review to the contracting parties’ behavior around the time of formation. FERC seems to have thought it was powerless to conduct just-and-reasonable review unless the contract
was already subject to abrogation based on contract defenses such as fraud or duress. By including contracts within the scope of § 206(a), however, Congress must have concluded that contract defenses are insufficient to protect the public interest. Indeed, nothing in the FPA or this Court’s cases precludes FERC from considering circumstances exogenous to contract negotiations, including natural disasters and market manipulation by entities not parties to the challenged contract. FERC’s error is obvious from the face of the orders, which repeatedly state the Commission’s belief that it could not consider evidence relevant to the reasonableness of the contract rates. ***

V

The decision of the Court of Appeals for the Ninth Circuit deserves praise for its efforts to bring the freewheeling Mobile-Sierra doctrine back in line with the FPA and this Court’s cases. I cannot endorse the opinion in its entirety, however, because it verges into the same sort of improper policymaking that I have criticized in the Court’s opinion. Both decisions would hobble the Commission, albeit from different sides. Congress has not authorized courts to prescribe energy policy by imposing presumptions or prerequisites, or by making marginal cost the sole concern or no concern at all. I would therefore vacate and remand the cases in order to give the Commission an opportunity to evaluate the contract rates in light of a proper understanding of its discretion.

I respectfully dissent.
Midwest ISO Transmission Owners v. Federal Energy Regulatory Commission

373 F.3d 1361 (D.C. Cir. 2004)

ROBERTS, Circuit Judge:

1. In the bad old days, utilities were vertically integrated monopolies; electricity generation, transmission, and distribution for a particular geographic area were generally provided by and under the control of a single regulated utility. Sales of those services were “bundled,” meaning consumers paid a single price for generation, transmission, and distribution. As the Supreme Court observed, with blithe understatement, “[c]ompetition among utilities was not prevalent.” New York v. FERC, 535 U.S. 1, 5 (2002).

In its pathmarking Order No. 888, FERC required utilities that owned transmission facilities to guarantee all market participants non-discriminatory access to those facilities. See Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities, FERC Stats. & Regs. ¶ 31,036, 31,635-36 (1996) (Order No. 888). That is, FERC required all transmission-owning utilities to provide transmission service for electricity generated by others on the same basis that they provided transmission service for the electricity they themselves generated. To effectuate this introduction of competition, FERC required public utilities to “functionally unbundle” their wholesale generation and transmission services by stating separate rates for each service in a single tariff and offering transmission service under that tariff on an open-access, non-discriminatory basis. See New York, 535 U.S. at 11, 122; see generally California Indep. Sys. Operator Corp. v. FERC, 372 F.3d 395, 397 (D.C. Cir. 2004).

As the next step toward the goal of a more competitive electricity marketplace, Order No. 888 encouraged—but did not require—the development of multi-utility regional transmission organizations (RTOs). The concern was that the segmentation of the transmission grid among different utilities, even if each had functionally unbundled transmission, contributed to inefficiencies that impeded free competition in the market for electric power. Combining the different segments and placing control of the grid in one entity—an RTO—was expected to overcome these inefficiencies and promote competition. Order No. 888 at 31,730-32; see also Public Util. Dist. No. 1 of Snohomish County v. FERC, 272 F.3d 607, 610-11 (D.C. Cir. 2001). Better still if the RTO were run by an independent system operator—an ISO. As envisioned by FERC, an ISO would assume operational control—but not ownership—of the transmission facilities owned by its member utilities, thereby “separat[ing] operation of the transmission grid and access to it from economic interests in generation.” Order No. 888 at 31,654; see also id. at 31,730-32. The ISO would then provide open access to the regional transmission system to all electricity generators at rates established in “a single, unbundled, grid-wide tariff that applies to all eligible users in a non-discriminatory manner.” Id. at 31,731; see also California Indep. Sys. Operator Corp., at 397. FERC called this type of separation of generation and transmission “operational unbundling,” a step beyond “functional unbundling.” Order No. 888 at 31,654. Although several parties to the 1996 rulemaking had requested that FERC require “operational unbundling” or even divestiture of transmission assets, it was FERC’s considered judgment that “the less intrusive functional unbundling approach ... is all that we must require at this time.” Id. at 31,655.
By 1999, FERC had come to a less sanguine view of the curative powers of functional unbundling. In FERC’s view, inefficiencies in the transmission grid and lingering opportunities for transmission owners to discriminate in their own favor remained obstacles to robust competition in the wholesale electricity market. FERC concluded that these problems could be remedied through the establishment of RTOs, explaining that “better regional coordination in areas such as maintenance of transmission and generation systems and transmission planning and operation” was necessary to address regional reliability concerns and to foster regional competition. See Regional Transmission Organizations, Order No. 2000, FERC Stats. & Regs. ¶ 31,089, 30,999 (1999) (Order No. 2000) (codified at 18 C.F.R. § 35.34) (citing Staff Report to FERC on the Causes of Wholesale Electric Pricing Abnormalities in the Midwest During June 1998, at 5-8 (Sept. 22, 1998)). FERC concluded that RTOs would: “(1) improve efficiencies in transmission grid management; (2) impose grid reliability; (3) remove remaining opportunities for discriminatory transmission practices; (4) improve market performance; and (5) facilitate lighter handed regulation.” Order No. 2000 at 30,993; Public Util. Dist. No. 1, 272 F.3d at 611. To further encourage RTO development, FERC directed transmission-owning utilities either to participate in an RTO or to explain their refusal to do so. Public Util. Dist. No. 1, 272 F.3d at 612. Importantly, though, Order No. 2000 still did not require utilities to join RTOs; participation remained voluntary. See id. at 616.

For those utilities opting to join an RTO, Order No. 2000 retained a flexible approach, allowing the RTOs to employ a variety of ownership and operational structures, so long as the RTO established that it had certain required characteristics and functional capabilities. Id. at 611. FERC required, inter alia, that an RTO be regional in scope, 18 C.F.R. § 35.34(j)(2); “have operational authority for all transmission facilities under its control,” id. § 35.34(j)(3); “be the only provider of transmission service over the facilities under its control,” id. § 35.34(k)(1)(i); and “have the sole authority to receive, evaluate, and approve or deny all requests for transmission service,” id. Thus, whatever its structure, once a utility made the decision to surrender operational control of its transmission facilities to an RTO, any transmissions across those facilities were subject to the control of that RTO.

2. In January 1998 (more than a year before Order No. 2000), several transmission-owning utilities in the Midwest sought FERC’s approval for the transfer of operational control of their transmission facilities to an ISO known as Midwest ISO (MISO), which would be organized as a non-profit, non-stock corporation. See Midwest Indep. Transmission Sys. Operator, Inc., 84 FERC ¶ 61,231, 62,138-39 (1998) (MISO Initial Approval). MISO would link up the transmission lines of the member transmission-owning utilities (MISO Owners) into a single interconnected grid stretching across the northern border of the U.S. from Michigan to eastern Montana, and reaching as far south as Kansas City, Missouri and Louisville, Kentucky. Under the MISO proposal, the MISO Owners would retain ownership of and physically operate and maintain their transmission facilities, subject to MISO’s instructions. MISO would have functional control of the transmission system, with responsibility for calculating available transmission capability; receiving, approving, and scheduling transmission service requests; and providing or arranging for ancillary services under the tariff. MISO would also serve as the system security coordinator for the MISO Owners.

The MISO Owners concurrently applied for approval of MISO’s open access transmission tariff. See id. at 62,166. Under the tariff, all customers would pay a single rate
to use the entire MISO transmission system, based on the volume of power the customer carried on the system. The MISO Owners did not, however, propose to bring all of their own transmission loads immediately under that new open access tariff. Several of the MISO Owners were required to provide bundled retail service (generation and transmission) to consumers at rates frozen by state legislation, state regulatory agencies, or legal settlements. The MISO Owners proposed that such bundled retail loads be brought under the MISO tariff at the end of a six-year transition period, unless the state regulatory authorities unbundled those loads sooner. See id. at 62,167. Also, some MISO Owners had pre-existing bilateral agreements with other utilities to provide wholesale transmission service at fixed rates. The MISO Owners proposed that loads under such grandfathered agreements also remain outside of the tariff until the end of the transition period. Thus, only new wholesale and unbundled retail transmission loads would be immediately subject to the MISO tariff.

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Illinois Commerce Commission v. Federal Energy Regulatory Commission

721 F.3d 764 (7th Cir. 2013)

POSNER, Circuit Judge: Control of more than half the nation’s electrical grid is divided among seven Regional Transmission Organizations, as shown in Figure 1. These are voluntary associations of utilities that own electrical transmission lines interconnected to form a regional grid and that agree to delegate operational control of the grid to the association. See 18 C.F.R. § 35.34(j), (k)(1); Midwest ISO Transmission Owners v. FERC, 373 F.3d 1361, 1363-65 (D.C. Cir. 2004). Power plants that do not own any part of the grid but generate electricity transmitted by it are also members of these associations, as are other electrical companies involved in one way or another with the regional grid.

FIGURE 1

REGIONAL TRANSMISSION ORGANIZATIONS
The RTOs play a key role in the effort by the Federal Energy Regulatory Commission “to promote competition in those areas of the industry amenable to competition, such as the segment that generates electric power, while ensuring that the segment of the industry characterized by natural monopoly—namely, the transmission grid that conveys the generated electricity—cannot exert monopolistic influence over other areas.... To further pry open the wholesale-electricity market and to reduce technical inefficiencies caused when different utilities operate different portions of the grid independently, the Commission has encouraged transmission providers to establish ‘Regional Transmission Organizations’—entities to which transmission providers would transfer operational control of their facilities for the purpose of efficient coordination ... [and] has encouraged the management of those entities by ‘Independent System Operators,’ not-for-profit entities that operate transmission facilities in a nondiscriminatory manner.” Morgan Stanley Capital Group, Inc. v. Public Utility District No. 1, 554 U.S. 527, 536-37 (2008).

Two Regional Transmission Organizations are involved in this case—Midwest Independent Transmission System Operator, Inc. (MISO) and PJM Interconnection, LLC (PJM). As shown in Figure 1, MISO operates in the midwest and in the Great Plains states while PJM operates in the mid-Atlantic region but has midwestern enclaves in and surrounding Chicago and in southwestern Michigan.

Each RTO is responsible for planning and directing expansions and upgrades of its grid. It finances these activities by adding a fee to the price of wholesale electricity transmitted on the grid. 18 C.F.R. § 35.34(k)(1), (7). The Federal Power Act requires that the fee be “just and reasonable,” 16 U.S.C. § 824d(a), and therefore at least roughly proportionate to the anticipated benefits to a utility of being able to use the grid. Illinois Commerce Commission v. FERC, 576 F.3d 470, 476 (7th Cir. 2009); Pacific Gas & Electric Co. v. FERC, 373 F.3d 1315, 1320-21 (D.C. Cir. 2004). Thus “all approved rates [must] reflect to some degree the costs actually caused by the customer who must pay them.”
K N Energy, Inc. v. FERC, 968 F.2d 1295, 1300 (D.C. Cir. 1992). Courts “evaluate compliance [with this principle, which is called ‘cost causation’] by comparing the costs assessed against a party to the burdens imposed or benefits drawn by that party.” Midwest ISO Transmission Owners v. FERC, supra, 373 F.3d at 1368.

MISO began operating in 2002 and soon grew to have 130 members. (Unfortunately, the voluminous briefs say little about the association’s governance structure.) In 2010 it sought FERC’s approval to impose a tariff on its members to fund the construction of new high-voltage power lines that it calls “multi-value projects” (MVPs), beginning with 16 pilot projects. The tariff is mainly intended to finance the construction of transmission lines for electricity generated by remote wind farms. Every state in MISO’s region except Kentucky (which is barely in the region, see Figure 1) encourages or even requires utilities to obtain a specified percentage of their electricity supply from renewable sources, mainly wind farms. Indiana, North Dakota, and South Dakota have aspirational goals; the rest have mandates. The details vary but most of the states expect or require utilities to obtain between 10 and 25 percent of their electricity needs from renewable sources by 2025—and by then there may be federal renewable energy requirements as well.

“The dirty secret of clean energy is that while generating it is getting easier, moving it to market is not.... Achieving [a 20% renewable energy quota] would require moving large amounts of power over long distances, from the windy, lightly populated plains in the middle of the country to the coasts where many people live... The grid’s limitations are putting a damper on such projects already.” Matthew L. Wald, “Wind Energy Bumps into Power Grid’s Limits,” New York Times, Aug. 27, 2008, p. A1. MISO aims to overcome these limitations.

To begin with, it has identified what it believes to be the best sites in its region for wind farms that will meet the region’s demand for wind power. They are the shaded ovals in Figure 2. Most are in the Great Plains, because electricity produced by wind farms there is cheaper despite the longer transmission distance; the wind flow is stronger and steadier and land is cheaper because population density is low (wind farms require significant amounts of land).

FIGURE 2

WIND DEVELOPMENT ZONES AND MVP PROJECTS (dashed lines are initial proposals, solid lines approved projects)
MISO has estimated that the cost of the transmission lines necessary both to bring electricity to its urban centers from the Great Plains and to integrate the existing wind farms elsewhere in its region with transmission lines from the Great Plains—transmission lines that the multi-value projects will create—will be more than offset by the lower cost of electricity produced by western wind farms. The new transmission lines will also increase the reliability of the electricity supply in the MISO region and thus reduce brownouts and outages, and also increase the efficiency with which electricity is distributed throughout the region.

The cost of the multi-value projects is to be allocated among utilities drawing power from MISO’s grid in proportion to each utility’s share of the region’s total wholesale consumption of electricity. Before 2010, MISO allocated the cost of expanding or upgrading the transmission grid to the utilities nearest a proposed transmission line, on the theory that they would benefit the most from the new line. But wind farms in the Great Plains can generate far more power than that sparsely populated region needs. So MISO decided to allocate MVP costs among all utilities drawing power from the grid according to the amount of electrical energy used, thus placing most of those costs on urban centers, where demand for energy is greatest.

FERC approved (with a few exceptions, one discussed later in this opinion) MISO’s rate design and pilot projects in two orders (for simplicity we’ll pretend they’re just one), precipitating the petitions for review that we have consolidated.

Six issues are presented: the proportionality of benefits to costs; the procedural adequacy of the Commission’s treatment of proportionality; the propriety of apportioning the cost of the multi-value projects among utilities on the basis of their total power consumption while allocating no MVP costs to the plants that generate the power; whether MISO should be permitted to add the MVP fee to electricity transmitted to utilities that belong to the PJM Regional Transmission Organization rather than to MISO; whether MISO should be permitted to assess some of the multi-value projects’
costs on departing members of MISO; and whether the Commission’s approval of the MVP tariff—which if implemented will influence decisions by state utility commissions regarding the siting of transmission lines—violates the Tenth Amendment to the Constitution by invading state prerogatives.

The Tenth Amendment. The last issue is frivolous, so we dispatch it first. FERC approved the MVP tariff pursuant to its statutory authority to regulate interstate electrical rates, 16 U.S.C. § 824(a), but (unlike the regulation of natural gas, a field in which FERC has jurisdiction both over pricing and over the siting of interstate lines, see 15 U.S.C. § 717f(c)) the states retain authority over the location and construction of electrical transmission lines. 16 U.S.C. § 824(b)(1); New York v. FERC, 535 U.S. 1, 24 (2002). Some of the petitioners complain that FERC’s approval of the MVP tariff coerces each state to approve all MVPs proposed within its territory. They argue that since the costs of each project are distributed among all MISO utilities while any local benefits will be retained in the state in which the project is located, a state will deprive itself of the local benefits of a project subsidized by other utilities if it refuses to approve an MVP project.

But this is just to say that the tariff provides a carrot that states won’t be able to resist eating; to obtain the benefits of the MVP program each state’s MISO members may have to shoulder costs of some specific projects that they’d prefer not to support. But that’s a far cry from the federal government’s conscripting a state government into federal service. That it may not do. National Federation of Independent Business v. Sebelius, ___ U.S. ___ (2012); New York v. United States, 505 U.S. 144, 149 (1992); Printz v. United States, 521 U.S. 898, 935 (1997). This it may do. Cf. National Ass’n of Regulatory Utility Commissioners v. FERC, 475 F.3d 1277, 1282-83 (D.C. Cir. 2007). It’s not as if FERC were ordering states to build transmission lines that the federal government wants to use for its own purposes. And to glance ahead a bit, there is nothing to prevent a member of MISO from withdrawing from the association and joining another Regional Transmission Organization.

Five issues remain; we discuss them in the order in which we listed them, beginning with—

Proportionality and Procedure (best discussed together). MISO used to allocate the cost of an upgrade to its grid to the local area (“pricing zone”) in which the upgrade was located. (There are 24 pricing zones in MISO.) But those were upgrades to low-voltage lines, which transmit power short distances and thus benefit only the local area served by the lines. MISO contends (and FERC agrees) that the multi-value projects, which involve high-voltage lines that transmit electricity over long distances, will benefit all members of MISO and so the projects’ costs should be shared among all members.

The petitioners’ objections fall into two groups. One consists of objections lodged by the Michigan utilities and their regulator (we’ll call this set of objectors “Michigan”), the other of objections by other petitioners led by the Illinois Commerce Commission. We’ll call these objectors “Illinois,” though they include other state utilities and regulators; and we’ll begin with their objections.

Illinois contends that the criteria for determining what projects are eligible to be treated as MVPs are too loose and as a result all MISO members will be forced to contribute to the cost of projects that benefit only a few. To qualify as an MVP a project must have an expected cost of at least $20 million, must consist of high-voltage
transmission lines (at least 100kV), and must help MISO members meet state renewable energy requirements, fix reliability problems, or provide economic benefits in multiple pricing zones. None of these eligibility criteria ensures that every utility in MISO’s vast region will benefit from every MVP project, let alone in exact proportion to its share of the MVP tariff. For example, Illinois power cooperatives are exempt from the state’s renewable energy requirements, 83 Ill. Adm.Code 455.100; 20 ILCS 3855/1-75(c), and so would not benefit from MVPs that help utilities meet state renewable energy requirements. But FERC expects them to benefit by virtue of the criteria for MVP projects relating to reliability and to the provision of benefits across pricing zones.

Bear in mind that every multi-value project is to be large, is to consist of high-voltage transmission (enabling power to be transmitted efficiently across pricing zones), and is to help utilities satisfy renewable energy requirements, improve reliability (which benefits the entire regional grid by reducing the likelihood of brownouts or outages, which could occur anywhere on it, Illinois Commerce Commission v. FERC, supra, 576 F.3d at 477), facilitate power flow to currently underserved areas in the MISO region, or attain several of these goals at once. The 16 projects that have been authorized are just the beginning. And FERC has required MISO to provide annual updates on the status of those projects. Should the reports show that the benefits anticipated by MISO and FERC are not being realized, the Commission can modify or rescind its approval of the MVP tariff.

Illinois also complains that MISO has failed to show that the multi-value projects as a whole will confer benefits greater than their costs, and it complains too about FERC’s failure to determine the costs and benefits of the projects subregion by subregion and utility by utility. But Illinois’s briefs offer no estimates of costs and benefits either, whether for the MISO region as a whole or for particular subregions or particular utilities. And in complaining that MISO and the Commission failed to calculate the full financial incidence of the MVP tariff, Illinois ignores the limitations on calculability that the uncertainty of the future imposes. MISO did estimate that there would be cost savings of some $297 million to $423 million annually because western wind power is cheaper than power from existing sources, and that these savings would be “spread almost evenly across all Midwest ISO Planning Regions.” Midwest Independent Transmission System Operator, Inc., 133 FERC 61221, ¶ 34 (2010). It also estimated that the projected high-voltage lines would reduce losses of electricity in transmission by $68 to $104 million, and save another $217 to $271 million by reducing “reserve margin losses.” Id. That term refers to electricity generated in excess of demand and therefore (because it can’t be stored) wasted. Fewer plants will have to be kept running in reserve to meet unexpected spikes in demand if by virtue of longer transmission lines electricity can be sent from elsewhere to meet those unexpected spikes. It’s impossible to allocate these cost savings with any precision across MISO members.

The promotion of wind power by the MVP program deserves emphasis. Already wind power accounts for 3.5 percent of the nation’s electricity, U.S. Energy Information Administration, “What is U.S. Electricity Generation by Source?” May 9, 2013, www.eia.gov/tools/faqs/faq.cfm?id=427&t=3 (visited May 29, 2013), and it is expected to continue growing despite the downsides of wind power that we summarized in Muscarello v. Winnebago County Board, 702 F.3d 909, 910-11 (7th Cir. 2012). The use of wind power in lieu of power generated by burning fossil fuels reduces both the
nation’s dependence on foreign oil and emissions of carbon dioxide. And its cost is falling as technology improves. No one can know how fast wind power will grow. But the best guess is that it will grow fast and confer substantial benefits on the region served by MISO by replacing more expensive local wind power, and power plants that burn oil or coal, with western wind power. There is no reason to think these benefits will be denied to particular subregions of MISO. Other benefits of MVPs, such as increasing the reliability of the grid, also can’t be calculated in advance, especially on a subregional basis, yet are real and will benefit utilities and consumers in all of MISO’s subregions.

It’s not enough for Illinois to point out that MISO’s and FERC’s attempt to match the costs and the benefits of the MVP program is crude; if crude is all that is possible, it will have to suffice. As we explained in Illinois Commerce Commission v. FERC, supra, 576 F.3d at 477, if FERC “cannot quantify the benefits [to particular utilities or a particular utility]... but it has an articulable and plausible reason to believe that the benefits are at least roughly commensurate with those utilities’ share of total electricity sales in [the] region, then fine; the Commission can approve [the pricing scheme proposed by the Regional Transmission Organization for that region] ... on that basis. For that matter it can presume [as it did in this case] that new transmission lines benefit the entire network by reducing the likelihood or severity of outages.”

Illinois can’t counter FERC without presenting evidence of imbalance of costs and benefits, which it hasn’t done. When we pointed this out at oral argument, Illinois’s lawyer responded that he could not obtain the necessary evidence without pretrial discovery and that FERC had refused to grant his request for an evidentiary hearing even though the Commission’s rules make the grant of such a hearing a precondition to discovery. 18 C.F.R. § 385.504(b)(5). FERC refused because it already had voluminous evidentiary materials, including MISO’s elaborate quantifications of costs and benefits—and these were materials to which the petitioners had access as well; they are, after all, members of MISO. The only information MISO held back was the production costs of particular power plants, which it deemed trade secrets and anyway are only tenuously related to the issue of proportionality. The need for discovery has not been shown; and for us to order it without a compelling reason two and a half years after the Commission rendered its exhaustive decision (almost 400 pages long) would create unconscionable regulatory delay.

Michigan (which is to say Michigan utilities plus the state’s electric power regulatory agency) argues that unique features of the state’s power system will cause Michigan utilities to pay a share of the MVP tariff greatly disproportionate to the benefits they will derive from the multi-value projects. A Michigan statute, Mich. Comp. L. 460.1029(1), forbids Michigan utilities to count renewable energy generated outside the state toward satisfying the requirement in the state’s “Clean, Renewable, and Efficient Energy Act” of 2008 that they obtain at least 10 percent of their electrical power needs from renewable sources by 2015. Michigan further argues that it won’t benefit from any multi-value projects constructed in other states because its utilities draw very little power from the rest of the MISO grid, as a consequence of the limited capacity to transmit electricity from Indiana to Michigan. It argues that for these reasons it should be required to contribute only to the costs of multi-value projects built in Michigan.
The second argument founders on the fact that the construction of high-voltage lines from Indiana to Michigan is one of the multi-value projects and will enable more electricity to be transmitted to Michigan at lower cost. Michigan’s first argument—that its law forbids it to credit wind power from out of state against the state’s required use of renewable energy by its utilities—trips over an insurmountable constitutional objection. Michigan cannot, without violating the commerce clause of Article I of the Constitution, discriminate against out-of-state renewable energy. See Oregon Waste Systems, Inc. v. Department of Environmental Quality, 511 U.S. 93, 100–01 (1994); Wyoming v. Oklahoma, 502 U.S. 437, 454–55 (1992); Alliance for Clean Coal v. Miller, 44 F.3d 591, 595–96 (7th Cir.1995).

Like Illinois, Michigan objects to the Commission’s refusal to conduct an evidentiary hearing. It wants an opportunity to present evidence in a trial-type proceeding involving cross-examination of expert witnesses. (All direct testimony at FERC’s evidentiary hearings is presented in writing; only cross-examination is oral.) It also wants pretrial discovery, like Illinois. But unlike Illinois it didn’t raise the issue until its reply brief, which is too late.

FERC need not conduct an oral hearing if it can adequately resolve factual disputes on the basis of written submissions. Considering the highly technical character of the data and analysis required to match costs and benefits of transmission projects, the technical knowledge and experience of FERC’s members and staff, and the petitioners’ access to MISO’s studies, we would be creating gratuitous delay to insist at this late date on the Commission’s resorting to litigation procedures designed long ago for run-of-the-mine legal disputes. Michigan has failed to indicate what evidence that it might present in an evidentiary hearing would contribute to the data and analysis in the record already before the Commission.

A further answer to both the substantive and procedural questions about proportionality is that MISO members who think they’re being mistreated by the MVP tariff can vote with their feet. Membership in an RTO is voluntary and though there’s a “departure fee” (discussed later in this opinion), it is an unexceptionable feature of membership in a voluntary association, designed to prevent a departing member from reaping a windfall by leaving costs for which it is properly liable to be borne by the remaining members. A departure fee, which if properly calculated just deters windfalls, will not prevent a discontented MISO member from decamping to an adjacent RTO. As shown in the right-hand panel of Figure 3, Michigan abuts the border between MISO (light gray) and PJM (dark gray) and has claimed that 96.5 percent of its external grid connections are with PJM. It should therefore be able without great difficulty to quit MISO and join PJM. It doesn’t want to do that; so far as appears, it is objecting to the MVP program only in the hope of getting better terms.
Allocation of cost on the basis of peak load versus total electricity consumption. Because a power grid must be built to handle peak loads (the amount of electricity transmitted when demand is greatest, as on hot summer days), some of the petitioners argue that the MVP surcharge should be allocated according to each utility’s contribution to peak demand. The peak demanders would be paying for facilities built to accommodate that demand and thus minimize brownouts and outages. Instead MISO allocates the surcharge by the total amount of electricity that each utility receives over the MISO grid. A higher share of MVP costs is thus allocated to utilities receiving electricity to meet continuous demands, such as the demand by a factory for electricity much of which it uses in off-peak periods.

The objection to MISO’s allocating costs by total rather than peak demand is refuted by the fact that a primary goal of the MVPs is to increase the supply of wind-powered energy. The electricity generated by wind farms varies with the amount of wind rather than with demand and therefore is not a reliable source of energy to meet peak demand. That is why the states’ renewable energy standards are couched in terms of total energy rather than peak load. See, e.g., 20 ILCS 3855/1-75(c)(2); Wis. Stat. § 196.378(1)(fm); Minn.Stat. § 216B.1691 subd. 2a(a). Furthermore, long-distance power transmission will enable fewer power plants to serve the grid’s off-peak demand. True, the projects are also intended to increase the grid’s reliability, which is challenged mainly by peak load (which is why outages are more frequent on hot summer days, when everyone is running his air conditioner at the same time). But MISO and FERC were entitled to conclude that the benefits of more and cheaper wind power predominate over the benefits of greater reliability brought about by improvement in meeting peak demand.

Allocation of cost between power plants and the wholesale buyers of the power. Petitioners complain about MISO’s decision to allocate all MVP costs to the utilities that buy electricity from its grid and none to the power plants that generate that electricity. Because the power plants are required to pay for connecting to the grid and the multivalue projects will shorten the interconnection distance and thus reduce the cost to the power plants
of connecting, the petitioners argue that the power plants should pay part of the MVP tariff. But the utilities benefit from cheaper power generated by efficiently sited wind farms whose development the multi-value projects will stimulate. The MVP tariff allocates to the wholesale buyers some of the costs of conferring these benefits on those buyers, though competition might do the same thing without the tariff because the power plants would pass some of their higher costs on to their customers, the wholesale buyers.

An important consideration is that when wind farms are built in remote areas (which are the best places to site them), the costs of connecting them to the grid are very high, and by reducing those costs the multi-value projects, financed by the MVP tariff, facilitate siting wind farms at the best locations in MISO’s region rather than at inefficient ones that are however closer to the existing grid and so would be preferred by the wind-farm developers if they had to pay for the connection. See California Independent System Operator Corp., 119 F.E.R.C. 61061, ¶¶ 64-67 (2007); Southwest Power Pool, Inc., 127 FERC 61283, ¶¶ 5, 11, 28 (2009).

Export charges to PJM. An issue that unlike the previous ones finds MISO and FERC at loggerheads is whether the Commission is unreasonable in prohibiting MISO from adding the MVP surcharge to electricity transmitted from its grid to the grid of PJM, an adjoining Regional Transmission Organization. The Commission permits MISO to charge for transmission to other RTOs.

The prohibition arises from a concern with what in FERC-speak is called “rate pancaking” but is more transparently described as exploiting a locational monopoly by charging a toll. It is illustrated by Henrich von Kleist’s classic German novella Michael Kohlhaas. When the book was published in 1810, what is now Germany was divided into hundreds of independent states. A road from Munich to Berlin, say, would cross many boundaries, and each state that the road entered could charge a toll as a condition for allowing entry. The toll would be limited not by the cost imposed on the state by the traveler, in wear and tear on the road or traffic congestion, but by the cost to the traveler of using a less direct alternative route. Like early nineteenth-century Germany, the American electric grid used to be divided among hundreds of independent utilities, each charging a separate toll for the right to send electricity over its portion of the grid. The multiple charges imposed on long-distance transmission discouraged such transmission. FERC promoted the creation of the Regional Transmission Organizations as a way of eliminating these locational monopolies. Wabash Valley Power Ass’n v. FERC, 268 F.3d 1105, 1116 (D.C. Cir. 2001). For it required that the RTOs embrace coherent geographic regions and that each RTO charge a single fee for use of its entire grid. 18 C.F.R. § 35.34(j)(2), (b)(1)(ii).

In the early 2000s Commonwealth Edison and American Electric Power had requested FERC’s permission to join PJM despite being inside MISO’s region (around Chicago and in southwestern Michigan, respectively). The Commission approved their requests yet was concerned that the irregular border (seen in the left-hand panel of Figure 3) between the two regions, by creating PJM enclaves in MISO’s region, violated the requirement that RTOs embrace coherent regions. The Commission was concerned for example with Michigan utilities’ having to pay PJM charges on power sent from elsewhere in MISO (such as Wisconsin), because those transmissions, though beginning and ending in MISO territory, traversed a PJM enclave—the area served by Commonwealth Edison.
The Commission had another concern with the irregular border, what we’ll call the “power routing” concern. Notice in the left-hand panel of Figure 3 the MISO utilities that lie (or rather lay, as of 2004) on a south to north diagonal in Kentucky and Ohio. Imagine a wholesale buyer of electricity located on the diagonal. It would be more efficient for it to draw electricity from the PJM transmission lines to its immediate west or east than from the MISO lines that snake to the northeast and thus bring electricity from a great distance. But the buyer might be deflected from the most efficient routing option because buying from PJM would cross both MISO and PJM territory and thus require paying a double toll.

So in 2003 FERC forbade export charges between MISO and PJM and ordered the two RTOs to negotiate a joint rate that would divide the costs of the cross-border transmissions between them, much as with “divisions” of railroad rates for shipments in which more than one railroad participates. The Commission didn’t require a similar negotiation between MISO and the other RTOs that MISO abuts because no enclave or power-routing problem was created by transmission to those RTOs; there were no enclaves or highly irregular borders.

The two RTOs negotiated a joint rate designed to share the costs of some transmission upgrades with crossborder benefits—but have not negotiated a joint rate for multi-value projects. MISO argues that the Commission should have reconsidered its 2003 prohibition of export charges to PJM and permitted such charges for multi-value projects that benefit electricity customers in PJM, in light of the changes (seen in the right-hand panel of Figure 3) in the MISO-PJM border between 2003-2004 and 2013. Those changes have straightened out the border and by doing so should have lessened the Commission’s concern that “the elongated and highly irregular seam between MISO and PJM....would subject a large number of transactions in the region to continued rate pancaking.” Midwest Independent Transmission System Operator, Inc., 137 FERC 61074, ¶ 264 (2011). No longer are any parts of Ohio in MISO. True, there still are PJM enclaves. For example, a transmission from a PJM enclave in northern Illinois or southwestern Michigan to Ohio or Pennsylvania runs through MISO lines in Indiana. But with the disappearance of the MISO diagonal that we mentioned, the power-routing problem, at least, appears to have been solved, though FERC wants more data from MISO to demonstrate this.

A further concern about the continued validity of the 2003 order prohibiting tolls on transmissions between MISO and PJM is that the order was issued at a time when all of MISO’s transmission projects were local and therefore provided only local benefits, so that an export charge would have shifted costs to PJM utilities that derived few or even no benefits from the projects. A related consideration behind the 2003 order was that export charges would not finance projects, but would merely operate as a toll exploiting a locational advantage. Cf. Illinois Commerce Commission v. FERC, supra, 576 F.3d at 473-74. The multi-value projects are new projects, not yet paid for, and since they will benefit electricity users in PJM, those users should contribute to the costs.

The MVPs also are not local. They will “support all uses of the system, including transmission on the system that is ultimately used to deliver to an external load,” and “benefit all users of the integrated transmission system, regardless of whether the ultimate point of delivery is to an internal or external load.” Midwest Independent Transmission System Operator, Inc., 133 FERC 61221, ¶ 439 (2010). (By “external” read PJM or any
other recipient of electricity that is outside MISO.) That is an argument for shifting some of the costs of the system to PJM utilities. The requirement of proportionality between costs and benefits requires that all beneficiaries—which the Commission has determined include all users of the MISO grid, including users in PJM—shoulder a reasonable portion of MVP costs.

MISO and PJM may eventually negotiate an allocation agreement, as they did in the pre-MVP era, but the rest of the grid is left to pay for PJM’s share unless and until they do so. So far as we can tell, the Commission is being arbitrary in continuing to prohibit MISO from charging anything for exports of energy to PJM enabled by the multi-value projects while permitting it to charge for exports of energy to all the other RTOs. The Commission must determine in light of current conditions what if any limitation on export pricing to PJM by MISO is justified. This part of the Commission’s decision must therefore be vacated.

The departers. Two former members of MISO, FirstEnergy and Duke Energy, which lie on the diagonal that had created the power-routing problem, announced their intention to quit MISO before the MVP tariff was announced. MISO wants nevertheless to allocate some MVP costs to them. FERC has ruled that allocation to departing utilities is proper in principle. But it has not yet determined which if any costs may be allocated to the two utilities in particular. That determination FERC has ruled to be outside the scope of the present proceeding, the proceeding before us. Midwest Independent Transmission System Operator, Inc., 133 FERC 61221, ¶ 472 (2010). FirstEnergy and Duke respond that they can’t be made liable for any such costs because their membership contract with MISO does not provide for the imposition of such costs.

When a firm withdraws from an association owing money to it, its withdrawal does not terminate its liability; an example is an employer who withdraws from a multiemployer ERISA plan. The same may be true of withdrawal from a Regional Transmission Organization. If MISO began to incur costs relating to the MVPs (including the pilot projects) before the departing members announced their departure, those utilities may be liable for some of those costs. MISO contends that they are liable, but the Commission has reserved the question for a separate proceeding, see FirstEnergy Service Co. v. Midwest Independent Transmission System Operator, Inc., 138 FERC 61140, ¶ 74 (2012), as it is authorized to do. Mobil Oil Exploration & Producing Southeast Inc. v. United Distribution Cos., 498 U.S. 211, 230 (1991). That proceeding is pending.

The departing members’ attack on an order that amounts to a truism—that amounts to saying that if they’re liable they’re liable—is premature, and must therefore be dismissed for want of a final administrative decision on the matter.

In summary, the challenged orders are affirmed, except that the challenge by the departing MISO members is dismissed as premature and the determination regarding export pricing to PJM is remanded for further analysis by the Commission in light of the discussion of the issue in this opinion.
Ameren Services Co. v. Federal Energy Regulatory Commission

893 F.3d 786 (D.C. Cir. 2018)

Opinion for the Court filed by Circuit Judge Srinivasan. In 2011, the Federal Energy Regulatory Commission issued Order 1000, which aims, among other things, to encourage the development of “interregional” electricity transmission projects—projects spanning more than one geographic region. The interregional component of Order 1000 rested on the belief that certain interregional projects might meet the needs of transmission providers and customers more efficiently and effectively than regional projects, but that prevailing incentives and coordination mechanisms did not adequately encourage regional transmission providers to pursue interregional projects.

To that end, Order 1000 calls for regional providers to jointly evaluate interregional projects. As part of that process, providers must adopt cost-allocation methodologies for dividing up the costs of a joint project. The primary goal of Order 1000’s cost-allocation provisions is to assure that the relative costs borne by a particular transmission provider be commensurate with the relative benefits gained by the provider from the project.

This case concerns one transmission provider’s proposed interregional cost-allocation methodology. Midcontinent Independent System Operator (MISO), an organization that operates transmission facilities on behalf of providers across fifteen states in the Midwest, proposed to conduct cost allocation for interregional projects using what’s called a cost-avoidance method. The share of costs allocated to MISO under that method corresponds to the benefits to MISO of its regional projects that would be displaced by the interregional project. In identifying which regional projects should be regarded as displaced by an interregional project, MISO proposed to exclude any project that had already been approved by the MISO board.

The Commission rejected MISO’s cost-allocation approach. In the Commission’s view, excluding approved regional projects from the analysis would result in a failure to account for the full potential benefits of an interregional project. The transmission providers that make up MISO filed a petition for review in this court. We deny the petition.

I.

A.

Electric transmission in the United States is largely managed by regional transmission organizations (RTOs) and independent system operators (ISOs). Those entities operate the electric transmission systems for a geographic region on behalf of the local utilities (known as transmission providers) in a region. MISO operates transmission facilities in the midwestern United States on behalf of more than two dozen transmission providers, petitioners here.

For the past several decades, the Federal Energy Regulatory Commission, acting under its authority to fix just and reasonable rates under section 206 of the Federal Power Act has issued orders requiring RTOs and ISOs to adopt practices meant to encourage competition in the market for electricity. E.g., Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities, Order No. 1000, 136 FERC ¶ 61,051 at PP 1-5 (2011). Order 1000, among the most recent of those orders, requires ISOs and RTOs to consider and evaluate interregional projects—projects embracing more than one region—and set certain parameters for allocating the costs of those

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interregional projects among providers. *Id.* The Commission’s aim is to induce the construction of interregional projects “if such facilities address the needs of the transmission planning regions more efficiently or cost-effectively” than regional projects. *Id.* at 111.

Order 1000’s cost-allocation provisions seek to further that goal. Establishing both a mechanism and set of principles for cost allocation, Order 1000 calls for neighboring ISOs and RTOs to reach agreements on cost allocation for interregional projects that avoid free rider problems, that improve transparency with respect to the costs of interregional projects, and that otherwise align regional and interregional planning processes. The guiding principle behind Order 1000’s cost-allocation provisions is that the costs of interregional projects should be “allocated in a way that is roughly commensurate with benefits.” *Id.* at 178.

This court considered a petition for review raising a variety of challenges to Order 1000. *S.C. Pub. Serv. Authority v. FERC,* 762 F.3d 41 (D.C. Cir. 2014) (per curiam). The court sustained Order 1000 in all respects.

B.

MISO submitted filings to the Commission that purported to comply with Order 1000's interregional project coordination and cost-allocation provisions. The particular filing at issue in this case concerns the cost-allocation methodology MISO proposed to use with respect to one of its neighboring transmission planning regions, the Southeastern Regional Transmission Planning organization (SERTP).

MISO proposed to conduct cost allocation using a “cost-avoidance” method. Under that method, the costs allocated to MISO for a given interregional project would correspond to the costs of the regional projects MISO expects to avoid as a result of the interregional project—that is, the costs of the regional projects rendered unnecessary by the interregional project. Of central relevance here, MISO proposed to include in its cost calculation only those displaced projects that had been identified in the regional transmission plan but had yet to be approved. The costs of displaced projects already approved in the regional transmission plan would be excluded from the calculation.

The Commission accepted MISO’s compliance filing in part. The Commission concluded that the cost-avoidance method largely complied with Order 1000's cost-allocation provisions calling for the costs of an interregional project to be allocated in a manner roughly commensurate with the project’s benefits. As a general matter, the Commission said, the costs of regional projects that would be avoided by undertaking an interregional project should approximate the expected benefits of the interregional project.

The Commission ultimately rejected MISO’s proposed cost-allocation method, however, because it excluded from its calculation the costs of any displaced projects that had already been approved in MISO’s transmission plan. By excluding approved projects, the Commission determined, MISO’s methodology would undervalue the benefits of an interregional project. That undervaluation, the Commission found, would result in an improper allocation of costs: relative to its neighboring region (SERTP), MISO would bear a lesser share of costs than would be warranted based on the share of an interregional project’s benefits it would receive.
In addition, the Commission concluded, inclusion of approved regional projects in the cost-allocation analysis would make it more likely that MISO would pursue a beneficial interregional project—i.e., one that would displace less efficient and less cost-effective regional projects. That is because, if MISO counts an approved regional project for cost-allocation purposes, it also includes that project when assessing the benefits of an interregional project for purposes of deciding whether to undertake the project. The inclusion of an approved regional project for cost-allocation purposes thus ultimately makes it more likely that an interregional project will be pursued.

MISO filed a request for clarification and, in the alternative, rehearing. MISO argued that the Commission’s requirement to include approved regional projects in MISO’s cost-avoidance calculation could lead to the displacement of those approved projects: if, as just explained, the inclusion of approved regional projects increases the likelihood that an interregional project will be pursued, the selection of that project could occasion the displacement of approved regional projects that are rendered unnecessary. The possibility that already-approved regional projects could be displaced, MISO contended, creates uncertainty among transmission providers and harms investors and consumers.

The Commission denied MISO’s petition, reiterating its position that MISO’s cost-avoidance methodology failed to account for the full range of projects displaced by interregional projects, thus undervaluing the benefits of an interregional project. The Commission also noted that MISO’s cost-avoidance methodology lacked adequate transparency to comply with Order 1000 because MISO failed to explain what it meant for a project to be “identified,” but not approved, in its current regional transmission plan. Midcontinent Indep. Sys. Operator, Inc., 153 FERC ¶ 61,247 at P 10 (Nov. 25, 2015).

The transmission providers forming MISO filed a petition for review in this court, and MISO intervened in their support. The transmission providers making up SERTP intervened on the Commission’s side. Petitioners advance two principal arguments: first, that the Commission did not adequately respond to their contention that the mandated change in cost-allocation methodology would displace approved projects, causing harm to the providers and their customers; and second, that the Commission’s denial of MISO’s compliance filing did not comport with the Commission’s affirmative obligation under section 206 of the Federal Power Act, 16 U.S.C. § 824e, to justify its rates as just and reasonable. ***

III.

On the merits, petitioners argue that the Commission failed to give adequate consideration to their concerns about the effects of displacing approved regional projects. We disagree.

We set aside the Commission’s actions if they are “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” 5 U.S.C. § 706(2)(A). “An agency’s failure to respond meaningfully to objections raised by a party renders its decision arbitrary and capricious.” PPL Wallingford Energy LLC v. FERC, 419 F.3d 1194, 1198 (D.C. Cir. 2005) (internal quotation marks omitted). But if “FERC ‘has considered the relevant factors and articulated a rational connection between the facts found and the choice made,’ we will uphold its decision.” Aera Energy LLC v. FERC, 789 F.3d 184, 190 (D.C. Cir. 2015) (quoting Transcon. Gas Pipe Line Corp. v. FERC, 518 F.3d 916, 919 (D.C. Cir. 2008)). That is the case here.
Petitioners contend that the Commission failed to give adequate consideration to four concerns they had raised in their request for rehearing. We conclude that the Commission adequately addressed each of petitioners’ concerns.

First, petitioners argued generally that the Commission’s orders could require them to replace an already-approved regional project with a new interregional project. In response, the Commission acknowledged that possibility, noting that “displacing a selected regional transmission project with a more efficient or cost-effective interregional transmission solution” would not be “inconsistent with MISO’s regional transmission planning process.” *Midcontinent Indep. Sys. Operator, Inc.*, 153 FERC ¶ 61,247 at P 12.

Second, petitioners contended that the displacement of approved regional projects would harm certain stakeholders in various ways. For instance, developers might have already expended significant sums of money on approved projects that would be subject to displacement by a new interregional project. And on a prospective basis, developers might find it more difficult to gain access to financing for an approved project if it might be displaced. That could in turn have the effect of raising rates for consumers.

The Commission offered several responses. The Commission’s central response was that failing to account for approved regional projects that would be displaced by an interregional project would undervalue the benefits of the interregional project. The cost-avoidance method could approximate the benefits of an interregional project, the Commission explained, if it captured all the regional benefits gained by the ISO or RTO, including the efficiency and public-policy benefits of the interregional project. But it could capture all the regional benefits only if it included all regional projects that stood to be displaced by an interregional project. Indeed, the Commission noted, approved projects tend to be the most efficient and cost-effective projects. So by excluding them from the calculation of benefits of an interregional project, MISO would disregard the most beneficial projects. The result would be a significant undervaluation of the benefits of the interregional project.

Undervaluing the benefits, the Commission explained, would violate Order 1000’s core cost-allocation principle: that an interregional project’s costs be allocated in a manner “roughly commensurate” with the project’s benefits. *Midcontinent Indep. Sys. Operator, Inc.*, 153 FERC ¶ 61,247 at P 10. As a result, MISO would be allocated a smaller proportion of an interregional project’s costs, relative to its neighbor SERTP, than would be appropriate had the benefits been properly calculated. In addition, MISO would be less likely to pursue “more efficient or cost-effective” interregional projects. *Id.* As explained, undervaluation of an interregional project’s benefits for cost-allocation purposes would result in an under-appreciation of the project’s benefits for purposes of deciding whether to undertake the project.

In short, the Commission, while not disputing the possibility that the harms raised by petitioners could come to pass, determined that the interest in an appropriate allocation of the costs of an interregional project (and the resulting implications for undertaking interregional projects) required MISO to account for already-approved regional projects in its cost-allocation methodology. We see no basis for setting aside that determination by the Commission.

Third, petitioners argued in their request for rehearing that, “in the interests of certainty and fairness to potential [project] bidders,” there “must be some point at which
the comparisons of different regional and interregional projects concludes.” J.A. 277. In petitioners’ view, the logical point to make that comparison is after the identification of projects but before their approval. The Commission permissibly disagreed, concluding that petitioners could properly account for the benefits of an interregional project only if they considered the benefits of approved projects, not merely of identified ones. That might lead to the displacement of approved regional projects only when it is appropriate to do so—i.e., when an interregional project is selected in a region’s own transmission planning process as the more efficient or cost-effective solution to a transmission need. The Commission further noted that other regions had adopted the same approach without protest.

Fourth, petitioners contended that their existing tariff did “not contemplate removing projects from [their] bid solicitation process.” J.A. 276. In response, the Commission pointed out that MISO’s tariff already contained provisions allowing for the removal of bids under certain circumstances, including cost increases or changes in developer qualifications. In light of those provisions, the Commission explained, it would not be inconsistent with MISO’s transmission planning process to allow the displacement of approved regional projects when those projects are rendered unnecessary by a more optimal interregional project.

In the end, we conclude that the Commission adequately responded to petitioners’ concerns about the possible effects of including approved regional projects in the cost-allocation calculation. Petitioners ultimately disagree with the Commission’s policy judgment about whether the importance of properly calculating an interregional project’s benefits outweighs the effects of potentially displacing approved regional projects. Petitioners’ disagreement with the Commission’s resolution of that issue does not render the Commission’s explanation any less thorough or reasoned.

For the foregoing reasons, we deny the petition for review.

It is so ordered.
United States v. American Telephone and Telegraph Co.

HAROLD H. GREENE, District Judge.: These actions are before the Court for a determination whether a consent decree proposed by the parties is in the “public interest” and should therefore be entered as the Court’s judgment. ***

I
Preliminary Considerations
A. History of the Litigation

On January 14, 1949, the government filed an action in the District Court for the District of New Jersey against the Western Electric Company, Inc. and the American Telephone and Telegraph Company, Inc. (Civil Action No. 17-49). The complaint alleged that the defendants had monopolized and conspired to restrain trade in the manufacture, distribution, sale, and installation of telephones, telephone apparatus, equipment, materials, and supplies, in violation of sections 1, 2, and 3 of the Sherman Act, 15 U.S.C. §§ 1, 2, and 3. The relief sought included the divestiture by AT&T of its stock ownership in Western Electric; termination of exclusive relationships between AT&T and Western Electric; divestiture by Western Electric of its fifty percent interest in Bell Telephone Laboratories; separation of telephone manufacturing from the provision of telephone service; and the compulsory licensing of patents owned by AT&T on a non-discriminatory basis.

The court record reveals little activity in the case between the date of the filing of the complaint in 1949 and the entry of a consent decree in 1956. Except for the notation that an answer was filed in April, 1949, there are no record entries until the Fall of 1951 when the government filed and the court ordered compliance with several discovery requests. Following the discovery order, there is another two-year gap, and it is not until April 27, 1953, that another record entry is found. This entry indicates that defendants were given two additional months to complete their compliance with the government’s 1951 discovery requests. The next reference is to the transcript of a hearing held on January 24, 1956, during which the consent decree was approved as being in the public interest.

The gaps in the court record are partly filled by a report of a committee of the United States House of Representatives which conducted an intensive investigation of the circumstances surrounding the entry of the consent decree. Report of the Antitrust Subcommittee of the House Committee on the Judiciary on the Consent Decree Program of the Department of Justice, 86th Cong., 1st Sess., January 30, 1959 (Committee Print) [hereinafter Subcommittee Report]. That report reveals that the parties were quite active between the time of the filing of the government’s discovery requests in 1951 and the signing of the consent decree in 1956.

As early as February 28, 1952, the president of Bell Laboratories, Dr. M.J. Kelly, met with Secretary of Defense Robert A. Lovett and other members of the Department of

3 Western Electric is the wholly owned subsidiary of AT&T that manufactures telecommunications equipment for AT&T’s Long Lines Department and the Operating Companies. In addition, Western Electric provides telecommunications equipment and services to government agencies and, to a limited extent, the independent telephone companies.

6 Bell Telephone Laboratories, AT&T’s telecommunications research and development facility, is a jointly owned subsidiary in which AT&T and Western Electric each owns 50 percent of the stock.
Defense to enlist their help in persuading the Justice Department to suspend prosecution of the action until the end of the Korean War, a suspension the Attorney General refused to grant.

AT&T continued its attempts to end the litigation as soon as the Eisenhower Administration took office. Its executives and lawyers met with officials of the Departments of Defense and Justice throughout the first six months of 1953. These efforts culminated in a meeting on June 27, 1953, during a judicial conference held at White Sulphur Springs, West Virginia, between T.B. Price, AT&T’s general counsel, and Attorney General Herbert Brownell. According to a memorandum prepared by Price following this meeting, Attorney General Brownell said that he believed that “a way ought to be found to get rid of the case,” and that AT&T “could readily find practices that [they] might agree to have enjoined with no real injury to [their] business.” Memorandum of T.B. Price (March 3, 1954) reprinted in Subcommittee Report at 53-54.

Shortly after this meeting, AT&T again urged the Defense Department “to intercede with the Justice Department to have the case settled on a basis that would not require divorcement of Western.” Subcommittee Report at 55. To that end, Secretary of Defense Charles E. Wilson had a letter hand-carried to Attorney General Brownell urging him to end the litigation without divesting Western Electric. The rationale stated for this position was that the severance of Western Electric would “effectively disintegrate the coordinated organization which is fundamental to the successful carrying forward of these critical defense projects,” and would “be contrary to the vital interests of the Nation.” Subcommittee Report at 56. The Wilson letter was actually prepared by AT&T.

Periodic negotiations between AT&T and the government continued through 1954 and 1955, and by early December, 1955, the government and AT&T had reached an agreement.

The consent decree which was the product of this process included neither the divestiture of Western Electric nor any of the other structural relief originally requested by the government. Instead, an injunction was issued which precluded AT&T from engaging in any business other than the provision of common carrier communications services; precluded Western Electric from manufacturing equipment other than that used by the Bell System; and required the defendants to license their patents to all applicants upon the payment of appropriate royalties.

Despite the substantial differences between the structural relief requested in the government’s 1949 complaint and the relief actually provided by the proposed decree, the District Court for the District of New Jersey accepted the proposal on January 24, 1956, after a brief hearing, stating:

I feel that I can unhesitatingly accept the recommendation of the Attorney General, that this judgment is in the public interest, and that it is a satisfactory adjustment of this very, very vexatious problem; and I am therefore happy to go along with the recommendation made by the Attorney General and shall forthwith sign this judgment.

After the decree was approved, no major developments occurred in the case for the next several years. Until 1981, the entries in the court record concern primarily the patent licensing provisions.

This was the status of the Western Electric suit when the government filed a separate antitrust action on November 20, 1974, in this Court against AT&T, Western Electric,
and Bell Telephone Laboratories, Inc. (Civil Action No. 74-1698). The complaint in
the new action alleged monopolization by the defendants with respect to a broad va-
riety of telecommunication services and equipment in violation of section 2 of the
Sherman Act. In this lawsuit, the government initially sought the divestiture from
AT&T of the Bell Operating Companies (hereinafter generally referred to as Operating
Companies or BOCs) as well as the divestiture and dissolution of Western Electric.
While the action was pending, the government changed its relief requests several times
asking, at various times or in various alternatives, for the divestiture from AT&T of
Western Electric and portions of the Bell Laboratories.

Pretrial discovery began shortly after the defendants filed their answer in February
1975 *** . The trial itself began on January 15, 1981. At the request of the parties, the
trial was recessed immediately after the opening statements for a period of six weeks
in order to afford an opportunity for a negotiated settlement. When the settlement
discussions proved fruitless, the trial resumed on March 4, 1981. The government pre-
sented close to one hundred witnesses, many thousands of documents, and additional
thousands of stipulations. After the conclusion of the government’s case, defendants
moved to dismiss the action on a variety of grounds. That motion was denied on Sep-
tember 11, 1981. United States v. AT&T, supra, 524 F.Supp. 1336. Defendants com-
menced their case-in-chief on August 3, 1981, and during the next five months they
presented approximately 250 witnesses and tens of thousands of pages of documents.

Defendants were scheduled to complete the presentation of their evidence on about
January 20, 1982, and it was expected that the government’s rebuttal evidence would
be presented between that date and February 10, 1982, when the trial would have
ended. However, early in January, 1982, the Court was advised of the proposed decree
described below.

B. The Proposed Decree
On January 8, 1982, the parties to these two actions filed with the District Court for
the District of New Jersey a stipulation consenting to the entry by the Court of the
“Modification of Final Judgment” filed therewith. On the same day, they attempted to
file in this Court a dismissal of the AT&T action pursuant to Rule 41(a)(1)(ii), Federal
Rules of Civil Procedure. This Court ordered that the dismissal be lodged, not filed,
and, in accordance with that order and the provisions of the Tunney Act, the dismissal
has not yet been effected.

In their settlement proposal, the parties proposed that the Court enter the following
judgment with respect to both lawsuits.

Section I of the proposed decree would provide for significant structural changes in
AT&T. In essence, it would remove from the Bell System the function of supplying
local telephone service by requiring AT&T to divest itself of the portions of its twenty-
two Operating Companies which perform that function.

The geographic area for which these Operating Companies would provide local tel-
phone service is defined in the proposed decree by a new unit, the “exchange area.”
According to the Justice Department, an exchange area “will be large enough to com-
prehend contiguous areas having common social and economic characteristics but not
so large as to defeat the intent of the decree to separate the provision of intercity
services from the provision of local exchange service.” Court approval would be required for the inclusion in an exchange area of more than one standard metropolitan area or the territory of more than one State.

The Operating Companies would provide telephone service from one point in an exchange area to other points in the same exchange area—“exchange telecommunications”—and they would originate and terminate calls from one exchange area to another exchange area—“exchange access.” The interexchange portion of calls from one exchange area to another exchange area would, however, be carried by AT&T and the other interexchange carriers, such as MCI and Southern Pacific Co.

The proposed decree sets forth general principles governing the configuration of the Operating Companies which AT&T would be required to divest. Under the proposal, AT&T would be required to endow the companies with sufficient personnel, facilities, systems, and rights to technical information to enable them to provide exchange telecommunications and exchange access services. These personnel, systems, facilities, and rights would be drawn from the Operating Companies and from AT&T and its other affiliates. AT&T would be permitted to choose to transfer some of these elements directly to the new Operating Companies and to place others in a central entity jointly owned by them.

AT&T would be required by the proposed decree to formulate a plan of reorganization which complied with these principles, and to submit the plan to the Department of Justice within six months after the Court approved the decree. The plan would not be effective without the Department’s approval.

After divestiture, the new Operating Companies would be required to provide, through a centralized body, a single point of contact for national security and emergency preparedness. They would be permitted to use this or a similar central body to provide those services, such as administration and engineering, which “can most efficiently be provided on a centralized basis.” In addition, until September 1987, AT&T, Western Electric, and Bell Laboratories would have to provide on a priority basis, all research, development, manufacturing, and other support services necessary to enable the Operating Companies to fulfill the requirements of the proposed decree.

Section II of the proposed decree would complement these structural changes by various restrictions which are said to be designed (1) to prevent the divested Operating Companies from discriminating against AT&T’s competitors, and (2) to avoid a recurrence of the type of discrimination and cross-subsidization that were the basis of the AT&T lawsuit.

The first group of these provisions would require the divested Operating Companies to provide services to interexchange carriers equal in type, quality, and price to the services provided to AT&T and its affiliates. In addition, they would be prohibited from discriminating between AT&T and other companies in their procurement activities, the establishment of technical standards, the dissemination of technical information, their use of Operating Company facilities and charges for such use, and their network planning. The Justice Department has indicated that it intends these provisions to be “construed broadly to encompass all potential areas of favoritism, subtle as well as overt, that may arise in relationship between the divested BOCs and AT&T and its competitors.” Competitive Impact Statement at 26-27.
The second type of restriction imposed upon the Operating Companies is said to be intended to prevent them from engaging in any non-monopoly business so as to eliminate the possibility that they might use their control over exchange services to gain an improper advantage over competitors in such businesses. Thus, the Operating Companies would not be permitted (1) to manufacture or market telecommunications products and customer premises equipment; (2) to provide interexchange services, (3) to provide directory advertising such as the Yellow Pages; (4) to provide information services; and (5) to provide any other product or service is not a “natural monopoly service actually regulated by tariff.” The Operating Companies would have the authority, however, to engage in what are called the “inherent” functions of procurement, engineering, marketing, and management.

Section III of the agreement provides that the decree would be binding on AT&T and the Operating Companies and their successors and that it would not constitute any evidence against, an admission by, or an estoppel against AT&T or the Operating Companies.

The proposed decree contains a number of enforcement provisions. Section V would impose a requirement upon AT&T and the Operating Companies to inform their employees of their obligations under the decree. Section VI would grant to the Department of Justice the right of access to AT&T and the Operating Companies to inspect books, interview and depose employees, and demand reports. Section VII provides that the Court would retain jurisdiction for the purpose of issuing orders to construe or carry out the decree, to modify it, to enforce compliance, and to punish violations, upon application of the parties and, after the reorganization, upon the application of an Operating Company.

Finally, the proposed decree would vacate the final judgment entered on January 24, 1956 in the Western Electric case, eliminating the restrictions imposed upon AT&T by that decree.

On January 11, 1982, Judge Vincent Biunno of the District Court for the District of New Jersey, following a brief hearing, approved the proposed decree, interpreting it solely as a modification of the 1956 consent judgment, but he did not, initially, agree to the parties’ request for a transfer of the Western Electric action to this Court.

The following day, this Court held a hearing and continued in effect its order that the stipulation of dismissal which the parties had attempted to file in the AT&T action here be simply lodged pending completion of the appropriate public interest proceedings. Judge Biunno thereafter granted the parties’ motion for a transfer of the Western Electric action, that action was docketed here under Civil Action No. 82-0192 and, by order of this Court, it was consolidated with the AT&T action. At the same time, this Court vacated the order of January 11, 1982, which had approved the proposed decree, and it ordered that procedures equivalent to those required by the Tunney Act be applied to the consolidated actions.

C. Procedures in Connection with the Settlement Proposal

*** On May 25, 1982, the Court issued a Memorandum governing further proceedings. The Memorandum identified a number of key issues that were raised by the comments and the responses, and it invited the parties and the various interested persons to brief these issues in a form more suitable to judicial adjudication than the necessarily somewhat diffuse comments. A hearing was held on June 29 and 30, 1982, at which time
the issues were further elucidated and refined. The Court’s substantive conclusions based upon the comments, responses, briefs, oral arguments, and the entire record herein, are discussed below. ***

IV

The Divestiture

A key feature of the proposed decree is the divestiture of the Operating Companies from the remainder of AT&T. In order to determine whether that divestiture is in the public interest, the Court must decide first whether it is a remedy that is likely to eliminate anticompetitive conditions within the telecommunications industry. In addition, the Court must assess the efficacy of alternative remedies and it must weigh the effect of the divestiture on the public interest generally, particularly on the level of charges for local telephone service.

A. Conditions Necessitating Antitrust Relief

1. Evidence of Anticompetitive Actions by AT&T

In its complaint and in documents filed thereafter (i.e., the several Statements of Contentions and Proof), the government asserted that AT&T monopolized the intercity telecommunications market and the telecommunications product market in a variety of ways in violation of the Sherman Act.

The evidence that was produced during the AT&T trial indicates that, at least with respect to several of the government’s claims, this charge may be well taken. It would be inappropriate for the Court at this juncture to draw definitive conclusions with regard either to the sufficiency of the evidence to sustain a finding of liability or to the validity of AT&T’s various legal and factual defenses. ***

In its intercity case, the government alleged that AT&T used its control over its local monopoly to preclude competition in the intercity market. The government proved, inter alia, that after 1968 AT&T included a “customer premises” provision in its interconnection tariff which deterred potential competitors from entering that market; that it refused to provide FX and CCSA services to specialized common carriers and domestic satellite carriers until 1974 when the FCC specifically ordered it to do so; and that it attempted to prevent competitors from offering metered long distance service that would compete with AT&T’s own regular long distance service.

AT&T’s basic rationale for these policies was that it was attempting to prevent competitors from “creamskimming.” As viewed by AT&T, it would have been able successfully to combat creamskimming if it had priced each of its routes on the basis of the costs for operating that route. However, it concluded that the FCC had rejected this approach when it endorsed national rate averaging in the interest of promoting the goal of universal service. Accordingly, AT&T argued that, since rate averaging is inconsistent with competition, and since the basic rate averaging policy had been required by the FCC as being in the public interest, it was acting reasonably under the Communications Act in preventing competition as best and as long as it could.

What this line of reasoning fails to consider is that, at least by the mid-1970s, the FCC had clearly begun to promote competition in telecommunications. The government contended during the trial—correctly, in the Court’s view—that AT&T had an obligation to follow the more recent FCC policy rather than the Commission’s previous policies which may have suited it better, particularly since there was never a direct
FCC rule against de-averaging. Moreover, even if, because of the lack of definite guidance from the FCC, AT&T’s actions were to be regarded as reasonable under the Communications Act standards, it does not at all follow that these same actions were immunized under the standards of the Sherman Act.

What is significant about these events is that AT&T was able to adopt the policies described above in large part because of its control over the local exchange facilities. The government proved that AT&T prohibited the attachment of competitors’ equipment to the network except through a protective connecting arrangement (PCA). There was evidence that some experts (including a panel of the National Academy of Sciences) believed that such a PCA was necessary if the nationwide telephone network was to be protected from a variety of harms. On the other hand, the government’s evidence indicated that AT&T required PCAs for equipment that in all probability could not harm the network; that there were delays in providing PCAs; that the PCAs were over-designed and over-engineered, and, thus, over-priced; that PCAs were required for competitive equipment while identical equipment sold by AT&T did not require their use; and that PCAs could not guard against all four potential harms to the network.

Additionally, the alternative option of certification was available but never seriously pursued by Bell. Moreover, when ultimately certification was directly mandated by the FCC as a substitute for the protective connecting arrangement, the telephone network—AT&T’s predictions to the contrary notwithstanding—did not cease to function in its customary fashion. Indeed, AT&T was unable during the trial to prove any actual harm to the network from the elimination of the PCAs.

In its procurement part of the case, the government alleged, and there was proof, that AT&T used its control over the local Operating Companies to force them to buy products from Western Electric even though other equipment manufacturers produced better products or products of identical quality at lower prices. Here, too, AT&T’s control of the Operating Companies was central to the allegedly anticompetitive behavior.

Without making definitive findings on any or all of the issues, it is certainly clear that—to the extent that the proposed decree is offered by the government on the premise that it will destroy the basis of past anticompetitive behavior—the Court would not be justified in rejecting it as constituting a remedy for nonexistent anticompetitive acts.

2. Concentration of Power in the Telecommunications Industry

There is an additional reason, largely independent of the factors discussed above, which supports some type of antitrust relief in this case: AT&T’s substantial domination of the telecommunications industry in general.

The antitrust laws are most often viewed as only a means for ensuring free competition in order to achieve the most efficient allocation of society’s resources. However, Congress and the courts have repeatedly declared that these laws also embody “a desire

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135 Under a certification program, non-Bell equipment may be connected directly to the AT & T network—without the use of a PCA—provided that the equipment has been certified as meeting certain technical standards.
to put an end to great aggregations of capital because of the helplessness of the indi-
vidual before them.” United States v. Aluminum Company of America, 148 F.2d 416, 428
(2d Cir.1945) (footnote omitted). ***

The significance of these concepts is accentuated by the context in which the Court
must consider the public interest in these cases. The telecommunications industry
plays a key role in modern economic, social, and political life. Indeed, many commen-
tators have asserted that we are entering an age in which information will be the key-
stone of the economy *** .

The only pervasive two-way communications system is the telephone network. It is
crucial in business affairs, in providing information to the citizenry, and in the simple
conduct of daily life. In its present form, AT&T has a commanding position in that
industry. The men and women who have guided the Bell System appear by and large
to have been careful not to take advantage of its central position in America’s eco-
nomic life. There is no guarantee, however, that future managers will be equally careful.
In any event, it is antithetical to our political and economic system for this key industry
to be within the control of one company.

For these reasons, the Court concludes that the loosening of AT&T’s control over
telecommunications through the divestiture of the Operating Companies will entail
benefits which transcend those which flow from the narrowest reading of the purpose
of the antitrust laws.

B. Effect of the Divestiture

The remedy in an antitrust action—whether imposed by a court or agreed upon be-
tween the parties—is measured both by how well it halts the objectionable practices
and by its prospects for minimizing the likelihood that such practices will occur in the
future. Where, as here, the Court has heard substantially all of the evidence, it is ap-
propriate that it weigh the proposed remedy against the evidence in that context.

As indicated in Part IV(A) supra, the ability of AT&T to engage in anticompetitive
conduct stems largely from its control of the local Operating Companies. Absent such
control, AT&T will not have the ability to disadvantage competitors in the interex-
change and equipment markets.

For example, with the divestiture of the Operating Companies AT&T will not be
able to discriminate against intercity competitors, either by subsidizing its own intercity
services with revenues from the monopoly local exchange services, or by obstructing
its competitors’ access to the local exchange network. The local Operating Companies
will not be providing interexchange services, and they will therefore have no incentive
to discriminate. Moreover, AT&T’s competitors will be guaranteed access that is equal
to that provided to AT&T, and intercity carriers therefore will no longer be presented
with the problems that confronted them in that area.

Abuses will also be unlikely in the equipment interconnection area, for the simple
reason that the Operating Companies will not manufacture equipment and will there-
fore lack AT&T’s incentive to favor the connection of one manufacturer’s equipment
over that of another. Even as to the part of the government’s case dealing with pro-
curement, the divestiture of the Operating Companies will go a long way toward elim-
inating the potential for anticompetitive behavior. Any pro-Western Electric bias on
the part of these companies will be eliminated once the intra-enterprise relationship
between the Operating Companies and Western Electric is broken.
To the extent, then, that the proposed decree proceeds on the assumption that the structural reorganization will make it impossible, or at least unprofitable, for AT&T to engage in anticompetitive practices, it is fully consistent with the public interest in the enforcement of the antitrust laws. The soundness of this remedy becomes even more apparent when it is compared with other relief alternatives. ***

C. Alternative Remedies

*** There has long been a debate over the relative merits of regulation and competition. The evidence adduced during the AT&T trial indicates that the Bell System has been neither effectively regulated nor fully subjected to true competition. The FCC officials themselves acknowledge that their regulation has been woefully inadequate to cope with a company of AT&T’s scope, wealth, and power. The efforts of various arms of government to introduce true competition into the telecommunications industry have been similarly feeble. The antitrust suit brought by the Department of Justice in 1949 ended in 1956 with a consent decree which imposed injunctive relief that was patently inadequate. It took from 1968 when the Carterfone decision\textsuperscript{164} was handed down by the FCC to 1978 when the United States Court of Appeals decided Execunet II\textsuperscript{165} to establish even the very principle of competition so that it was beyond dispute by AT&T. Future regulatory and injunctive remedies are unlikely to be more successful than were similar efforts in the past. In short, the choice is between a Bell System restrained by neither regulation nor true competition and a Bell System reorganized in such a way as to diminish greatly the possibility of future anticompetitive behavior.

The history of the American economic system teaches that fair competition is more likely to benefit all, especially consumers, than an industry dominated by a single-company monopolist. There is no reason to believe that the experience of the telecommunications industry will be contrary to that rule.

For all of these reasons, the Court concludes that the divestiture from AT&T of companies providing local telephone service is in the public interest.

V

Absence of Restrictions on AT&T

Under the terms of the proposed decree, the line of business restrictions and the licensing requirements imposed by the 1956 consent decree in the Western Electric case would be removed and AT&T would be free to compete in all facets of the marketplace. Some of the opponents of the proposed decree argue that several of the restrictions contained in the 1956 decree should not be eliminated, and others contend that the Court should also impose additional restrictions, not present in the 1956 decree. For the reasons explained in this part of the opinion and Part VI below, the Court finds that, with one exception (see Part VI(B) \textit{infra}), the imposition of restrictions on AT&T would not be in the public interest.

The antitrust laws do not require that a company be prohibited from competing in a market unless it can be demonstrated that its participation in that market will have anticompetitive effects. Past restrictions on AT&T were justified primarily because of its control over the local Operating Companies. With the divestiture of these local

\textsuperscript{164} 13 F.C.C.2d 420 (1968).

\textsuperscript{165} MCI Telecommunications Corp. v. FCC, 580 F.2d 590 (D.C. Cir.1978).
exchange monopolies, continued restrictions are not required unless justified by some other rationale.

A. AT&T Power in the Interexchange Market

Virtually all those who suggest that restrictions beyond those in the proposed decree be imposed on AT&T make the same general arguments. Their basic claim is that AT&T still possesses monopoly power in the interexchange market and that it will leverage this power by cross subsidizing its competitive services with monopoly revenues. These interexchange monopoly revenues, it is said, will subsidize a variety of business activities, ranging from competitive interexchange routes to equipment manufacturing to alternative local distribution facilities.

The validity of these arguments depends, of course, upon the soundness of the claim that after the divestiture AT&T will still possess monopoly power in the interexchange market. If AT&T lacks such power, it would be unable to reap supra-competitive profits with which to support its other activities; it would only recover a profit commensurate with its interexchange operations.

There can be no doubt that AT&T’s market share in the interexchange market is high. Although it is not possible to focus on a precise figure inasmuch as the number of market share estimates is almost as varied as the number of persons submitting comments, even AT&T concedes that as late as 1981 its share of interexchange revenue was around 77 percent. But the inquiry of whether AT&T possesses monopoly power in the interexchange areas does not end with a description of AT&T’s size or its market share.***

Both the Department of Justice and AT&T contend that competition in the interexchange market is growing and that this increase in competition demonstrates an absence of monopoly power. There is some validity to this claim. The interexchange market is now being served not only by relatively young businesses but also by subsidiaries of such well established firms as ITT, Southern Pacific, and IBM.

That is not to say, however, that competition has flourished without impediment or that it would soar if the Bell System were not broken up. There is substantial merit to the suggestion that, absent divestiture, AT&T would still possess significant monopoly power, and that whatever competition developed in the past did so despite anticompetitive conditions. See Part IV supra. But the overriding fact is that the principal means by which AT&T has maintained monopoly power in telecommunications has been its control of the Operating Companies with their strategic bottleneck position. The divestiture required by the proposed decree will thus remove the two main barriers that previously deterred firms from entering or competing effectively in the interexchange market.

First, AT&T will no longer have the opportunity to provide discriminatory interconnection to competitors. The Operating Companies will own the local exchange facilities. Since these companies will not be providing interexchange services, they will lack AT&T’s incentive to discriminate. Moreover, they will be required to provide all interexchange carriers with exchange access that is “equal in type, quality, and price to that provided to AT&T and its affiliates.” Proposed Decree, Section II. See Part VIII infra.
Second. Once AT&T is divested of the local Operating Companies, it will be unable either to subsidize the prices of its interexchange service with revenues from local exchange services or to shift costs from competitive interexchange services. ***

B. Interexchange Restrictions

Some of those who have commented on the proposed decree urge that the Court require a modification which would add a clause guaranteeing access to AT&T’s interexchange network for its competitors, and another which would require AT&T’s Long Lines Department to be placed in a fully separated subsidiary. The imposition of such modifications is not warranted. Those who argue for these restrictions essentially cite no reason other than AT&T’s share in the interexchange market to support their demands and, as discussed supra, that alone is insufficient.

Additionally, the proposed restrictions are substantively deficient. As the proponents of a clause which would guarantee access to AT&T’s interexchange competitors concede, such access is already required by existing FCC decisions and regulations. These regulations make it possible for competing carriers to interconnect freely and to expand their facilities by “piecing out” AT&T’s network, that is, by using AT&T’s facilities to complete portions of routes that must traverse low density, sparsely populated, and hence presumably not very profitable territory. There is no basis for simply repeating in the decree precisely that which is already contained in the FCC regulations.

The second proposed restriction—that Long Lines be placed in a separate subsidiary—is likewise unsupported either by necessity or by adequate reasoning. This restriction is required, it is said, to prevent AT&T from using its interexchange revenues to subsidize its competitive services. But as the Court has stated elsewhere (see Part VII infra), if cross subsidization is a problem, a separate subsidiary will not resolve it. Moreover, AT&T’s opportunity for any cross subsidization will become increasingly curtailed as interexchange competition increases; excessive profits from that service with which to subsidize other activities would quickly attract lower-priced competitors into the interexchange field or stimulate existing competitors into expanding their networks to displace AT&T.

For these reasons, the proposed interexchange restrictions must be rejected.

C. Equipment Restrictions

The restrictions that are suggested in the area of equipment manufacturing are of three basic types: that AT&T’s equipment manufacturing and marketing operations be placed in a separate subsidiary or even, in the view of some of those who submitted comments, divested; that AT&T be required to disseminate its network standards and technical information; and that procurement quotas be imposed on the Operating Companies and on AT&T’s Long Lines Department.

In addition to justifying these restrictions on the basis discussed above—that is, on AT&T’s interexchange market share—their proponents support their position on two other grounds: that AT&T possesses monopoly power in the equipment market, and that the association with Bell Laboratories and Long Lines provides Western Electric with anticompetitive advantages in the manufacturing of equipment. The Court will examine each of the arguments in turn.

There is no merit to the claim that after divestiture AT&T will possess monopoly power in the area of equipment manufacturing. In reviewing the proof on anticompetitive behavior in the equipment market—even before divestiture—the Court found
that the government’s evidence on that aspect of the case was less convincing than, for example, on that involving intercity services. As explained in Part IV supra, where the government was able to show that AT&T’s market share was high, it was generally unable to demonstrate significant anticompetitive behavior; where evidence of behavior was more damning, it had difficulty establishing market power. Thus, at a minimum the factual predicate for drastic restrictions in the equipment area is not as apparent as it might be with respect to other subjects. ***

D. Bypass

A considerable number of persons have suggested that the Court prohibit AT&T from using new local distribution technologies that would allow it to “bypass” the networks of the Operating Companies to reach its local subscribers directly. The fear is that, early on, use of this technology will tend to exert pressure on Operating Companies rates and their ability to levy access charges on interexchange carriers, and that, in time, the new technology will render the Operating Companies and their plant obsolete.

The suggestions for a modification to prohibit bypass would be worthy of implementation only if two premises were accepted: (1) that if AT&T does not develop the technology required for bypass, it will not be developed by anyone, and (2) that it is desirable as a matter of public policy to curtail this technological development. Neither premise is well taken.

AT&T is not the only carrier to possess the technical know-how necessary for bypassing the Operating Companies’ local networks. Imposition of this restriction on AT&T is thus unlikely to be effective. Furthermore, because other interexchange carriers possess this technology, to prohibit only AT&T from developing and using it would artificially and unfairly restrict competition—an action antithetical to the purposes of the antitrust laws.

Even if the Court, by a simple modification of the decree, could stop bypass technology from developing, it would not be justified in doing so. This technology is a threat to the Operating Companies presumably because, when it is developed, it will be more advanced and less expensive than the present method of transmission which depends upon a cumbersome system of poles and wires. Bypass would provide telecommunications service directly to the subscriber by means of satellites, microwave towers, or other advanced technological innovations at a lower cost than such service is available now. If indeed this should prove to be the case—there is general agreement that truly large-scale use of bypass technology is still some time into the future—the answer is not to call a halt to these developments but to make certain that the benefits will not be distributed in such a way as to undermine the goal of universal service.

Neither the Court nor those who object to the decree can halt the electronic revolution any more than the Luddites could stop the industrial revolution at the beginning of the last century. If and when bypass technology becomes technically and economically feasible for widespread use, it should have the effect of reducing telephone costs and charges across the board, to the benefit of consumers, the economy, and the nation. Should it turn out instead that, as some fear, this technology will be used to reduce charges unevenly so as to threaten the goal of universal service, then those with legislative authority may at that time wish to take steps, through a program of subsidies, special charges, or other regulatory means, to make the benefits of the new technology
available to all, including those who are relatively low-volume users of telephone service. But there is no warrant for preventing the development of this technology through a ban on its use by AT&T or otherwise.

E. Patent Licensing Requirements

Under the terms of the 1956 consent decree, AT&T is required to grant to all applicants non-exclusive licenses for all existing and future Bell System patents. 1956 Consent Decree, Section X. In addition, the decree requires that, upon the payment of reasonable charges, AT&T must furnish to those with licenses for AT&T patents the technical information necessary to manufacture the equipment for which the applicant obtained the patent license. Section XIV. These licensing requirements would be eliminated by the proposed decree, and the Court must determine whether such elimination is in the public interest.

A prime reason for the imposition of the mandatory licensing requirement in 1956 was AT&T's anticompetitive hold on telecommunications and electronics technology. But this technology has advanced rapidly since then, and has become much more widely dispersed, so that AT&T now faces significant challenges in research and development both from established domestic firms and from powerful foreign competitors. The need for continued compulsory licensing of patents, therefore, is diminished on this basis alone.

Divestiture of the Operating Companies may be expected vastly to accelerate this trend. Until now, AT&T's research and development have been financed primarily through the licensing contracts with the local Operating Companies. As long as ratepayer-financed local exchange revenues were supporting this research and development, it made sense to require AT&T to share the fruits of its monopoly financing with others. But under the proposed decree, the licensing contracts will be terminated, and this rationale for exclusive licensing thus falls.

Moreover, AT&T would be forced after divestiture to fund its research and development just like other competitive enterprises—without an artificial subsidy from captive ratepayers. That being so, unless compulsory licensing is eliminated, AT&T would be placed at a significant disadvantage vis-a-vis its competitors: of all those who would be active in the development of new technology, it alone would be compelled to furnish its patents to those who might be interested, including all of its domestic and foreign competitors.

Some of AT&T's competitors contend next that compulsory licensing is necessary to ensure that equipment manufacturers and interexchange carriers receive the interface information necessary to interconnect with the local exchange network. There is no basis for such claims. *** [A]fter the divestiture, the local Operating Companies, not AT&T, will possess and generate the information necessary for interconnection. The proposed decree requires AT&T to provide these Operating Companies with, *inter alia*, sufficient technical information to permit them to perform their exchange telecommunications and exchange access functions. Proposed Decree, Section I(A)(1). The Operating Companies, in turn, are prohibited from discriminating in the “establishment and dissemination of technical information and procurement and interconnection standards.” Section II(B)(2). And since the Operating Companies will neither manufacture equipment nor provide interexchange services, they will have no incentive to favor Western Electric or Long Lines to the detriment of other intercity service providers and equipment manufacturers.
For these reasons, the Court concludes that the provisions in the proposed decree which would eliminate the patent licensing provisions imposed in 1956 are not inconsistent with the public interest. ***

VI

The 1956 Decree and Line of Business Restrictions

The basic agreement embodied in the 1956 consent decree in the Western Electric case was that AT&T would not be required to divest itself of Western Electric, provided that AT&T would restrict its operations to the provision of common carrier communications services and that Western Electric would manufacture only the types of equipment used by the Bell System.

The decree which has now been submitted by the parties would eliminate all of the restrictions of the 1956 consent judgment. If that decree is entered by the Court, AT&T would be free to enter the computer market as well as to provide the full range of so-called information services.

There has been no serious opposition to the entry of AT&T into manufacturing and marketing of computers and other electronic equipment, and there is no question that this development would be in the public interest. It will accordingly be approved.

By contrast, others who have submitted comments object to AT&T’s entry into the information services market.

“Information services” are defined in the proposed decree at Section IV(J) as:

- the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing or making available information which may be conveyed via telecommunications ....

Two distinctly different types of information services fall within this general category: services which would involve no control by AT&T over the content of the information other than for transmission purposes (such as the traditional data processing services), and services in which AT&T would control both the transmission of the information and its content (such as news or entertainment). Because these two types of services raise different concerns, they will be addressed separately.

A. Data Processing and Other Computer-Related Services

As technology has advanced, the line between communications and data processing has become blurred. Advances in communications technology, for example, now allow otherwise incompatible computers to converse with each other. New sophisticated telephone equipment located on a customer’s premises not only performs switching and call routing functions but it also retrieves information much as does a traditional computer. Even ordinary telephones may be capable of performing functions that formerly required the support of a separate computer.

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199 Without control of the local exchange monopolies, AT&T will have no improper advantage over other competitors. It will not be able to subsidize its offerings with monopoly profits in the interexchange or telecommunications equipment markets and there is little likelihood of customer discrimination because these products and services, unlike information services, are not closely dependent upon access to the telecommunications network. If a potential competitor poses no threat to the development of a healthy competitive market it should obviously not be barred from entering that market. The greater the number of competitors, the more likely it is that consumers will reap the benefits of lower prices and product improvements. AT&T is likely to be an especially potent competitor given its manufacturing expertise and the resources of Bell Laboratories.
Providers of data processing services—like others who have commented on the decree in other contexts—contend that AT&T should be prohibited from entering these fields because of its market power in the area of interexchange services. Shaping the argument to support their particular interests, these persons contend that AT&T will use the monopoly profits from its interexchange services to subsidize its computer-related services, and that it will use its control over the interexchange network to discriminate against other data processing competitors in providing access to that network.

As explained in Part V supra, there is little possibility that AT&T will be able to use its revenues from the interexchange market to subsidize its prices for computer services. That being true, AT&T would not possess any anticompetitive advantages over competitors on this basis, and the possibility of cross subsidization as a basis for rejecting this portion of the proposed decree may therefore be completely discounted.

The discrimination argument is slightly more serious. Since AT&T will be offering its own computer-related services, it may well have an incentive to discriminate in transmitting competitors’ services. But what defeats the objections is that AT&T’s actual ability to discriminate is quite remote. This segment of the information services industry is already well established, comprised of some of the nation’s leading corporate giants, as well as of many smaller concerns. The FCC has found that “[t]here are literally thousands of unregulated computer service vendors offering competing services connected to the interstate telecommunications network.” Computer II, supra, 77 F.C.C.2d at 426. These strongly competitive conditions will limit AT&T’s ability to practice discrimination in two ways. First, AT&T’s competitors will have the economic resources necessary to combat any attempt at discrimination. Second, the growing demand for information services will necessarily increase the demand for transmission facilities for these services. Such an increase in demand is likely to stimulate AT&T’s interexchange competitors to offer satisfactory alternatives to the AT&T network, and any attempt by AT&T to discriminate would only further enhance this eventuality.

This fairly limited possibility of discrimination clearly does not outweigh the substantial advantages to the public that would be gained by allowing AT&T to develop this new technology. AT&T’s entry into these technologically sophisticated fields will stimulate competition, and it is therefore likely to produce further technological advances, new products, and better services—all of which are likely to benefit the American consumer, American foreign trade, and national defense.

Since AT&T’s participation in these areas will foster the traditional objectives of the Sherman Act and is not likely to lead to anticompetitive practices, the Court will not sustain the objections to this aspect of the proposed decree.

B. Electronic Publishing Services

The second type of information service which AT&T would be permitted to provide under the proposed decree are those services in which it would control, or have a financial interest in, the content of the information being transmitted. Those services are generally referred to as electronic publishing or information publishing services.

A number of organizations have objected to entry of the proposed decree unless it is modified to include a ban on electronic publishing. However, the decree itself does not specifically refer to the concept of electronic publishing, let alone provide a suitable definition. In order to conduct a meaningful discussion of the relevant issues,
therefore, electronic publishing must first be defined. After drawing on various sources, the Court has concluded that, for purposes of this opinion, electronic publishing will be regarded as:

the provision of any information which a provider or publisher has, or has caused to be originated, authored, compiled, collected, or edited, or in which he has a direct or indirect financial or proprietary interest, and which is disseminated to an unaffiliated person through some electronic means.

A number of persons have argued that because of potential dangers to competition and to First Amendment values, AT&T should be prohibited from engaging in such activities. For the reasons stated below, the Court agrees.

The threat to competition that is claimed to be posed by AT&T in this industry is that, through the use of cross-subsidization and customer discrimination, it will use its power in the interexchange market to disadvantage competing electronic publishers. While the possibility of cross-subsidization is as remote here as it is with respect to other subjects considered herein, there is a real danger that AT&T will use its control of the interexchange network to undermine competing publishing ventures.

AT&T could discriminate against competing electronic publishers in a variety of ways. It could, for example, use its control over the network to give priority to traffic from its own publishing operations over that of competitors. A second concern is that, inasmuch as AT&T has access to signalling and traffic data, it might gain proprietary information about its competitors’ publishing services. Furthermore, it appears that AT&T would have both the incentive and the opportunity to develop technology, facilities, and services that favor its own publishing operations and the areas served by these operations rather than the operations of the publishing industry at large. Similarly, AT&T could discriminate in interconnecting competitors to the network and in providing needed maintenance on competitors’ lines. Finally, AT&T might submit tariffs that would have the effect of favoring AT&T’s publishing operations to the disadvantage of competing concerns.

AT&T and the Department of Justice provide the same response to these arguments that they make in other contexts: that market forces will curtail AT&T’s ability effectively to engage in these practices. In the absence of special problems and concerns relating only to the electronic publishing industry, the Court probably would, as it has in other instances, accept that response. However, in the view of the Court a different conclusion is appropriate here, for the peculiar characteristics of the electronic publishing market would both render anticompetitive acts more damaging to AT&T’s competitors in that market and insulate such acts from correction by market forces.

The electronic publishing industry is still in its infancy. Although this business may some day be a very significant part of the American communications system, at present, and most likely for the next several years, a small number of relatively small firms will be experimenting with new technology to provide services to an American public that is, for the most part, still almost totally unfamiliar with them. There can be no doubt that, if AT&T entered this market, the combination of its financial, technological, manufacturing, and marketing resources would dwarf any efforts of its competitors. In fact, AT&T’s mere presence in the electronic publishing area would be likely to deter other potential competitors from even entering the market.
It is also readily apparent that competitors in the electronic publishing industry—far more so than competitors in any other industry—could easily be crushed were AT&T to engage in the types of anticompetitive behavior described above. Unlike most products and services, information in general and news in particular are by definition especially sensitive to even small impediments or delays. Information is only valuable if it is timely; by and large it is virtually worthless if its dissemination is delayed. This quality is especially important in electronic publishing because up-to-date information and constant availability are the features likely to be sought by subscribers.

The trial record in the AT&T case reveals many instances when AT&T was slow to respond to the needs of competitors, both in providing essential products or parts and in servicing these products and parts. Any delays of that kind, were they to occur in the context of the transmission of electronic publishing information, would quickly cause subscribers to desert their unreliable publishers and thus cripple AT&T’s competitors in that business.

Finally, electronic publishers remain more dependent upon the AT&T network than others in the telecommunications business. In some areas, AT&T is the sole provider of intercity services. Elsewhere, where competition does exist, the other common carriers—although capable of handling voice transmissions—frequently lack the sophisticated facilities necessary to meet the needs of the electronic publishers. Systems that are specifically designed to transmit data do not provide a satisfactory solution; most of these systems lease part, if not all, their facilities from AT&T. Nor are satellites the answer, for at least for the present they do not appear to present a realistic alternative, given their restricted availability, potential transmission problems, and high costs.

Thus, even if AT&T should engage in anticompetitive activity, publishers would have no realistic alternative transmission system by which to reach their subscribers. The low level of demand for these services that exists at present makes it unlikely that competing interexchange carriers would construct transmission systems to be used solely for the delivery of electronic publishing services, and publishers would therefore be forced to accept the inferior services provided by AT&T.

Based on competitive considerations alone, therefore, the Court might well be justified in barring AT&T from electronic publishing industry. Beyond that, AT&T’s entry into the electronic publishing market poses a substantial danger to First Amendment values. *** In determining whether the proposed decree is in the public interest, the Court must take into account the decree’s effects on other public policies, such as the First Amendment principle of diversity in dissemination of information to the American public. Consideration of this policy is especially appropriate because, as the Supreme Court has recognized, in promoting diversity in sources of information, the values underlying the First Amendment coincide with the policy of the antitrust laws. *FCC v. National Citizens Committee for Broadcasting*, supra, 436 U.S. at 800, n. 18.

Applying this diversity principle to the issue here under discussion, it is clear that permitting AT&T to become an electronic publisher will not further the public interest.

During the last thirty years, there has been an unremitting trend toward concentration in the ownership and control of the media. Diversity has disappeared in many areas; newspapers have gone out of business; others have merged; and much of the flow of news and editorial opinion appears more and more to be controlled and shaped
by the three television networks and a handful of news magazines and metropolitan newspapers.

This concentration presents obvious dangers even today. Unless care is taken, both the concentration and the attendant dangers will be significantly increased by the new technologies. Indeed, it is not at all inconceivable that electronic publishing, with its speed and convenience will eventually overshadow the more traditional news media, and that a single electronic publisher would acquire substantial control over the provision of news in large parts of the United States.

The concentration that now exists in the media has presumably been brought about by impersonal economic and technological forces, and it is obviously beyond the concern of this or any other court. But the particular concentration that may emerge from the proposed decree is subject to the Court’s jurisdiction in this antitrust case as part of the instant proceeding. Not only is AT&T a regulated company, and not only does the proceeding stem directly from serious charges of anticompetitive conduct, but the Court has been mandated not to approve the proposed decree unless it finds it to be in the public interest. AT&T’s ability, described above, to use its control of the interexchange network to reduce or eliminate competition in the electronic publishing industry is the source of this threat to the First Amendment principle of diversity.

In sum, for a variety of reasons, the entry of AT&T into electronic publishing involves risks to the public interest that are greater than those which would be involved by that company’s entry into other markets. Since under the Sherman Act, it is appropriate to bar a company from a market if the restriction is necessary to permit the development of competition in that market, and since First Amendment values, too, support a ban on electronic publishing by AT&T, the Court will require that the company be prohibited from entering that market.

At the same time, a prohibition on electronic publishing does not impose an undue burden on AT&T. The company is free to enter all the other computer, computer-related, and information services markets; and it will simply be barred from the creation or control of the information to be transmitted. AT&T may thus fulfill its traditional function of providing a delivery system for information which others wish to transmit, and it may also manufacture and market equipment for the electronic publishing industry and provide transmission services for other electronic publishers.

The restriction on electronic publishing—like any limitation on competition—should only remain in effect for the period necessary to establish conditions conducive to free and fair competition. Since it is not likely that the factors enumerated above which militate against AT&T’s immediate entry into the electronic publishing market will continue to exist indefinitely, the Court will place a time limit on its prohibition.  

*** Section VII of the proposed decree allows modifications to be made in its provisions upon the application of a party or an Operating Company. It is the intention of the Court to remove the prohibition on electronic publishing at the end of seven years from the entry of the decree should application for such removal be made pursuant to Section VII. That seven-year period should be sufficient for the development of electronic publishing as a viable industry, for the acquisition of sufficient strength by individual publishers adequate to permit them to compete, and for the development of means other than the AT&T network for the transmission of the messages of electronic publishers. During that same period, the new AT&T will also have acquired a
track record with respect to behavior toward its competitors in other areas of the telecommunications business.

VII

Restrictions on the Divested Operating Companies

The proposed decree limits the Operating Companies, upon their divestiture, to the business of supplying local telephone service. In addition to a general prohibition against the provision of “any product or service that is not a natural monopoly service actually regulated by tariff,” there are more specific restrictions in Section II(D) which deny the Operating Companies the opportunity to engage in the following activities: (1) the provision of interexchange services; (2) the provision of information services; (3) the manufacture of telecommunications products and customer premises equipment; (4) the marketing of such equipment and (5) directory advertising, including the production of the “Yellow Pages” directories.

*** These restrictions are justified, according to the Department, because the Operating Companies will have “both the ability and the incentive” to thwart competition in these markets by leveraging their monopoly power in the intraexchange telecommunications market. In the absence of the restrictions, it is reasoned, the Operating Companies will be able (1) to subsidize their prices in competitive markets with supra-competitive profits earned in the monopoly market, and (2) to hinder competitors by restricting their access to the intraexchange network. In short, it is the Department’s view that the divested Operating Companies may appropriately be equated with the present Bell System complex in that, if permitted to enter competitive markets, they may be expected to engage in the same type of anticompetitive behavior that was the crux of the AT&T lawsuit.

The government’s approach, while not without conceptual neatness, fails to take account of circumstances far more complex than these undifferentiated rules acknowledge. The Bell System is a vast, vertically integrated company which dominates local telecommunications, intercity telecommunications, telecommunications research, and the production and marketing of equipment. Each of the divested Operating Companies will have a monopoly in only one geographic portion of one of these markets—local telecommunications. In addition, the Bell System as presently constituted has few powerful competitors in any of the activities in which it is engaged. The Operating Companies, by contrast, will, if permitted to enter competitive markets, be faced with the most potent conceivable competitor: AT&T itself. Thus, the only similarity between the divested Operating Companies and the present Bell System is that both possess a monopoly in local telecommunications.

That single circumstance—important though it may be—is not a sufficient basis upon which to restrict competition generally in the name of the antitrust laws. If this were the case, all monopolies might have to be barred from competitive industries, and even the Department of Justice acknowledges that this drastic remedy is not required. The Tunney Act’s public interest standard permits the Operating Companies to be barred from a competitive market only if there is a substantial possibility that they will use monopoly power to impede competition in that market. Two basic factors are relevant to this determination.

The restrictions are based upon the assumption that the Operating Companies, were they allowed to enter the forbidden markets, would use their monopoly power in an
anticompetitive manner. It is accordingly necessary for the Court first to determine whether these companies will actually have the incentive and opportunity to act anticompetitively. Second, the restrictions are, at least in one sense, directly anticompetitive because they prevent a potential competitor from entering the market. The Court must accordingly also consider the extent to which the participation of the Operating Companies would contribute to the creation of a competitive market.

A. Interexchange Services

The proposed decree prohibits the divested Operating Companies from providing interexchange services. This restriction is clearly necessary to preserve free competition in the interexchange market.

Access to the local exchange is essential for all interexchange carriers and, as the evidence in the AT&T action has suggested, there are many ways in which the company controlling the local exchange monopoly could discriminate against competitors in the interexchange market. After divestiture, the incentive of those who control the local networks to engage in such activity will remain unchanged: they would stand to gain business if other carriers were disadvantaged by poor access arrangements and high tariffs.

To permit the Operating Companies to compete in this market would be to undermine the very purpose of the proposed decree—to create a truly competitive environment in the telecommunications industry. The key to interexchange competition is the full implementation of the decree’s equal exchange access provisions. If the Operating Companies were free to provide interexchange service in competition with the other carriers, they would have substantial incentives to subvert these equal access requirements.

B. Information Services

The proposed decree prohibits the Operating Companies from providing information services, an umbrella description of a variety of services including electronic publishing and other enhanced uses of telecommunications.

All information services are provided directly via the telecommunications network. The Operating Companies would therefore have the same incentives and the same ability to discriminate against competing information service providers that they would have with respect to competing interexchange carriers. Here, too, the Operating Companies could discriminate by providing more favorable access to the local network for their own information services than to the information services provided by competitors, and here, too, they would be able to subsidize the prices of their services with revenues from the local exchange monopoly.

C. Manufacture of Equipment

The provision in the proposed decree which prohibits the Operating Companies from manufacturing telecommunications equipment and customer premises equipment (CPE) is also an outgrowth of the government’s case in the AT&T action.

There is a substantial likelihood that, should the Operating Companies be permitted to manufacture telecommunications equipment, nonaffiliated manufacturers would be disadvantaged in the sale of such equipment and the development of a competitive market would be frustrated. The Operating Companies would have an incentive to subsidize the prices of their equipment with the revenues from their monopoly services as well as to purchase their own equipment, even though it was more expensive.
and not of the highest quality. In that respect, the Operating Companies lack the competitive restraints that ordinarily prevent the typical vertically-integrated company from engaging in such practices: the absence of competition in the end product market—exchange telecommunications—immunizes these purchasing decisions from competitive pressures. The Operating Companies therefore would be able to pay inflated prices for poor quality equipment and to reflect these costs in their rates without suffering a diminution in revenues. ***

D. Marketing of Customer Premises Equipment

The proposed decree would also prohibit the Operating Companies from selling or leasing customer premises equipment. While the Department of Justice’s comments and briefs tend to blur the distinction between manufacturing and marketing, in fact the restrictions on the two activities present wholly different considerations. Based upon a realistic assessment, marketing of CPE presents little potential for anticompetitive behavior by the Operating Companies. While the Operating Companies would have the theoretical ability to engage in the types of anticompetitive activities which support the prohibition on manufacturing of CPE, their incentives and their practical ability to do so would be minimal.

The Court concludes that, for the reasons stated, the prohibition on marketing by the Operating Companies of customer premises equipment is not in the public interest, and it will therefore require that the proposed decree be modified to eliminate this prohibition.

E. Directory Advertising

Each Bell Operating Company presently publishes Yellow Pages directories for its service area. The proposed decree would bar the divested Operating Companies from all activities related to directory advertising, including the production of the so-called Yellow Pages. This restriction lacks an appropriate basis and is not in the public interest.

Neither of the reasons underlying the other restrictions on the Operating Companies—the need to prevent cross subsidization and the importance of preventing competitor discrimination—has any relevance to the printed directory market.

All parties concede that the Yellow Pages currently earn supra-competitive profits. There is no warrant therefore for proceeding on the premise that the advertising prices charged by the Operating Companies are artificially low as the result of a subsidy from local exchange service. Similarly, there is no possibility of improper discrimination by the Operating Companies against competing directory manufacturers since access to the local exchange network is not required for production of a printed directory. In short, the Operating Companies would have little or no ability to discriminate against competitors in the printed directory market, and this restriction thus has no procompetitive justification whatever.

To the contrary, the prohibition on directory production by the Operating Companies is distinctly anticompetitive in its effects, for at least two reasons. In the first place, the production of the Yellow Pages will be transferred from a number of smaller entities to one nationwide company—AT&T. This type of concentration is itself anathema to the antitrust laws. Furthermore, possession of the franchise for the printed directories will give AT&T a substantial advantage over its competitors in providing
electronic directory advertising—a market in which the Operating Companies will not be engaged.

In addition to these factors directly related to competition, there are other reasons why the prohibition on publication of the Yellow Pages by the Operating Companies is not in the public interest. All those who have commented on or have studied the issue agree that the Yellow Pages provide a significant subsidy to local telephone rates. This subsidy would most likely continue if the Operating Companies were permitted to continue to publish the Yellow Pages.

The loss of this large subsidy would have important consequences for the rates for local telephone service. For example, the State of California claims that a two dollar increase in the rates for monthly telephone service would be necessary to offset the loss of revenues from directory advertising. Other states assert that increases of a similar magnitude would be required. Evidence submitted during the AT&T trial indicates that large rate increases of this type will reduce the number of households with telephones and increase the disparity, in terms of the availability of telephone service, between low income and well-off citizens. This result is clearly contrary to the goal of providing affordable telephone service for all Americans.

In addition, as noted in Part III(C) supra, the Court must take care to intrude upon state regulation only to the extent necessary to vindicate the federal interest embodied in the antitrust laws. Where, as here, that interest is not furthered, intrusion constitutes an impermissible imposition upon the States.

For these various interrelated reasons, the Court concludes that the prohibition, express or implied, on publication by the Operating Companies of the Yellow Pages directories is not in the public interest. It will therefore require that the proposed judgment be modified to specify that there will be no such prohibition.

F. Removal of the Restrictions

It is probable that, over time, the Operating Companies will lose the ability to leverage their monopoly power into the competitive markets from which they must now be barred. This change could occur as a result of technological developments which eliminate the Operating Companies’ local exchange monopoly or from changes in the structures of the competitive markets. In either event, the need for the restrictions upheld in Subparts A through C will disappear, and the decree should therefore contain a mechanism by which they may be removed. ***

The standard for removal of restrictions proposed by the parties incorporates the Department of Justice’s view that the restrictions are justified by the mere existence of monopoly power. However, in the opinion of the Court, the removal of the restrictions should be governed by the same standard which the Court has applied in determining whether they are required in the first instance. Thus, a restriction will be removed upon a showing that there is no substantial possibility that an Operating Company could use its monopoly power to impede competition in the relevant market. ***

XII

Conclusion

The proposed reorganization of the Bell System raises issues of vast complexity. Because of their importance, not only to the parties but also to the telecommunications industry and to the public, the Court has discussed the various problems in substantial
detail. It is appropriate to summarize briefly the major issues and the Court’s decisions which are central to the proceeding.

A. The American telecommunications industry is presently dominated by one company—AT&T. It provides local and long-distance telephone service; it manufactures and markets the equipment used by telephone subscribers as well as that used in the telecommunications network; and it controls one of the leading communications research and development facilities in the world. According to credible evidence, this integrated structure has enabled AT&T for many years to undermine the efforts of competitors seeking to enter the telecommunications market.

The key to the Bell System’s power to impede competition has been its control of local telephone service. The local telephone network functions as the gateway to individual telephone subscribers. It must be used by long-distance carriers seeking to connect one caller to another. Customers will only purchase equipment which can readily be connected to the local network through the telephone outlets in their homes and offices. The enormous cost of the wires, cables, switches, and other transmission facilities which comprise that network has completely insulated it from competition. Thus, access to AT&T’s local network is crucial if long distance carriers and equipment manufacturers are to be viable competitors.

AT&T has allegedly used its control of this local monopoly to disadvantage these competitors in two principal ways. First, it has attempted to prevent competing long distance carriers and competing equipment manufacturers from gaining access to the local network, or to delay that access, thus placing them in an inferior position vis-à-vis AT&T’s own services. Second, it has supposedly used profits earned from the monopoly local telephone operations to subsidize its long distance and equipment businesses in which it was competing with others.

For a great many years, the Federal Communications Commission has struggled, largely without success, to stop practices of this type through the regulatory tools at its command. A lawsuit the Department of Justice brought in 1949 to curb similar practices ended in an ineffectual consent decree. Some other remedy is plainly required; hence the divestiture of the local Operating Companies from the Bell System. This divestiture will sever the relationship between this local monopoly and the other, competitive segments of AT&T, and it will thus ensure—certainly better than could any other type of relief—that the practices which allegedly have lain heavy on the telecommunications industry will not recur.

B. With the loss of control over the local network, AT&T will be unable to disadvantage its competitors, and the restrictions imposed on AT&T after the government’s first antitrust suit—which limited AT&T to the provision of telecommunications services—will no longer be necessary. The proposed decree accordingly removes these restrictions.

The decree will thus allow AT&T to become a vigorous competitor in the growing computer, computer-related, and information markets. Other large and experienced firms are presently operating in these markets, and there is therefore no reason to believe that AT&T will be able to achieve monopoly dominance in these industries as it did in telecommunications. At the same time, by use of its formidable scientific, engineering, and management resources, including particularly the capabilities of Bell Laboratories, AT&T should be able to make significant contributions to these fields, which are at the forefront of innovation and technology, to the benefit of American
consumers, national defense, and the position of American industry vis-a-vis foreign competition.

All of these developments are plainly in the public interest, and the Court will therefore approve this aspect of the proposed decree, with one exception. Electronic publishing, which is still in its infancy, holds promise to become an important provider of information—such as news, entertainment, and advertising—in competition with the traditional print, television, and radio media; indeed, it has the potential, in time, for actually replacing some of these methods of disseminating information.

Traditionally, the Bell System has simply distributed information provided by others; it has not been involved in the business of generating its own information. The proposed decree would, for the first time, allow AT&T to do both, and it would do so at a time when the electronic publishing industry is still in a fragile state of experimentation and growth and when electronic information can still most efficiently and most economically be distributed over AT&T’s long distance network. If, under these circumstances, AT&T were permitted to engage both in the transmission and the generation of information, there would be a substantial risk not only that it would stifle the efforts of other electronic publishers but that it would acquire a substantial monopoly over the generation of news in the more general sense. Such a development would strike at a principle which lies at the heart of the First Amendment: that the American people are entitled to a diversity of sources of information. In order to prevent this from occurring, the Court will require, as a condition of its approval of the proposed decree, that it be modified to preclude AT&T from entering the field of electronic publishing until the risk of its domination of that field has abated.

C. After the divestiture, the Operating Companies will possess a monopoly over local telephone service. According to the Department of Justice, the Operating Companies must be barred from entering all competitive markets to ensure that they will not misuse their monopoly power. The Court will not impose restrictions simply for the sake of theoretical consistency. Restrictions must be based on an assessment of the realistic circumstances of the relevant markets, including the Operating Companies’ ability to engage in anticompetitive behavior, their potential contribution to the market as an added competitor for AT&T, as well as upon the effects of the restrictions on the rates for local telephone service.

This standard requires that the Operating Companies be prohibited from providing long distance services and information services, and from manufacturing equipment used in the telecommunications industry. Participation in these fields carries with it a substantial risk that the Operating Companies will use the same anticompetitive techniques used by AT&T in order to thwart the growth of their own competitors. Moreover, contrary to the assumptions made by some, Operating Company involvement in these areas could not legitimately generate subsidies for local rates. Such involvement could produce substantial profits only if the local companies used their monopoly position to dislodge competitors or to provide subsidy for their competitive services or products—the very behavior the decree seeks to prevent.

Different considerations apply, however, to the marketing of customer premises equipment—the telephone and other devices used in subscribers’ homes and offices—and the production of the Yellow Pages advertising directories. For a variety of reasons, there is little likelihood that these companies will be able to use their monopoly position to disadvantage competitors in these areas. In addition, their marketing of
equipment will provide needed competition for AT&T, and the elimination of the restriction on their production of the Yellow Pages will generate a substantial subsidy for local telephone rates. The Court will therefore require that the proposed decree be modified to remove the restrictions on these two types of activities.

D. With respect to a number of subjects, the proposed decree establishes merely general principles and objectives, leaving the specific implementing details for subsequent action, principally by the plan of reorganization which AT&T is required to file within six months after entry of the judgment. The parties have also made informal promises, either to each other or to the Court, as to how they intend to interpret or implement various provisions. The Court has decided that its public interest responsibilities require that it establish a process for determining whether the plan of reorganization and other, subsequent actions by AT&T actually implement these principles and promises in keeping with the objectives of the judgment. Absent such a process, AT&T would have the opportunity to interpret and implement the broad principles of the decree in such a manner as to disadvantage its competitors, the Operating Companies, or both, or otherwise to act in a manner contrary to the public interest as interpreted by the Court in this opinion.

For that reason, the Court is requiring that the judgment be modified (1) to vest authority in the Court to enforce the provisions and principles of that judgment on its own rather than only at the request of a party; and (2) to provide for a proceeding, accessible to third party intervenors and to the chief executives of the seven new regional Operating Companies, in which the Court will determine whether the plan of reorganization is consistent with the decree’s general principles and promises.

E. For the reasons stated in this opinion, the Court will approve the proposed decree as in the public interest provided that the parties agree to the addition of the following new section ***.
AT&T Corp. v. Iowa Utilities Board  
525 U.S. 366 (1999)

JUSTICE SCALIA delivered the opinion of the Court: In this case, we address whether the Commission’s rules governing unbundled access are consistent with the statute.

I

Until the 1990s, local phone service was thought to be a natural monopoly. States typically granted an exclusive franchise in each local service area to a local exchange carrier (LEC), which owned, among other things, the local loops (wires connecting telephones to switches), the switches (equipment directing calls to their destinations), and the transport trunks (wires carrying calls between switches) that constitute a local exchange network. Technological advances, however, have made competition among multiple providers of local service seem possible, and Congress recently ended the longstanding regime of state-sanctioned monopolies.

The Telecommunications Act of 1996, Pub. L. 104-104, 110 Stat. 56, (1996 Act or Act) fundamentally restructures local telephone markets. States may no longer enforce laws that impede competition, and incumbent LECs are subject to a host of duties intended to facilitate market entry. Foremost among these duties is the LEC’s obligation under 47 U.S.C. § 251(c) to share its network with competitors. Under this provision, a requesting carrier can obtain access to an incumbent’s network in three ways: It can purchase local telephone services at wholesale rates for resale to end users; it can lease elements of the incumbent’s network “on an unbundled basis”; and it can interconnect its own facilities with the incumbent’s network.\textsuperscript{1} When an entrant seeks

\textsuperscript{1} 47 USC § 251(c) provides as follows:

Additional Obligations of Incumbent Local Exchange Carriers.

In addition to the duties contained in subsection (b) of this section, each incumbent local exchange carrier has the following duties:

(1) Duty to Negotiate
The duty to negotiate in good faith in accordance with section 252 of this title the particular terms and conditions of agreements to fulfill the duties described in paragraphs (1) through (5) of subsection (b) of this section, and this subsection. The requesting telecommunications carrier also has the duty to negotiate in good faith the terms and conditions of such agreements.

(2) Interconnection
The duty to provide, for the facilities and equipment of any requesting telecommunications carrier, interconnection with the local exchange carrier’s network—

(A) for the transmission and routing of telephone exchange service and exchange access;
(B) at any technically feasible point within the carrier’s network;
(C) that is at least equal in quality to that provided by the local exchange carrier to itself or to any subsidiary, affiliate, or any other party to which the carrier provides interconnection; and
(D) on rates, terms, and conditions that are just, reasonable, and nondiscriminatory, in accordance with the terms and conditions of the agreement and the requirements of this section and section 252 of this title.

(3) Unbundled Access
The duty to provide, to any requesting telecommunications carrier for the provision of a
access through any of these routes, the incumbent can negotiate an agreement without regard to the duties it would otherwise have under § 251(b)\(^2\) or (c). See § 252(a)(1). But if private negotiation fails, either party can petition the state commission that regulates telecommunications service, nondiscriminatory access to network elements on an unbundled basis at any technically feasible point on rates, terms, and conditions that are just, reasonable, and nondiscriminatory in accordance with the terms and conditions of the agreement and the requirements of this section and section 252 of this title. An incumbent local exchange carrier shall provide such unbundled network elements in a manner that allows requesting carriers to combine such elements in order to provide such telecommunications service.

(4) Resale
The duty—

(A) to offer for resale at wholesale rates any telecommunications service that the carrier provides at retail to subscribers who are not telecommunications carriers; and

(B) not to prohibit, and not to impose unreasonable or discriminatory conditions or limitations on, the resale of such telecommunications service, except that a State commission may, consistent with regulations prescribed by the Commission under this section, prohibit a reseller that obtains at wholesale rates a telecommunications service that is available at retail only to a category of subscribers from offering such service to a different category of subscribers.

(5) Notice of Changes
The duty to provide reasonable public notice of changes in the information necessary for the transmission and routing of services using that local exchange carrier's facilities or networks, as well as of any other changes that would affect the interoperability of those facilities and networks.

(6) Collocation
The duty to provide, on rates, terms, and conditions that are just, reasonable, and nondiscriminatory, for physical collocation of equipment necessary for interconnection or access to unbundled network elements at the premises of the local exchange carrier, except that the carrier may provide for virtual collocation if the local exchange carrier demonstrates to the State commission that physical collocation is not practical for technical reasons or because of space limitations.

\(^2\) Section 251(b) imposes the following duties on incumbents:

(1) Resale
The duty not to prohibit, and not to impose unreasonable or discriminatory conditions or limitations on, the resale of its telecommunications services.

(2) Number Portability
The duty to provide, to the extent technically feasible, number portability in accordance with requirements prescribed by the Commission.

(3) Dialing Parity The duty to provide dialing parity to competing providers of telephone exchange service and telephone toll service, and the duty to permit all such providers to have nondiscriminatory access to telephone numbers, operator services, directory assistance, and directory listing, with no unreasonable dialing delays.

(4) Access to Rights-of-Way
The duty to afford access to the poles, ducts, conduits, and rights-of-way of such carrier to competing providers of telecommunications services on rates, terms, and conditions that are consistent with section 224 of this title.

(5) Reciprocal Compensation
The duty to establish reciprocal compensation arrangements for the transport and termination of telecommunications.
local phone service to arbitrate open issues, which arbitration is subject to § 251 and the FCC regulations promulgated thereunder.

Six months after the 1996 Act was passed, the FCC issued its First Report and Order implementing the local-competition provisions. In re Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, 11 FCC Rcd 15499 (1996) (First Report & Order). The numerous challenges to this rulemaking, filed across the country by incumbent LECs and state utility commissions, were consolidated in the United States Court of Appeals for the Eighth Circuit.

*** Incumbent LECs also made several challenges, only some of which are relevant here, to the rules implementing the 1996 Act’s requirement of unbundled access. See 47 U.S.C. § 251(c)(3). Rule 319, the primary unbundling rule, sets forth a minimum number of network elements that incumbents must make available to requesting carriers. See 47 CFR § 51.319 (1997). The LECs complained that, in compiling this list, the FCC had virtually ignored the 1996 Act’s requirement that it consider whether access to proprietary elements was “necessary” and whether lack of access to nonproprietary elements would “impair” an entrant’s ability to provide local service. See § 251(d)(2). In addition, the LECs thought that the list included items (like directory assistance and caller I.D.) that did not meet the statutory definition of “network element.” See § 153(29). The Eighth Circuit rebuffed both arguments, holding that the Commission’s interpretations of the “necessary and impair” standard and the definition of “network element” were reasonable and hence lawful under Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc., 467 U.S. 837 (1984).

When it promulgated its unbundling rules, the Commission explicitly declined to impose a requirement of facility ownership on carriers who sought to lease network elements. First Report & Order ¶¶ 328-340. Because the list of elements that Rule 319 made available was so extensive, the effect of this omission was to allow competitors to provide local phone service relying solely on the elements in an incumbent’s network. The LECs argued that this “all elements” rule undermined the 1996 Act’s goal of encouraging entrants to develop their own facilities. The Court of Appeals, however, deferred to the FCC’s approach. Nothing in the 1996 Act itself imposed a requirement of facility ownership, and the court was of the view that the language of § 251(c)(3) indicated that “a requesting carrier may achieve the capability to provide telecommunications service completely through access to the unbundled elements of an incumbent LEC’s network.” 120 F.3d, at 814.

Given the sweep of the “all elements” rule, however, the Eighth Circuit thought that the FCC went too far in its Rule 315(b), which forbids incumbents to separate network elements before leasing them to competitors. 47 CFR § 51.315(b) (1997). Taken together, the two rules allowed requesting carriers to lease the incumbent’s entire, preassembled network. The Court of Appeals believed that this would render the resale provision of the statute a dead letter, because by leasing the entire network rather than purchasing and reselling service offerings, entrants could obtain the same product—finished service—at a cost-based, rather than wholesale, rate. Apparently reasoning that the word “unbundled” in § 251(c)(3) meant “physically separated,” the court vacated Rule 315(b) for requiring access to the incumbent LEC’s network elements “on a bundled rather than an unbundled basis.” Ibid. ***
III

A
We turn next to the unbundling rules, and come first to the incumbent LECs’ complaint that the FCC included within the features and services that must be provided to competitors under Rule 319 items that do not (as they must) meet the statutory definition of “network element”—namely, operator services and directory assistance, operational support systems (OSS), and vertical switching functions such as caller I.D., call forwarding, and call waiting. See 47 CFR §§ 51.319(f)-(g) (1997). The statute defines “network element” as

a facility or equipment used in the provision of a telecommunications service. Such term also includes features, functions, and capabilities that are provided by means of such facility or equipment, including subscriber numbers, databases, signaling systems, and information sufficient for billing and collection or used in the transmission, routing, or other provision of a telecommunications service.


Given the breadth of this definition, it is impossible to credit the incumbents argument that a “network element” must be part of the physical facilities and equipment used to provide local phone service. Operator services and directory assistance, whether they involve live operators or automation, are “features, functions, and capabilities ... provided by means of” the network equipment. OSS, the incumbent’s background software system, contains essential network information as well as programs to manage billing, repair ordering, and other functions. Section 153(29)’s reference to “databases ... and information sufficient for billing and collection or used in the transmission, routing, or other provision of a telecommunications service” provides ample basis for treating this system as a “network element.” And vertical switching features, such as caller I.D., are “functions ... provided by means of” the switch, and thus fall squarely within the statutory definition. We agree with the Eighth Circuit that the Commission’s application of the “network element” definition is eminently reasonable. See *Chevron v. NRDC*, 467 U.S., at 866.

B
We are of the view, however, that the FCC did not adequately consider the “necessary and impair” standards when it gave blanket access to these network elements, and others, in Rule 319. That rule requires an incumbent to provide requesting carriers with access to a minimum of seven network elements: the local loop, the network interface device, switching capability, interoffice transmission facilities, signaling networks and call-related databases, operations support systems functions, and operator services and directory assistance. 47 CFR § 51.319 (1997). If a requesting carrier wants access to additional elements, it may petition the state commission, which can make other elements available on a case-by-case basis. § 51.317.

Section 251(d)(2) of the Act provides:

In determining what network elements should be made available for purposes of subsection (c)(3) of this section, the Commission shall consider, at a minimum, whether—

(A) access to such network elements as are proprietary in nature is necessary; and
(B) the failure to provide access to such network elements would impair the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer.

The incumbents argue that § 251(d)(2) codifies something akin to the “essential facilities” doctrine of antitrust theory, opening up only those “bottleneck” elements unavailable elsewhere in the marketplace. We need not decide whether, as a matter of law, the 1996 Act requires the FCC to apply that standard; it may be that some other standard would provide an equivalent or better criterion for the limitation upon network-element availability that the statute has in mind. But we do agree with the incumbents that the Act requires the FCC to apply some limiting standard, rationally related to the goals of the Act, which it has simply failed to do. In the general statement of its methodology set forth in the First Report and Order, the Commission announced that it would regard the “necessary” standard as having been met regardless of whether “requesting carriers can obtain the requested proprietary element from a source other than the incumbent,” since “[r]quiring new entrants to duplicate unnecessarily even a part of the incumbent’s network could generate delay and higher costs for new entrants, and thereby impede entry by competing local providers and delay competition, contrary to the goals of the 1996 Act.” First Report & Order ¶ 283. And it announced that it would regard the “impairment” standard as having been met if “the failure of an incumbent to provide access to a network element would decrease the quality, or increase the financial or administrative cost of the service a requesting carrier seeks to offer, compared with providing that service over other unbundled elements in the incumbent LEC’s network,” id., ¶ 285 (emphasis added)—which means that comparison with self-provision, or with purchasing from another provider, is excluded. Since any entrant will request the most efficient network element that the incumbent has to offer, it is hard to imagine when the incumbent’s failure to give access to the element would not constitute an “impairment” under this standard. The Commission asserts that it deliberately limited its inquiry to the incumbent’s own network because no rational entrant would seek access to network elements from an incumbent if it could get better service or prices elsewhere. That may be. But that judgment allows entrants, rather than the Commission, to determine whether access to proprietary elements is necessary, and whether the failure to obtain access to nonproprietary elements would impair the ability to provide services. The Commission cannot, consistent with the statute, blind itself to the availability of elements outside the incumbent’s network. That failing alone would require the Commission’s rule to be set aside. In addition, however, the Commission’s assumption that any increase in cost (or decrease in quality) imposed by denial of a network element renders access to that element “necessary,” and causes the failure to provide that element to “impair” the entrant’s ability to furnish its desired services is simply not in accord with the ordinary and fair meaning of those terms. An entrant whose anticipated annual profits from the proposed service are reduced from 100% of investment to 99% of investment has perhaps been “impaired” in its ability to amass earnings, but has not ipso facto been “impair[ed] ... in its ability to provide the services it seeks to offer”; and it cannot realistically be said that the network element enabling it to raise its profits to 100% is “necessary.”

Justice Souter points out that one can say his ability to replace a light bulb is “impaired” by the absence of a ladder, and that a ladder is “necessary” to replace the bulb, even though one “could stand instead on a chair, a milk can, or eight volumes of Gibbon.” True enough (and nicely put), but the proper analogy here, it seems to us, is not the absence of a ladder, but the
of perfect competition, in which all carriers are providing their service at marginal cost, the Commission’s total equating of increased cost (or decreased quality) with “necessity” and “impairment” might be reasonable; but it has not established the existence of such an ideal world. We cannot avoid the conclusion that, if Congress had wanted to give blanket access to incumbents’ networks on a basis as unrestricted as the scheme the Commission has come up with, it would not have included § 251(d)(2) in the statute at all. It would simply have said (as the Commission in effect has) that whatever requested element can be provided must be provided.

When the full record of these proceedings is examined, it appears that that is precisely what the Commission thought Congress had said. The FCC was content with its expansive methodology because of its misunderstanding of § 251(c)(3), which directs an incumbent to allow a requesting carrier access to its network elements “at any technically feasible point.” The Commission interpreted this to “impos[e] on an incumbent LEC the duty to provide all network elements for which it is technically feasible to provide access,” and went on to “conclude that we have authority to establish regulations that are co-extensive” with this duty, First Report & Order ¶ 278 (emphasis added). See also id., ¶ 286 (“[w]e conclude that the statute does not require us to interpret the “impairment” standard in a way that would significantly diminish the obligation imposed by section 251(c)(3”). As the Eighth Circuit held, that was undoubtedly wrong: Section 251(c)(3) indicates “where unbundled access must occur, not which [network] elements must be unbundled.” 120 F.3d, at 810. The Commission does not seek review of the Eighth Circuit’s holding on this point, and we bring it into our discussion only because the Commission’s application of § 251(d)(2) was colored by this error. The Commission began with the premise that an incumbent was obliged to turn over as much of its network as was “technically feasible,” and viewed (d)(2) as merely permitting it to soften that obligation by regulatory grace:

To give effect to both sections 251(c)(3) and 251(d)(2), we conclude that the proprietary and impairment standards in section 251(d)(2) grant us the authority to refrain from requiring incumbent LECs to provide all network elements for which it is technically feasible to provide access on an unbundled basis.

First Report & Order ¶ 279.

The Commission’s premise was wrong. Section 251(d)(2) does not authorize the Commission to create isolated exemptions from some underlying duty to make all network elements available. It requires the Commission to determine on a rational basis which network elements must be made available, taking into account the objectives of the Act and giving some substance to the “necessary” and “impair” requirements. The latter is not achieved by disregarding entirely the availability of elements outside the network, and by regarding any “increased cost or decreased service quality” as establishing a “necessity” and an “impair[ment]” of the ability to “provide ... services.”

The Commission generally applied the above described methodology as it considered the various network elements seriatim. Though some of these sections contain presence of a ladder tall enough to enable one to do the job, but not without stretching one’s arm to its full extension. A ladder one-half inch taller is not, “within an ordinary and fair meaning of the word,” “necessary,” nor does its absence “impair” one’s ability to do the job. We similarly disagree with Justice Souter that a business can be impaired in its ability to provide services— even impaired in that ability “in an ordinary, weak sense of impairment,” —when the business receives a handsome profit but is denied an even handsomer one.
statements suggesting that the Commission’s action might be supported by a higher standard, no other standard is consistently applied and we must assume that the Commission’s expansive methodology governed throughout. Because the Commission has not interpreted the terms of the statute in a reasonable fashion, we must vacate 47 CFR § 51.319 (1997).

C

The incumbent LECs also renew their challenge to the “all elements” rule, which allows competitors to provide local phone service relying solely on the elements in an incumbent’s network. This issue may be largely academic in light of our disposition of Rule 319. If the FCC on remand makes fewer network elements unconditionally available through the unbundling requirement, an entrant will no longer be able to lease every component of the network. But whether a requesting carrier can access the incumbent’s network in whole or in part, we think that the Commission reasonably omitted a facilities-ownership requirement. The 1996 Act imposes no such limitation; if anything, it suggests the opposite, by requiring in § 251(c)(3) that incumbents provide access to “any” requesting carrier. We agree with the Court of Appeals that the Commission’s refusal to impose a facilities-ownership requirement was proper.

D

Rule 315(b) forbids an incumbent to separate already-combined network elements before leasing them to a competitor. As they did in the Court of Appeals, the incumbents object to the effect of this rule when it is combined with others before us today. TELRIC\(^3\) allows an entrant to lease network elements based on forward-looking costs, Rule 319 subjects virtually all network elements to the unbundling requirement, and the all-elements rule allows requesting carriers to rely only on the incumbent’s network in providing service. When Rule 315(b) is added to these, a competitor can lease a complete, preassembled network at (allegedly very low) cost-based rates.

The incumbents argue that this result is totally inconsistent with the 1996 Act. They say that it not only eviscerates the distinction between resale and unbundled access, but that it also amounts to Government-sanctioned regulatory arbitrage. Currently, state laws require local phone rates to include a “universal service” subsidy. Business customers, for whom the cost of service is relatively low, are charged significantly above cost to subsidize service to rural and residential customers, for whom the cost of service is relatively high. Because this universal-service subsidy is built into retail rates, it is passed on to carriers who enter the market through the resale provision. Carriers who purchase network elements at cost, however, avoid the subsidy altogether and can lure business customers away from incumbents by offering rates closer to cost. This, of course, would leave the incumbents holding the bag for universal service.

As was the case for the all-elements rule, our remand of Rule 319 may render the incumbents concern on this score academic. Moreover, § 254 requires that universal-service subsidies be phased out, so whatever possibility of arbitrage remains will be

\(^3\) TELRIC pricing is based upon the cost of operating a hypothetical network built with the most efficient technology available. Incumbents argued below that this method was unreasonable because it stranded their historic costs and underestimated the actual costs of providing interconnection and unbundled access. The Eighth Circuit did not reach this issue, and the merits of TELRIC are not before us. [footnote moved from original location]
only temporary. In any event, we cannot say that Rule 315(b) unreasonably interprets the statute.

Section 251(c)(3) establishes:

The duty to provide, to any requesting telecommunications carrier for the provision of a telecommunications service, nondiscriminatory access to network elements on an unbundled basis at any technically feasible point on rates, terms, and conditions that are just, reasonable, and nondiscriminatory in accordance with the terms and conditions of the agreement and the requirements of this section and section 252 .... An incumbent local exchange carrier shall provide such unbundled network elements in a manner that allows requesting carriers to combine such elements in order to provide such telecommunications service.

Because this provision requires elements to be provided in a manner that “allows requesting carriers to combine” them, incumbents say that it contemplates the leasing of network elements in discrete pieces. It was entirely reasonable for the Commission to find that the text does not command this conclusion. It forbids incumbents to sabotage network elements that are provided in discrete pieces, and thus assuredly contemplates that elements may be requested and provided in this form (which the Commission’s rules do not prohibit). But it does not say, or even remotely imply, that elements must be provided only in this fashion and never in combined form. Nor are we persuaded by the incumbents’ insistence that the phrase “on an unbundled basis” in § 251(c)(3) means “physically separated.” The dictionary definition of “unbundled” (and the only definition given, we might add) matches the FCC’s interpretation of the word: “to give separate prices for equipment and supporting services.” Webster’s Ninth New Collegiate Dictionary 1283 (1985).

The reality is that § 251(c)(3) is ambiguous on whether leased network elements may or must be separated, and the rule the Commission has prescribed is entirely rational, finding its basis in § 251(c)(3)’s nondiscrimination requirement. As the Commission explains, it is aimed at preventing incumbent LECs from “disconnect[ing] previously connected elements, over the objection of the requesting carrier, not for any productive reason, but just to impose wasteful reconnection costs on new entrants.” Reply Brief for Federal Petitioners 23. It is true that Rule 315(b) could allow entrants access to an entire preassembled network. In the absence of Rule 315(b), however, incumbents could impose wasteful costs on even those carriers who requested less than the whole network. It is well within the bounds of the reasonable for the Commission to opt in favor of ensuring against an anticompetitive practice. ***

***

It would be gross understatement to say that the Telecommunications Act of 1996 is not a model of clarity. It is in many important respects a model of ambiguity or indeed even self-contradiction. That is most unfortunate for a piece of legislation that profoundly affects a crucial segment of the economy worth tens of billions of dollars. The 1996 Act can be read to grant (borrowing a phrase from incumbent GTE) “most promiscuous rights” to the FCC vis-à-vis the state commissions and to competing carriers vis-a-vis the incumbents—and the Commission has chosen in some instances to read it that way. But Congress is well aware that the ambiguities it chooses to produce in a statute will be resolved by the implementing agency, see Chevron v. NRDC, 467 U.S., at 842-843. We can only enforce the clear limits that the 1996 Act contains, which in the present case invalidate only Rule 319.
For the reasons stated, the July 18, 1997 judgment of the Court of Appeals, 120 F.3d 753, is reversed in part and affirmed in part; the August 22, 1997 judgment of the Court of Appeals, 124 F.3d 934, is reversed in part; and the cases are remanded for proceedings consistent with this opinion.

It is so ordered.

JUSTICE SOUTER, concurring in part and dissenting in part: *** I disagree with the Court’s holding that the Commission was unreasonable in its interpretation of 47 U.S.C. § 251(d)(2), which requires it to consider whether competitors” access to network elements owned by Local Exchange Companies (LECs) is “necessary” and whether failure to provide access to such elements would “impair” competitors’ ability to provide services. Because I think that, under Chevron, the Commission reasonably interpreted its duty to consider necessity and impairment, I respectfully dissent from Part III-B of the Court’s opinion.

The statutory provision in question specifies that in determining what network elements should be made available on an unbundled basis to potential competitors of the LECs, the Commission “shall consider” whether “access to such network elements as are proprietary in nature is necessary,” § 251(d)(2)(A), and whether “the failure to provide access” to network elements “would impair the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer,” § 251(d)(2)(B). The Commission interpreted “necessary” to mean “prerequisite for competition,” in the sense that without access to certain proprietary network elements, competitors “ability to compete would be significantly impaired or thwarted.” In re Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, ¶ 282, 11 FCC Rcd 15,499, 15641-15642 (1996) (First Report & Order). On this basis, it decided to require access to such elements unless the incumbent LEC could prove both that the requested network element was proprietary and that the requesting competitor could offer the same service through the use of another, nonproprietary element offered by the incumbent.

The Commission interpreted “impair” to mean “diminished in value,” and explained that a potential competitor’s ability to offer services would diminish in value when the quality of those services would decline or their price rise, absent the element in question. The Commission chose to apply this standard “by evaluating whether a carrier could offer a service using other unbundled elements within an incumbent LEC’s network,” ibid., and decided that whenever it would be more expensive for a competitor to offer a service using other available network elements, or whenever the service offered using those other elements would be of lower quality, the LEC must offer the desired element to the competitor, ibid.

In practice, as the Court observes, the Commission’s interpretation will probably allow a competitor to obtain access to any network element that it wants; a competitor is unlikely in fact to want an element that would be economically unjustifiable, and a weak economic justification will do. Under Chevron, the only question before us is whether the Commission’s interpretation, obviously favorable to potential competitors, falls outside the bounds of reasonableness.

As a matter of textual justification, certainly, the Commission is not to be faulted. The words “necessary” and “impair” are ambiguous in being susceptible to a fairly wide range of meanings, and doubtless can carry the meanings the Commission identified. If I want to replace a light bulb, I would be within an ordinary and fair meaning of the word “necessary” to say that a stepladder is “necessary” to install the bulb, even
though I could stand instead on a chair, a milk can, or eight volumes of Gibbon. I could just as easily say that the want of a ladder would “impair” my ability to install the bulb under the same circumstances. These examples use the concepts of necessity and impairment in what might be called their weak senses, but these are unquestionably still ordinary uses of the words.

Accordingly, the Court goes too far when it says that under “the ordinary and fair meaning” of “necessary” and “impair,” “[a]n entrant whose anticipated annual profits from the proposed service are reduced from 100% of investment to 99% of investment ... has not ipso facto been ‘impair[ed] ... in its ability to provide the services it seeks to offer’; and it cannot realistically be said that the network element enabling it to raise profits to 100% is ‘necessary.’” A service is surely “necessary” to my business in an ordinary, weak sense of necessity when that service would allow me to realize more profits, and a business can be said to be “impaired” in delivery of services in an ordinary, weak sense of impairment when something stops the business from getting the profit it wants for those services.

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**Verizon Communications, Inc. v. Federal Communications Commission**


SOUTER, J., delivered the opinion of the Court: These cases arise under the Telecommunications Act of 1996. Each is about the power of the Federal Communications Commission to regulate a relationship between monopolistic companies providing local telephone service and companies entering local markets to compete with the incumbents. Under the Act, the new entrants are entitled, among other things, to lease elements of the local telephone networks from the incumbent monopolists. The issue [is] whether the FCC is authorized to require state utility commissions to set the rates charged by the incumbents for leased elements on a forward-looking basis untied to the incumbents’ investment.

II

The 1996 Act both prohibits state and local regulation that impedes the provision of “telecommunications service,” § 253(a), and obligates incumbent carriers to allow competitors to enter their local markets, § 251(c). Section 251(c) addresses the practical difficulties of fostering local competition by recognizing three strategies that a potential competitor may pursue. First, a competitor entering the market (a “requesting” carrier, § 251(c)(2)), may decide to engage in pure facilities-based competition, that is, to build its own network to replace or supplement the network of the incumbent. If an entrant takes this course, the Act obligates the incumbent to “interconnect” the competitor’s facilities to its own network to whatever extent is necessary to allow the competitor’s facilities to operate. §§ 251(a) and (c)(2). At the other end of the spectrum, the statute permits an entrant to skip construction and instead simply to buy and resell “telecommunications service,” which the incumbent has a duty to sell at wholesale. §§ 251(b)(1) and (c)(4). Between these extremes, an entering competitor may choose to lease certain of an incumbent’s “network elements,” which the incumbent has a duty to provide “on an unbundled basis’ at terms that are “just, reasonable, and nondiscriminatory.” § 251(c)(3).
Since wholesale markets for companies engaged in resale, leasing, or interconnection of facilities cannot be created without addressing rates, Congress provided for rates to be set either by contracts between carriers or by state utility commission rate orders. §§ 252(a)-(b). Like other federal utility statutes that authorize contracts approved by a regulatory agency in setting rates between businesses, e.g., 16 U.S.C. § 824d(d) (Federal Power Act); 15 U.S.C. § 717c(c) (Natural Gas Act), the Act permits incumbent and entering carriers to negotiate private rate agreements, 47 U.S.C. § 252(a); see also § 251(c)(1) (duty to negotiate in good faith). State utility commissions are required to accept any such agreement unless it discriminates against a carrier not a party to the contract, or is otherwise shown to be contrary to the public interest. §§ 252(e)(1) and (e)(2)(A). Carriers, of course, might well not agree, in which case an entering carrier has a statutory option to request mediation by a state commission, § 252(a)(2). But the option comes with strings, for mediation subjects the parties to the duties specified in § 251 and the pricing standards set forth in § 252(d), as interpreted by the FCC’s regulations, § 252(e)(2)(B). These regulations are at issue here.

As to pricing, the Act provides that when incumbent and requesting carriers fail to agree, state commissions will set a “just and reasonable” and “nondiscriminatory” rate for interconnection or the lease of network elements based on “the cost of providing the ... network element,” which “may include a reasonable profit.” § 252(d)(1). In setting these rates, the state commissions are, however, subject to that important limitation previously unknown to utility regulation: the rate must be “determined without reference to a rate-of-return or other rate-based proceeding.” Ibid. In AT&T Corp. v. Iowa Utilities Bd., 525 U.S. 366, 384-385 (1999), this Court upheld the FCC’s jurisdiction to impose a new methodology on the States when setting these rates. The attack today is on the legality and logic of the particular methodology the Commission chose.

*** So far as it bears on where we are today, the initial decision by the Eighth Circuit held that the FCC had no authority to control the methodology of state commissions setting the rates incumbent local-exchange carriers could charge entrants for network elements, 47 CFR § 51.505(b)(1) (1997). Iowa Utilities Bd. v. FCC, 120 F.3d 753, 800 (1997), aff’d in part and rev’d in part, 525 U.S. 366 (1999). *** This Court affirmed in part and in larger part reversed. AT&T Corp. v. Iowa Utilities Bd., 525 U.S. 366, 397 (1999). We reversed in upholding the FCC’s jurisdiction to “design a pricing methodology” to bind state ratemaking commissions, id., at 385 ***. The case then returned to the Eighth Circuit. Id., at 397.

With the FCC’s general authority to establish a pricing methodology secure, the incumbent carriers’ primary challenge on remand went to the method that the Commission chose. *** As for the method to derive a “nondiscriminatory,” “just and reasonable” rate for network elements,” the Act requires the FCC to decide how to value “the cost ... of providing the ... network element [which] may include a reasonable profit,” although the FCC is (as already seen) forbidden to allow any “reference to a rate-of-return or other rate-based proceeding,” § 252(d)(1). Within the discretion left to it after eliminating any dependence on a “rate of return or other rate-based proceeding,” the Commission chose a way of treating “cost” as “forward-looking economic cost,” 47 CFR § 51.505 (1997), something distinct from the kind of historically based cost generally relied upon in valuing a rate base after FPC v. Hope Natural Gas, 320 U.S. 591 (1944). In Rule 505, the FCC defined the “forward-looking economic cost of an element [as] the sum of (1) the total element long-run incremental cost of the element
[TELRIC]; [and] (2) a reasonable allocation of forward-looking common costs,” § 51.505(a), common costs being “costs incurred in providing a group of elements that “cannot be attributed directly to individual elements,” § 51.505(c)(1). Most important of all, the FCC decided that the TELRIC “should be measured based on the use of the most efficient telecommunications technology currently available and the lowest cost network configuration, given the existing location of the incumbent[s] wire centers.” § 51.505(b)(1).

“The TELRIC of an element has three components, the operating expenses, the depreciation cost, and the appropriate risk-adjusted cost of capital.” First Report and Order ¶ 703 (footnote omitted). A concrete example may help. Assume that it would cost $1 a year to operate a most-efficient loop element; that it would take $10 for interest payments on the capital a carrier would have to invest to build the lowest cost loop centered upon an incumbent carrier’s existing wire centers (say $100, at 10 percent per annum); and that $9 would be reasonable for depreciation on that loop (an 11-year useful life); then the annual TELRIC for the loop element would be $20.

The Court of Appeals understood § 252(d)(1)’s reference to “the cost ... of providing the ... network element” to be ambiguous as between “forward-looking” and “historical” cost, so that a forward-looking ratesetting method would presumably be a reasonable implementation of the statute. But the Eighth Circuit thought the ambiguity afforded no leeway beyond that, and read the Act to require any forward-looking methodology to be “based on the incremental costs that an [incumbent] actually incurs or will incur in providing ... the unbundled access to its specific network elements.” 219 F.3d, at 751-753. Hence, the Eighth Circuit held that § 252(d)(1) foreclosed the use of the TELRIC methodology. In other words, the court read the Act as plainly requiring rates based on the “actual” not “hypothetical” “cost ... of providing the ... network element,” and reasoned that TELRIC was clearly the latter. Id., at 750-751. The Eighth Circuit added, however, that if it were wrong and TELRIC were permitted, the claim that in prescribing TELRIC the FCC had effected an unconstitutional taking would not be “ripe” until “resulting rates have been determined and applied.” Id., at 753-754.

*** Before us, the incumbent local-exchange carriers claim error in the Eighth Circuit’s holding that a “forward-looking cost” methodology (as opposed to the use of “historical” cost) is consistent with § 252(d)(1), and its conclusion that the use of the TELRIC forward-looking cost methodology presents no “ripe” takings claim. The FCC and the entrants, on the other side, seek review of the Eighth Circuit’s invalidation of the TELRIC methodology ***

III

A

The incumbent carriers’ first attack charges the FCC with ignoring the plain meaning of the word “cost” as it occurs in the provision of § 252(d)(1) that “the just and reasonable rate for network elements ... shall be ... based on the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing the ... network element ... .” The incumbents do not argue that in theory the statute precludes any forward-looking methodology, but they do claim that the cost of providing a competitor with a network element in the future must be calculated using the incumbent’s past investment in the element and the means of providing it. They contend that “cost” in the statute refers to “historical” cost, which they define as “what was in fact paid”
for a capital asset, as distinct from “value,” or “the price that would be paid on the open market.” Brief for Petitioners in No. 00-511, p. 19. They say that the technical meaning of “cost” is “past capital expenditure,” *ibid.*, and they suggest an equation between “historical” and “embedded” costs, *id.*, at 20, which the FCC defines as “the costs that the incumbent LEC incurred in the past and that are recorded in the incumbent LEC’s books of accounts,” 47 CFR § 51.505(d)(1) (1997). The argument boils down to the proposition that “the cost of providing the network element” can only mean, in plain language and in this particular technical context, the past cost to an incumbent of furnishing the specific network element actually, physically, to be provided.

The incumbents have picked an uphill battle. At the most basic level of common usage, “cost” has no such clear implication. A merchant who is asked about “the cost of providing the goods” he sells may reasonably quote their current wholesale market price, not the cost of the particular items he happens to have on his shelves, which may have been bought at higher or lower prices.

When the reference shifts from common speech into the technical realm, the incumbents still have to attack uphill. To begin with, even when we have dealt with historical costs as a ratesetting basis, the cases have never assumed a sense of “cost” as generous as the incumbents seem to claim. “Cost” as used in calculating the rate base under the traditional cost-of-service method did not stand for all past capital expenditures, but at most for those that were prudent, while prudent investment itself could be denied recovery when unexpected events rendered investment useless, *Duquesne Light Co. v. Barasch*, 488 U.S. 299, 312 (1989). And even when investment was wholly includable in the rate base, ratemakers often rejected the utilities’ “embedded costs,” their own book-value estimates, which typically were geared to maximize the rate base with high statements of past expenditures and working capital, combined with unduly low rates of depreciation. See, e.g., *Hope Natural Gas*, 320 U.S., at 597-598. It would also be a mistake to forget that “cost” was a term in value-based ratemaking and has figured in contemporary state and federal ratemaking untethered to historical valuation.

What is equally important is that the incumbents’ plain-meaning argument ignores the statutory setting in which the mandate to use “cost” in valuing network elements occurs. First, the Act uses “cost” as an intermediate term in the calculation of “just and reasonable rates,” 47 U.S.C. § 252(d)(1), and it was the very point of *Hope Natural Gas* that regulatory bodies required to set rates expressed in these terms have ample discretion to choose methodology, *320 U.S.*, at 602. Second, it would have been passing strange to think Congress tied “cost” to historical cost without a more specific indication, when the very same sentence that requires “cost” pricing also prohibits any reference to a “rate-of-return or other rate-based proceeding,” § 252(d)(1), each of which has been identified with historical cost ever since *Hope Natural Gas* was decided. ***

B

The incumbents’ alternative argument is that even without a stern anchor in calculating “the cost ... of providing the ... network element,” the particular forward-looking methodology the FCC chose is neither consistent with the plain language of § 252(d)(1) nor within the zone of reasonable interpretation subject to deference under *Chevron U.S. A. Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837, 843-845 (1984). This is so,
they say, because TELRIC calculates the forward-looking cost by reference to a hypothetical, most efficient element at existing wire-centers, not the actual network element being provided.

1

The short answer to the objection that TELRIC violates plain language is much the same as the answer to the previous plain-language argument, for what the incumbents call the “hypothetical” element is simply the element valued in terms of a piece of equipment an incumbent may not own. This claim, like the one just considered, is that plain language bars a definition of “cost” untethered to historical investment, and as explained already, the term “cost” is simply too protean to support the incumbents’ argument.

2

Similarly, the claim that TELRIC exceeds reasonable interpretative leeway is open to the objection already noted, that responsibility for “just and reasonable” rates leaves methodology largely subject to discretion. The incumbents nevertheless field three arguments. They contend, first, that a method of calculating wholesale lease rates based on the costs of providing hypothetical, most efficient elements, may simulate the competition envisioned by the Act but does not induce it. Second, they argue that even if rates based on hypothetical elements could induce competition in theory, TELRIC cannot do this, because it does not provide the depreciation and risk-adjusted capital costs that the theory compels. Finally, the incumbents say that even if these objections can be answered, TELRIC is needlessly, and hence unreasonably, complicated and impracticable.

a

The incumbents’ basic critique of TELRIC is that by setting rates for leased network elements on the assumption of perfect competition, TELRIC perversely creates incentives against competition in fact. The incumbents say that in purporting to set incumbents’ wholesale prices at the level that would exist in a perfectly competitive market (in order to make retail prices similarly competitive), TELRIC sets rates so low that entrants will always lease and never build network elements. And even if an entrant would otherwise consider building a network element more efficient than the best one then on the market (the one assumed in setting the TELRIC rate), it would likewise be deterred by the prospect that its lower cost in building and operating this new element would be immediately available to its competitors; under TELRIC, the incumbents assert, the lease rate for an incumbent’s existing element would instantly drop to match the marginal cost of the entrant’s new element once built. According to the incumbents, the result will be, not competition, but a sort of parasitic free-riding, leaving TELRIC incapable of stimulating the facilities-based competition intended by Congress.

We think there are basically three answers to this no-stimulation claim of unreasonableness: (1) the TELRIC methodology does not assume that the relevant markets are perfectly competitive, and the scheme includes several features of inefficiency that undermine the plausibility of the incumbents’ no-stimulation argument; (2) comparison of TELRIC with alternatives proposed by the incumbents as more reasonable are plausibly answered by the FCC’s stated reasons to reject the alternatives; and (3) actual
investment in competing facilities since the effective date of the Act simply belies the no-stimulation argument’s conclusion.

(1)
The basic assumption of the incumbents’ no-stimulation argument is contrary to fact. As we explained, the argument rests on the assumption that in a perfectly efficient market, no one who can lease at a TELRIC rate will ever build. But TELRIC does not assume a perfectly efficient wholesale market or one that is likely to resemble perfection in any foreseeable time. ***

Not only that, but the FCC has of its own accord allowed for inefficiency in the TELRIC design in additional ways affecting the likelihood that TELRIC will squelch competition in facilities. First, the Commission has qualified any assumption of efficiency by requiring ratesetters to calculate cost on the basis of “the existing location of the incumbent’s wire centers.” 47 CFR § 51.505(b)(1) (1997). This means that certain network elements, principally local-loop elements, will not be priced at their most efficient cost and configuration to the extent, say, that a shorter loop could serve a local exchange if the incumbent’s wire centers were relocated for a snugger fit with the current geography of terminal locations.

Second, TELRIC rates in practice will differ from the products of a perfectly competitive market owing to built-in lags in price adjustments. In a perfectly competitive market, retail prices drop instantly to the marginal cost of the most efficient company. As the incumbents point out, this would deter market entry because a potential entrant would know that even if it could provide a retail service at a lower marginal cost, it would instantly lose that competitive edge once it entered the market and competitors adjusted to match its price. Wholesale TELRIC rates, however, are set by state commissions, usually by arbitrated agreements with 3- or 4-year terms, and no one claims that a competitor could receive immediately on demand a TELRIC rate on a leased element at the marginal cost of the entrant who introduces a more efficient element.

But even if a competitor could call for a new TELRIC rate proceeding immediately upon the introduction of a more efficient element by a competing entrant, the competitor would not necessarily know enough to make the call; the fact of the element’s greater efficiency would only become apparent when reflected in lower retail prices drawing demand away from existing competitors (including the incumbent), forcing them to look to lowering their own marginal costs. In practice, it would take some time for the innovating entrant to install the new equipment, to engage in marketing offering a lower retail price to attract business, and to steal away enough customer subscriptions (given the limited opportunity to capture untapped customers for local telephone service) for competitors to register the drop in demand.

Finally, it bears reminding that the FCC prescribe measurement of the TELRIC “based on the use of the most efficient telecommunications technology currently available,” 47 CFR § 51.505(b)(1) (1997). Owing to that condition of current availability, the marginal cost of a most-efficient element that an entrant alone has built and uses would not set a new pricing standard until it became available to competitors as an alternative to the incumbent’s corresponding element.

As a reviewing Court we are, of course, in no position to assess the precise economic significance of these and other exceptions to the perfectly functioning market that the incumbents’ criticism assumes. Instead, it is enough to recognize that the incumbents’
assumption may well be incorrect. Inefficiencies built into the scheme may provide incentives and opportunities for competitors to build their own network elements, perhaps for reasons unrelated to pricing (such as the possibility of expansion into data-transmission markets by deploying “broadband” technologies, cf. post (BREYER, J., concurring in part and dissenting in part), or the desirability of independence from an incumbent’s management and maintenance of network elements). In any event, the significance of the incumbents’ mistake of fact may be indicated best not by argument here, but by the evidence of actual investment in facilities-based competition since TELRIC went into effect, to be discussed at Part III-B-2-a-(3), infra.

(2)

Perhaps sensing the futility of an unsupported theoretical attack, the incumbents make the complementary argument that the FCC’s choice of TELRIC, whatever might be said about it on its own terms, was unreasonable as a matter of law because other methods of determining cost would have done a better job of inducing competition. Having considered the proffered alternatives and the reasons the FCC gave for rejecting them, 47 CFR § 51.505(d) (1997); First Report and Order ¶¶ 630-711, we cannot say that the FCC acted unreasonably in picking TELRIC to promote the mandated competition.

The incumbents present three principal alternatives for setting rates for network elements: embedded-cost methodologies, the efficient component pricing rule, and Ramsey pricing. The arguments that one or another of these methodologies is preferable to TELRIC share a basic claim: it was unreasonable for the FCC to choose a method of setting rates that fails to include, at least in theory, some additional costs beyond what would be most efficient in the long run, because lease rates that incorporate such costs will do a better job of inducing competition. The theory is that once an entrant has its foot in the door, it will have a greater incentive to build and operate its own more efficient network element if the lease rates reflect something of the incumbents’ actual and inefficient marginal costs. And once the entrant develops the element at its lower marginal cost and the retail price drops accordingly, the incumbent will have no choice but to innovate itself by building the most efficient element or finding ways to reduce its marginal cost to retain its market share.

The generic feature of the incumbents’ proposed alternatives, in other words, is that some degree of long-run inefficiency ought to be preserved through the lease rates, in order to give an entrant a more efficient alternative to leasing. Of course, we have already seen that TELRIC itself tolerates some degree of inefficient pricing in its existing wire-center configuration requirement and through the ratemaking and development lags just described. This aside, however, there are at least two objections that generally undercut any desirability that such alternatives may seem to offer over TELRIC.

The first objection turns on the fact that a lease rate that compensates the lessor for some degree of existing inefficiency (at least from the perspective of the long run) is simply a higher rate, and the difference between such a higher rate and the TELRIC rate could be the difference that keeps a potential competitor from entering the market. Cf. First Report and Order ¶ 378 (“[I]n some areas, the most efficient means of providing competing service may be through the use of unbundled loops. In such cases, preventing access to unbundled loops would either discourage a potential competitor from entering the market in that area, thereby denying those consumers the
benefits of competition, or cause the competitor to construct unnecessarily duplicative facilities, thereby misallocating societal resources”). If the TELRIC rate for bottleneck elements is $100 and for other elements (say switches) is $10, an entering competitor that can provide its own, more efficient switch at what amounts to a $7 rate can enter the market for $107. If the lease rate for the bottleneck elements were higher (say, $110) to reflect some of the inefficiency of bottleneck elements that actually cost the incumbent $150, then the entrant with only $107 will be kept out. Is it better to risk keeping more potential entrants out, or to induce them to compete in less capital-intensive facilities with lessened incentives to build their own bottleneck facilities? It was not obviously unreasonable for the FCC to prefer the latter.

The second general objection turns the incumbents’ attack on TELRIC against the incumbents’ own alternatives. If the problem with TELRIC is that an entrant will never build because at the instant it builds, other competitors can lease the analogous existing (but less efficient) element from an incumbent at a rate assuming the same most efficient marginal cost, then the same problem persists under the incumbents’ methods. For as soon as an entrant builds a more efficient element, the incumbent will be forced to price to match, and that rate will be available to all other competitors. The point, of course, is that things are not this simple. As we have said, under TELRIC, price adjustment is not instantaneous in rates for a leased element corresponding to an innovating entrant’s more efficient element; the same would presumably be true under the incumbents’ alternative methods, though they do not come out and say it.

Once we get into the details of the specific alternative methods, other infirmities become evident that undermine the claim that the FCC could not reasonably have preferred TELRIC. As for an embedded-cost methodology, the problem with a method that relies in any part on historical cost, the cost the incumbents say they actually incur in leasing network elements, is that it will pass on to lessees the difference between most-efficient cost and embedded cost. See First Report and Order ¶ 705. Any such cost difference is an inefficiency, whether caused by poor management resulting in higher operating costs or poor investment strategies that have inflated capital and depreciation. If leased elements were priced according to embedded costs, the incumbents could pass these inefficiencies to competitors in need of their wholesale elements, and to that extent defeat the competitive purpose of forcing efficient choices on all carriers whether incumbents or entrants. The upshot would be higher retail prices consumers would have to pay. Id., ¶¶ 655 and 705.

There are, of course, objections other than inefficiency to any method of ratemaking that relies on embedded costs as allegedly reflected in incumbents’ book-cost data, with the possibilities for manipulation this presents. Even if incumbents have built and are operating leased elements at economically efficient costs, the temptation would remain to overstate book costs to ratemaking commissions and so perpetuate the intractable problems that led to the price-cap innovation.

There is even an argument that the Act itself forbids embedded-cost methods, and while the FCC rejected this absolutistic reading of the statute, First Report and Order ¶ 704, it seems safe to say that the statutory language places a heavy presumption against any method resembling the traditional embedded-cost-of-service model of ratesetting. At the very least, proposing an embedded-cost alternative is a counterintuitive way to show that selecting TELRIC was unreasonable.
Other incumbents say the FCC was unreasonable to pick TELRIC over a method of ratesetting commonly called the efficient component pricing rule (ECPR). ECPR would base the rate for a leased element on its most efficient long-run incremental cost (presumably, something like the TELRIC) plus the opportunity cost to the incumbent when the entrant leasing the element provides a competing telecommunications service using it. The opportunity cost is pegged to the retail revenue loss suffered by the incumbent when the entrant provides the service in its stead to its former customers.

The FCC rejected ECPR because its calculation of opportunity cost relied on existing retail prices in monopolistic local-exchange markets, which bore no relation to efficient marginal cost. “We conclude that ECPR is an improper method for setting prices of interconnection and unbundled network elements because the existing retail prices that would be used to compute incremental opportunity costs under ECPR are not cost-based. Moreover, the ECPR does not provide any mechanism for moving prices towards competitive levels; it simply takes prices as given.” Id., ¶ 709. In effect, the adjustment for opportunity cost, because it turns on pre-existing retail prices generated by embedded costs, would pass on the same inefficiencies and be vulnerable to the same asymmetries of information in ratemaking as a straightforward embedded-cost scheme.

The third category of alternative methodologies proposed focuses on costs over an intermediate term where some fixed costs are unavoidable, as opposed to TELRIC’s long run. The fundamental intuition underlying this method of ratesetting is that competition is actually favored by allowing incumbents rate recovery of certain fixed costs efficiently incurred in the intermediate term.

The most commonly proposed variant of fixed-cost recovery ratesetting is “Ramsey pricing.” The underlying principle is that goods should be taxed or priced according to demand: taxes or prices should be higher as to goods for which demand is relatively inelastic. As applied to the local-exchange wholesale market, Ramsey pricing would allow rate recovery of certain costs incurred by an incumbent above marginal cost, costs associated with providing an unbundled network element that are fixed and unavoidable over the intermediate run, typically the 3- or 4-year term of a rate arbitration agreement. The specific mechanism for recovery through wholesale lease rates would be to spread such costs across the different elements to be leased according to the demand for each particular element. Thus, when demand among entrants for loop elements is high as compared with demand for switch elements, a higher proportion of fixed costs would be added as a premium to the loop-element lease rate than to the switch lease rate.

But this very feature appears to be a drawback when used as a method of setting rates for the wholesale market in unbundled network elements. Because the elements for which demand among entrants will be highest are the costly bottleneck elements, duplication of which is neither likely nor desired, high lease rates for these elements would be the rates most likely to deter market entry, as our earlier example showed: if the rate for bottleneck elements went from $100 to $110, the $107 competitor would be kept out. This is what the FCC has said:

[W]e conclude that an allocation methodology that relies exclusively on allocating common costs in inverse proportion to the sensitivity of demand for various network elements and services may not be used. We conclude that such an allocation
could unreasonably limit the extent of entry into local exchange markets by allocating more costs to, and thus raising the prices of, the most critical bottleneck inputs, the demand for which tends to be relatively inelastic. Such an allocation of these costs would undermine the pro-competitive objectives of the 1996 Act.

First Report and Order ¶ 696 (footnote omitted).

(3) At the end of the day, theory aside, the claim that TELRIC is unreasonable as a matter of law because it simulates but does not produce facilities-based competition founders on fact. The entrants have presented figures showing that they have invested in new facilities to the tune of $55 billion since the passage of the Act (through 2000). ***

* * *

*** In short, the incumbents have failed to carry their burden of showing unreasonableness to defeat the deference due the Commission. We therefore reverse the Eighth Circuit’s judgment insofar as it invalidated TELRIC as a method for setting rates under the Act.
1. The Commission issues this Policy Statement to provide preliminary guidance for the development of personal communications services (PCS) in the United States and to solicit additional views addressing a wide range of issues affecting future development of PCS. This Policy Statement will serve as the basis for an *En Banc* hearing that we believe will better inform the Commission about this important communications development.

2. The concept of PCS has grown in scope and complexity since the ideas of second generation cordless telephone service (CT-2) and personal communications networks (PCNs) were introduced about two years ago. A class of mobile and/or portable technologies and services is developing under the name of PCS that promises both advanced generations of current mobile/portable services and new services. Comments filed in response to the *Notice of Inquiry* in this proceeding indicate broad interest from new entities such as cable TV providers, microwave common carriers, and private radio entities, in addition to the local exchange carriers and cellular radio telephone providers. Equipment manufacturers also have shown strong interest in unregulated, wireless office concepts. Computer manufacturers who envision PCS providing networking capabilities for future personal computers also have entered the field. While it seems certain that these new underlying technologies will offer an array of advanced voice and data services, such as improved wireless links for computers and medical equipment, PCS will provide the more fundamental capability of communicating directly to individuals rather than locations.

3. The Commission intends to broadly define personal communications services and make available an adequate amount of spectrum to foster the development of innovative and competitive markets for these services. The spectrum allocation should facilitate local, regional, national, and international uses. Additionally, the spectrum should be allocated in phases in order not to find early developments precluding later ones. The first phase should occur in 1992.

4. Important equipment, cost and international considerations suggest that a portion of the spectrum to be allocated should come from 1.8 to 2.2 GHz. We recognize that serious issues may exist for the incumbents in this band and we intend to reallocate the spectrum needed for PCS with minimum disruption to existing users. Explorations of spectrum availability in that band should proceed to a successful conclusion and should answer the questions dealing with sharing and the cost of substituting services. We also observe that in preparing for the 1992 World Administrative Radio Conference (WARC), the Commission proposed to maintain the primary mobile service allocations in the 1.8 to 2.2 GHz band. This would provide the United States with the flexibility to implement PCS based on domestic needs. We intend to consider the results of the WARC in developing our domestic PCS allocations.

5. Additionally, PCS developments will be encouraged in less congested bands. We will monitor closely current experiments in those bands and license quickly future experiments aimed at utilizing unused frequencies for this family of services.

6. We will encourage significant flexibility in the development of technologies and services. Anticipating, however, difficult issues dealing with transmission systems, interference avoidance, inter and intra industry protocols, roaming and other technical issues, we will empanel an advisory committee to help resolve those issues. If necessary, the advisory committee will make recommendations to the Commission for establishing rules when issues cannot be privately resolved.

7. Mobile services traditionally have been provided pursuant to both common carrier and private regulatory schemes. Each has its advantages and disadvantages. We lack sufficient information now to determine whether common carriage, private carriage, or some combination of both concepts will be optimal for PCS. The regulatory scheme we eventually decide upon will depend in part upon public interest factors such as our desire to promote the rapid development of this service and our interest in promoting competition in PCS and in telecommunications generally.

8. Commission policy towards PCS will be guided by these general conclusions. But we do not have sufficient information before us to propose tentative conclusions on how all the issues should be resolved. We seek additional information on issues such as how licenses should be assigned and policies affecting participation in PCS by new entrants, e.g., parties not currently engaged in the provision of telecommunications services, including the application of pioneer's preference and possible financial

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2. Consistent with this broad definition, we will consider the data PCS proposed by Apple Computer, Inc. (RM-7618) as part of the family of PCS services to be addressed in this proceeding.

3. The Commission is in the process of forming a Small Business Advisory Committee. One of the functions of the Small Business Advisory Committee will be to review FCC dockets in new, emerging technologies/services and to assess the policy implications of such developments on small businesses, including the impact on rural businesses and minority and female entrepreneurs. Included in this Committee's work will be an assessment of the potential impact of PCS allocation and licensing decisions on the participation of small businesses and new entrants.
qualification issues. The *En Banc* hearing will be structured to address these and other questions relating to four general areas:

1. Definition of personal communications services, for example, the types of service anticipated and demand for each service type;
2. Spectrum requirements, such as the amount of spectrum required for PCS, the timing of spectrum allocation, the desirable spectrum for various members of the PCS family of services, bandwidth requirements, the accommodation of current licensees, and the ability to share spectrum;
3. Technologies for personal communications services, such as the relative advantages of competing technologies for different applications, the degree of technical flexibility that should be granted PCS licensees, the results of PCS experiments or trials, the role of unregulated low power devices, and the need for mandated Commission standards; and
4. Regulatory issues, such as the method of assigning licenses, the appropriate geographic scope of licenses, the feasibility of a voluntary negotiated approach to relocating existing users, the merits of exclusive as compared to non-exclusive assignments, privacy implications of personal radio-based communications services, the terms and conditions of interconnection to the public switched network, the need for a new numbering plan, the need to accommodate roaming subscribers, licensee eligibility, regulatory jurisdiction, and appropriate regulatory treatment of PCS.

9. Accordingly, IT IS ORDERED THAT, the Commission shall hold, on December 5, 1991, an *En Banc* hearing.

FEDERAL COMMUNICATIONS COMMISSION

Donna R. Searcy
Secretary

SEPARATE STATEMENT OF COMMISSIONER ANDREW C. BARRETT

RE: Amendment of the Commission's Rules to Establish New Personal Communications Service (General Docket No. 90-314, RM-7140, RM-7175 and RM-7618

I am pleased to see this effort. I think we should begin to address the regulatory framework for PCS services. This item initiates that action. I will be particularly interested in reviewing comments that address the various ways we can ensure that PCS gives new entrants and small businesses new opportunities to get into the mobile service business. Whether that be through private carriage, or some combination of private and common carriage, I hope commenters will address these matters from that perspective. Also, I hope we have flexibility in our spectrum allocation scheme for PCS. I look forward to our December en banc to discuss these issues further.
In the Matter of
Redevelopment of Spectrum to Encourage Innovation in the Use of New Telecommunications Technologies

NOTICE OF PROPOSED RULE MAKING
Adopted: January 16, 1992; Released: February 7, 1992

Comment Date: April 21, 1992
Reply Comment Date: May 21, 1992

By the Commission: Commissioner Marshall not present; Commissioners Barrett and Duggan issuing separate statements.

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INTRODUCTION

1. By this Notice, the Commission proposes to establish new areas of the spectrum to be used for emerging telecommunications technologies. These new frequency bands would be designated from 220 MHz of the spectrum between 1.85 and 2.20 GHz. We further propose to provide a regulatory framework that will enable the existing fixed microwave users in these bands to relocate to other fixed microwave bands or alternative media with minimum disruption to their operations. We believe this can best be accomplished through the use of a flexible negotiations approach that permits financial arrangements between incumbents and new service providers during an extended transition period. We also propose to permit state and local government facilities, including public safety, to continue their current operations on a fully protected basis by exempting such facilities from any mandatory transition period. Establishment of these emerging technologies bands will ensure the availability of spectrum for the continued growth and development of new and innovative services made possible by emerging and anticipated future technologies.

BACKGROUND

2. In the early 1970s, the Commission employed the concept of setting aside spectrum for new and existing uses when it reallocated 115 MHz of spectrum in the 800/900 MHz bands from UHF-TV broadcasting and the federal government to land mobile services in Docket No. 18262. This action, one of the largest and most significant reallocation actions undertaken by the Commission to date, was taken to meet the growing needs of the land mobile industry. Initially, 40 MHz of the newly available spectrum was allocated for new “high capacity” common carrier land mobile technologies, i.e., cellular radio, and another 30 MHz was allocated to conventional and new trunked operations, and private radio operations, including specialized mobile radio (SMR) services. Most significantly, in response to suggestions from the commenting parties the Commission also established eight “land mobile reserve bands” with a total of 45 MHz of spectrum. These eight bands were not allocated to any specific service, but rather were set aside to accommodate new land mobile services and unexpected growth in existing services.

3. Subsequent developments have proven the advantages of having spectrum available in a single range of frequencies for new services and technologies. As envisioned in Docket No. 18262, the 45 MHz of 800/900 MHz spectrum has been used to introduce new services, foster new technology and provide for expansion of existing services. For example, spectrum from the reserve has been used for the new air-to-ground telephone service. These frequencies are also being used to introduce new technologies. In particular, the National Plan for Public Safety Services empowers a new spectrum efficient technologies, advanced private radio systems are using trunked and narrowband channels, and cellular radio operators are now implementing new advanced digital systems. Finally, the 1970’s reserve spectrum is being used by both the common carrier cellular and private land mobile communities to meet expanded demand.

NEED FOR EMERGING TECHNOLOGIES BANDS

4. In recent years, technological advancements in digital and signal processing systems have opened possibilities for the development of a broad range of new radio communication services. These technological advancements have increased the need for spectrum to foster the growth and development of new services, primarily for mobile applications. However, this has created an environment in which new services are vying with each other and with existing users for relatively small slivers of spectrum that are incapable of supporting full implementation of new service. The Commission currently has pending before it a number of requests for new services and technologies.
for which sufficient spectrum is unavailable. These requests include: 200 MHz for new personal communications services (PCS), \(40 \text{ MHz for data PCS,}\) \(33 \text{ MHz for a generic mobile-satellite service,}\) \(70 \text{ MHz for a digital audio broadcasting service,}\) and \(33 \text{ MHz for low-Earth orbit satellites.}\) Further, the interest and demand are demonstrated by the large number of applications for experimental authority to develop and test new technologies being submitted to the Commission. Currently, the Commission has authorized dozens of experiments with PCS-type technologies and requests for others are continuing to arrive.

5. Various forms of digital audio services are under development or being considered in Europe, Canada and Japan. These countries and Europe are also developing personal communications services (PCS). Some of the specific personal communications services currently being developed internationally include the British CT-2 advanced cordless telephone and CT-3 microcellular systems, Europe's general service mobile (GSM) system and Japan's "Handy Phone" service. In order to ensure the availability of spectrum for these services, the countries involved are allocating spectrum for new mobile services that use emerging technologies. For example, Europe and Japan recently have moved to allocate spectrum between 1 and 3 GHz for mobile services that use new technologies. In addition, the 1992 World Administrative Radio conference will address the allocation of spectrum for new mobile services.

6. We believe it also is in the best interest of the United States to make spectrum available for the development of new services and technology. We recognize that, because most of the spectrum is now heavily used, the conditions for finding spectrum for these new emerging technologies will be much more challenging than in the 1970s. Accordingly, the plan for use of these bands will have to take into account existing operations to a much greater extent than the earlier reserve. In particular, we cannot merely apply the "band clearing" method used in the 1970s. Rather, we will need to develop a new plan that includes specific provisions for minimizing impact on existing services. Nevertheless, we believe that establishing these emerging technologies bands is desirable and will again prove advantageous for facilitating the continuing development of new communications technologies and the growth and expansion of existing services.

7. As indicated above, the Commission has before it a significant number of requests for new services. New spectrum would permit the Commission to meet the needs of these services in an orderly manner. This spectrum would provide an available resource that could be drawn upon for the implementation of new services and the expansion of existing services. The new technology band concept also would foster the development of new technology by providing clear guidance on future use of these frequencies. The current lack of available spectrum tends to have a chilling effect on the incentives for manufacturers and financial institutions to develop and fund new communications research. The emerging technologies bands would help provide some of the structure, in terms of frequency of operation and operating plan, that is needed to facilitate the development of equipment. At the same time, this new concept would provide considerable flexibility with regard to the types of technologies and services that can be authorized. In reaching this conclusion, we have considered that the spectrum reserve established in the early 1970s resulted in the introduction of new cellular and trunked technologies in the reserve bands.

8. Accordingly, we believe that the creation of emerging technologies bands would further the Commission's mandate to encourage the provision of new technologies and services to the public and encourage the larger and more effective use of radio in the public interest. Moreover, such action would complement our recent pioneer's preference rules intended to foster the development of new technologies and services.

SPECTRUM ISSUES

9. We recognize that establishment of bands for emerging technologies poses significantly more difficult challenges than were present in the early 1970s. At that time, spectrum was available in the lower frequency bands that was only lightly used and the licenses on those frequencies could be relocated relatively easily. The situation is, of course, much different today. There are substantial operations on virtually all of the lower frequency bands, so that establishment of emerging technologies bands will unavoidably necessitate relocation of significant numbers of existing users. The task, then, is to identify a relatively wide band of frequencies that can be made available with a minimum of impact on existing users and that also can provide suitable operating characteristics for new, primarily mobile, services.

10. The spectrum selected must meet the requirements of a broad range of possible services, including land mobile and satellite. The factors that must be considered include:

- **Cost of equipment:** If the spectrum chosen is in a range for which state-of-the-art equipment is not available, then high costs would delay the introduction of new services.
- **Amount of spectrum:** There must be enough spectrum available to allow substantial development and economies of scale.
- **Feasibility of relocation:** The existing licensees must be able to relocate with a minimum of cost and disruption of service to consumers.
- **Non-government spectrum:** In order to avoid the need for coordination and to speed the process of transition, the new bands should come entirely from spectrum regulated by the FCC.
- **International developments:** It is desirable for the spectrum chosen to be compatible with similar international developments. The WARC-92 most likely will focus on this spectrum for mobile use.

We intend to consider these factors in evaluating alternative plans for new spectrum. Interested parties are invited to comment on these evaluative factors and their use and to suggest modifications and additions.

11. **Spectrum Study.** With the above considerations in mind, the Commission's staff conducted a study to examine the possibility of creating emerging technologies bands. This study identified the most suitable region of the spectrum, determined the existing users of that spectrum, explored alternatives for relocating those users to higher bands or other media with a minimum disruption...
of service, and examined the cost of such relocation. The study concluded that 220 MHz in the 1.85-2.20 GHz region could be designated for innovative technologies and services.

12. The study limited the consideration of candidate frequency bands to those in which mobile operations are practicable with current state-of-the-art electronic components and manufacturing capabilities. It found that while experimental mobile use is taking place at higher bands, the state-of-the-art technology for the compact, lightweight, portable electronic components expected to be used in new services generally will limit operations in those services to frequencies under 3 GHz. Thus, the study concluded that frequencies above 3 GHz would not be acceptable. It next found that the spectrum below 1 GHz generally does not appear to offer any possibilities for spectrum availability. Most of this spectrum is used for manufacturing and banking mobile services that would be very difficult to relocate. These services have very large numbers of users, particularly in the major urban areas, and there are no bands with similar technical characteristics to which the existing users could be relocated. The remaining frequencies below 1 GHz are narrow, scattered bands that would not provide sufficient spectrum.

13. For the above reasons, the study concentrated on the spectrum between 1 and 3 GHz. This region of the spectrum is also the subject of considerable research and developmental activities, both domestically and internationally. In fact, the 1992 World Administrative Radio Conference will address the allocation of spectrum in the 1 to 3 GHz range to meet emerging requirements for new mobile and satellite services.

14. The study identified three non-Government bands from this spectrum for consideration: 1.85-2.20, 2.45-2.50, and 2.50-2.65 GHz. The study found the 2.45-2.50 GHz band, which is allocated for use by Industrial, Scientific, and Medical (ISM) equipment, less desirable because it has a limited amount of spectrum (50 MHz) and because there is no replacement band that offers the same physical characteristics for the existing ISM operations in that band. The 2.50-2.60 GHz band, which is used for multipoint distribution service (MDS) and instructional fixed television service (ITFS), also was eliminated because there are no other frequency allocations currently available to which existing MDS operations could be relocated.

15. The remaining 1.85-2.20 GHz band is used for fixed private and common carrier microwave services, public land mobile service, broadcast auxiliary operations, and multipoint distribution service. Specifically, the 1.85-1.99, 2.11-2.15, and 2.16-2.20 GHz bands are used for private operational fixed and common carrier microwave operations. The private operational fixed licenses are local governments (including public safety), petroleum producers, utilities, railroads, and other business users such as the manufacturing, banking, and service industries. Systems range from a few links to very large systems that use hundreds of links. They are used as part of communications systems for local government and public safety organizations. These facilities are also used to control electric power, oil and gas pipeline and railroad systems, and to provide routine business voice, data, and video communications. The common carrier licensees are telephone, cellular telephone, and paging providers. Telephone companies use this band to provide telephone service to remote areas, cellular companies to interconnect cell sites with mobile telephone switching offices, and paging companies for control and repeater stations.

16. The 1.99-2.11 GHz band is used for broadcast auxiliary services. The licensees in this service are television broadcasters and cable television operators. Broadcast auxiliary services include studio-to-transmitter links, inner city relays, and electronic news gathering (ENG) mobile operations. These services are used to transmit video programming from remote sites to the studio and from the studio to the transmitter sites. The 2.15-2.16 GHz band is used for multipoint distribution service (MDS) and its licensees are, for the most part, wireless cable television operators. MDS is used to supply video programming to subscribers over city-wide areas and to rural areas where it is not economical to install cable service.

17. The study finds that the private and common carrier fixed microwave operations using this spectrum can be relocated to higher frequency bands that provide for similar type services and can support propagation over similar path lengths. Further, it observes that there are other reasonable alternatives for fixed microwave such as fiber, cable and satellite communications, which can utilize off-the-shelf equipment to provide these services.

18. The study also concludes that it is not practicable at this time to relocate the broadcast auxiliary and the multipoint distribution services that use spectrum in the 1.85-2.20 GHz range. It finds that currently there is heavy use of the ENG bands and that the forthcoming introduction of broadcast advanced television service may result in more congestion in these bands. As a result, the future requirements of the broadcast auxiliary services for operating channels could grow significantly. The higher frequency bands that are suitable for these operations do not appear to have the capacity to support the existing 2 GHz operations and new growth. Since there currently are a large number of MDS applications before the Commission and the MDS service is a developing industry, the study further finds that it would not be desirable to relocate the MDS channels at 2 GHz.

19. Proposed Reallocations. Based on the findings of our staff study, we propose to reallocate 220 MHz of the 1.85 to 2.20 GHz band that is currently used for private and common carrier fixed microwave services. The specific frequencies proposed to be reallocated are the 1.85-1.99, 2.11-2.15, and 2.16-2.20 GHz bands. We believe that the spectrum will meet the requirements of a significant number of new services and technologies. We recognize that establishment of emerging technologies bands in this spectrum will be considerably more difficult than the reserve established in the 1970s. The private and common carrier fixed microwave services operating in these bands provide important and essential services. Accordingly, we intend to pursue this reallocation in a manner that will minimize disruption of the existing 2 GHz fixed operations. We believe that this can be best achieved by providing for significant flexibility in negotiations between existing users and parties developing new services.

20. As indicated in the study, we believe that it is technically feasible to reallocate these services to higher frequency bands or to alternative media. There appears to be adequate capacity in the higher frequency bands that are allocated to fixed microwave services and can support path lengths similar to those of the existing 2 GHz fixed operations. In this regard, we propose to make available all fixed microwave bands above 3 GHz, both the com-
common carrier and the private bands, for reaccommodation of fixed microwave operations currently licensed in the 1.85-2.20 GHz spectrum. To provide for this reaccommodation, we propose a "blanket" waiver of the eligibility requirements in these bands for existing 2 GHz fixed microwave users. Specifically, we propose that all existing 2 GHz common carrier and private microwave operations be eligible for relocation to any of the higher frequency fixed microwave bands. The technical rules and coordination procedures currently applicable to each of the higher frequency bands, however, will apply. Existing 2 GHz fixed operations that relocate to the common carrier bands will be subject to the coordination procedures of Section 21.100 and 21.706, and those that relocate to private operational fixed bands will be subject to the coordination procedures of Section 94.63. We will encourage licensees moving from the 1.85-2.20 GHz band with path lengths of under 10 miles to reaccommodate their operations in frequency bands above 10 GHz to preserve the general availability of spectrum in the lower bands for longer path links not feasible at the higher frequencies.

21. The study did not examine the availability or suitability of government spectrum for relocation of the existing 2 GHz operations. We note that some parties have suggested the possibility of making available a portion of the 1.71-1.85 GHz government fixed, mobile, and space band for relocation of some 2 GHz operations. We invite comment on the feasibility of such action.

22. Transition Plan. Our intent is to reaccommodate the 2 GHz licensees in a manner that is the most advantageous for these existing users, least disruptive to the public and the most conducive to the introduction of new services. We recognize that this proposed relocation will entail significant costs and we intend to minimize those costs wherever possible. To the extent possible, it is our intention to permit some or all of these costs to be paid by replacement users. The approach needed for this relocation contrasts sharply with the "band clearing" approach used in the 1970s, when only two full service UHF television stations and a handful of TV translators had to be moved to new frequencies. Moreover, it may be that some new technology services will be able immediately to operate in segments of the emerging technology bands not presently used by existing 2 GHz licensees in some areas. Our proposed transition plan would consist of three basic elements, discussed below.

23. First, we wish to ensure the availability of the existing vacant 2 GHz spectrum for the initial development of new services and to discourage possible speculative fixed service applications for this spectrum. We therefore will continue to grant applications for fixed operations in the proposed new technologies bands; however, applications for new facilities submitted after the adoption date of this Notice will be granted on a secondary basis only, conditioned upon the outcome of this proceeding. This will provide some accommodation for the needs of fixed microwave users, particularly in less congested areas.

24. Second, except for state and local licensees, we propose to allow currently licensed 2 GHz fixed licensees to continue to occupy 2 GHz frequencies on a co-primary basis with new services for a fixed period of time, for example ten or fifteen years. Ten years could generally be expected to provide for a complete amortization of existing 2 GHz equipment. A fifteen year period would extend the relocation period through the useful life of that equipment. At the end of this transition period, these facilities could continue to operate in the band on a secondary basis. This means that if, after the transition period, new services were not able to use the spectrum because of interference from fixed microwave systems, those fixed microwave systems would be required to eliminate the interference, negotiate an arrangement for continued operation with the new service operator, or cease operation. This would allow some fixed microwave systems to continue operations indefinitely, particularly in rural areas where less spectrum may be required for new services. Comment is requested on this approach. In particular, parties are requested to comment on the technical feasibility of our proposal to permit sharing between new services and the existing 2 GHz fixed microwave operations on a co-primary basis.

25. We recognize that state and local government agencies would face special economic and operational considerations in relocating their 2 GHz fixed microwave operations to higher frequencies or alternative media. We are particularly sensitive to the need to avoid any disruption of police, fire and other public safety communications. To address these concerns, we propose to exempt state and local government 2 GHz fixed microwave facilities from any mandatory transition periods. Rather, these facilities would be allowed to continue to operate at 2 GHz on a co-primary basis indefinitely, at the discretion of the state and local government licensees. These agencies would be permitted to negotiate the use of their frequencies with other parties. In this manner, transfer of the state and local government operations could be arranged so as to accommodate fully any special economic or operational considerations with regard to the institutions affected. We would, of course, encourage those institutions to relocate to higher frequency bands or alternative media. Consistent with our overall objective in this matter, applications submitted after the adoption date of this Notice for new 2 GHz facilities by state and local government agencies will be authorized on a secondary basis only, conditioned upon the outcome of this proceeding.

26. To provide maximum flexibility in the relocation process, we believe it is desirable to permit parties seeking to operate new services to negotiate with the existing users for access to the 2 GHz frequencies and, conversely, to permit incumbent users to negotiate with the new service providers for continued use of the spectrum. Therefore, we propose to allow providers of new services assigned spectrum allocated to the new emerging technologies bands to negotiate financial arrangements with existing licensees. This would encourage reaccommodation and underwriting of the costs of transition for the 2 GHz users. In return, the new licensees would receive earlier access to the frequencies used by the existing fixed microwave operators. Such arrangements would allow market forces to achieve a balance between the need to minimize the reaccommodation cost to existing operators and the immediate need for the spectrum to permit provision of these new services. It would also provide incumbents with a way to assure that the new licensees would not interfere with their expanded facilities or current facilities at the end of a mandatory transition period. We request comment on this manner of proceeding. Specifically, we solicit information on how this process should be carried out and what restrictions, if any, the Commission should place on negotiated arrangements.
27. We request comment on these proposals and alternatives. Interested parties are also invited to submit plans for other approaches that might lessen the impact on existing fixed microwave systems while ensuring the timely availability of 2 GHz frequencies for new services. One alternative approach would be to adopt a phased spectrum implementation approach. In addition to unused spectrum that would be available at any time, specific blocks of frequencies would be made available for new services at specified intervals. For example, 50 to 70 MHz of the 220 MHz could be made available in five year increments. This would provide some spectrum for new services relatively quickly, but would minimize the impact to most existing 2 GHz users, with the exception of those users in the first bands to be reallocated. Under this option, we also would still intend that new fixed facilities, for which applications were received after the adoption of this Notice, be secondary and that current facilities, except those used by state and local government licensees, be reduced to secondary status at the end of the transition period. Parties favoring the phased approach are requested to suggest mechanisms for the selection of the blocks of spectrum. Another alternative would be to allow all currently licensed 2 GHz fixed users, not just state and local government licensees, to continue to operate on a co-primary basis while permitting negotiations for the use of the spectrum. Parties are requested to comment on the desirability and feasibility of this option. Finally, we request comment on whether and to what extent the possible availability of adjacent government spectrum might affect the market-based access approach suggested above. For example, would the availability of a portion of the 1.71-1.85 GHz band for relocation provide sufficient incentive in the transition process to eliminate the need to alter the incumbent 2 GHz operations to secondary status. We request comment on all of the above considerations.

USE OF THE EMERGING TECHNOLOGIES BANDS

28. As indicated above, frequencies in the emerging technologies bands would be intended primarily for use by new services made possible through technological advances, but would also be available for expansion of existing services. The location of the proposed bands tends to favor new land mobile and satellite services. Generally, we are of the view that, at a minimum, requests for operation of new services in these bands should demonstrate that the service makes innovative use of a new technology and that the technology is most appropriately suited to operate on in the 2 GHz region. Similarly, requests for expansion of existing services should demonstrate that the expansion would offer some substantial improvement in either quality of service or spectrum efficiency. Such improvements would generally be provided through use of new technology. We seek additional proposals and comment regarding the criteria to be applied in determining whether a new service or expansion of an existing service merits frequencies from the emerging technologies bands.

29. We anticipate that the first use of these emerging technologies bands will be for the creation of a new personal communications service (PCS). We intend to proceed with a Notice of Proposed Rule Making on PCS in the near future. This Notice will address the amount of spectrum to be allocated to PCS, further define the nature of PCS services, and define the interference and technical criteria for operation of those services, in general and in relation to 2 GHz fixed users. The further definition of such criteria will make it possible to determine the amount and location of 2 GHz frequencies that could be used immediately, without interference to, or from, the existing fixed users. This information in turn will be used to develop specific proposals for the negotiation to be used in this instance.

CONCLUSION

30. The potential benefits to American consumers and manufacturers of creating spectrum for innovative technologies and new services are many. Accordingly, we conclude that emerging technologies bands should be created to foster the development and implementation of new technologies and services. We recognize that creating emerging technologies bands will have a major impact on existing users; however, based on the staff study, we believe that the current users of these bands may be reaccommodated in other portions of the spectrum. We solicit comment on the proposals made herein.

PROCEDURAL MATTERS

31. Regulatory Flexibility Analysis. Pursuant to the Regulatory Flexibility Act of 1980, the Commission finds as follows:

A. Reason for Action
This rule making proceeding is initiated to obtain comment regarding the development of emerging technologies bands around 2 GHz to provide spectrum for new innovative technologies and services.

B. Objective
The objective of this proposal is to provide adequate spectrum in a reasonable time frame for the development and implementation of new innovative technologies and services to the American public.

C. Legal Basis
The proposed action is authorized by Sections 4(i), 303(e), 303(f), 303(g), and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. Sections 154(i), 303(c), 303(f), 303(g), and 303(r). These provisions authorize the Commission to make such rules and regulations as may be necessary to encourage the more effective use of radio in the public interest.

D. Description, Potential Impact, and Number of Small Entities Affected
This proposal would require many existing private and common carrier fixed microwave operators in the 1850-2200 MHz band, some of which are small entities, to reaccommodate their operations into higher bands or change to alternative technologies. This proposal may provide new opportunities for radio manufacturers and supplier of radio equipment, some of which may be small businesses, to develop and sell new equipment. Further, it may provide many new telecommunication services that may greatly impact the abilities of small entities to conduct business. Because this proposal concerns only the allocation of spectrum, and not the licensing of systems or
sations, we are unable to quantify other potential effects on small entities. We invite specific comments on this point by interested parties.

E. Reporting, Record Keeping and other Compliance Requirements

None.

F. Federal Rules which Overlap, Duplicate or Conflict with this Rule

None.

G. Significant Alternatives

If promulgated, this proposal will provide spectrum for the development of new innovative technologies in the immediate future. We are unaware of other alternatives that would provide such spectrum flexibility in the immediate future. We solicit comments on this point.

32. Other Matters. This is a non-restricted notice and comment rule making proceeding. Ex parte presentations are permitted, provided they are disclosed as provided in Commission rules. See generally 47 C.F.R. Sections 1.1202, 1.1203, and 1.1206(a).

33. This action is taken pursuant to Sections 4(i), 303(c), 303(f), 303(g), and 303(r) of the Communications Act of 1934, as amended. 47 U.S.C. Sections 154(i), 303(c), 303(f), 303(g), and 303(r).

34. Pursuant to applicable procedures set forth in Sections 1.415 and 1.419 of the Commission's Rules, interested parties may file comments on or before April 21, 1992, and reply comments on or before May 21, 1992. All relevant and timely comments will be considered by the Commission before final action is taken in this proceeding. To file formally in this proceeding, participants must file an original and four copies of all comments, reply comments, and supporting comments. If participants want each Commissioner to receive a personal copy of their comments, an original plus nine copies must be filed. Comments and reply comments should be sent to Office of the Secretary, Federal Communications Commission, Washington, DC 20554. Comments and reply comments will be available for public inspection during regular business hours in the Dockets Reference Room (Room 239) of the Federal Communications Commission, 1919 M Street, N.W., Washington, DC 20554.

35. For further information concerning this rule making proceeding contact Mr. Fred Lee Thomas at (202) 653-8117, Office of Engineering and Technology, Federal Communications Commission, Washington, DC 20554.

FEDERAL COMMUNICATIONS COMMISSION

Donna R. Searcy
Secretary

FOOTNOTES


6 See Notice of Inquiry GEN Docket No. 90-357, 5 FCC Rcd 5237 (1990), and Petition for Rule Making, RM-7400, filed by Satellite CD Radio, Inc.

7 See Petitions for Rule Making, RM-7771, filed by Constellation Communications; RM-7773, filed by TRW, Inc.; RM7965, filed by Ellipsat Corporation; and RM-7906, filed by American Mobile Satellite Corporation.

8 See 47 U.S.C. §§ 157 and 303(g).

9 See Report and Order GEN Docket No. 90-217, 6 FCC Rcd 3488 (1991), reconsideration pending. The pioneer's preference rules are intended to encourage the development of new technologies and services by offering a licensing preference to entities that develop an innovative new service or a substantial enhancement to an existing service.

10 See "Creating New Technology Bands for Emerging Telecommunications Technology," FCC/DOET TS92-1 (January, 1992). A copy of this report has been placed in the record of this proceeding and comments on the report are requested.

11 The study only considered spectrum already primarily under the jurisdiction of the Commission. Spectrum allocated to the Government, which is under the jurisdiction of the National Telecommunications Information Administration (NTIA), was not considered because of the delay and uncertainty that would be involved in obtaining reallocation of such spectrum not under our jurisdiction. See H. R. 531 and S. 2904, 101st Congress, 1st Session (1991), the "Emerging Telecommunications Technologies Act of 1991." If adopted as proposed, these bills would require the Federal Government to make available up to 200 MHz of spectrum for Non-Government use. This may give the Commission additional spectrum that could be used for the same purposes as the spectrum being made available in this proceeding. However, the known requests for new spectrum already exceed what is proposed in the bills and it is uncertain that spectrum made available through this process will meet the needs of many of the proposed new services. It is still uncertain when such spectrum will be available and where in the spectrum it will be located.

12 The study also found that while research is underway to increase this limit, there is no way to determine when more advanced equipment will be available.

13 Most of the bands in this portion of the spectrum were eliminated from consideration because they are allocated for government use or do not offer a significant amount of spectrum.

14 The Commission currently has more than 24,000 applications on file with the Common Carrier Bureau for new MDS facilities.

15 Frequencies between 2.16 and 2.162 GHz are shared by common carrier fixed microwave and multipoint distribution services.
16 The frequencies available for this reallocation include the 3.7-4.2, 5.925-6.425, 6.525-6.875, 10.7-11.7, 11.7-12.2, 12.7-13.25, and 17.7-19.7 GHz bands.

17 We will encourage licensees moving from the 1.85-2.20 GHz band with path lengths of under 10 miles to reaccommodate their operations in frequency bands above 10 GHz to preserve the general availability of spectrum in the lower bands for longer path links not feasible at the higher frequencies. We also will encourage fixed microwave operators to consider other non-radio alternative media to meet their telecommunication needs, particularly fiber optic circuits. In allocating spectrum, one of the primary considerations is whether there is a technological dependence of the service on radio rather than wire lines. Mobile communications necessarily will always require use of radio spectrum, and in the past the Commission provided large amounts of spectrum for fixed microwave because wireless alternatives often were economically prohibitive. However, in the last five years technological advancements in optical communications have resulted in fiber being very competitive with the fixed microwave. Further, the capacities of fiber optic circuits greatly exceed those of fixed microwave. For these reasons, many common carrier and private communication requirements, which in the past were met by fixed microwave, are now met with fiber optic circuits. Fiber deployment in the United States at the end of 1990 is estimated to be approximately 5.5 million miles. See "Fiber Deployment Update - End of Year 1990," by Jonathan M. Kraushaar, Industry Analysis Division, Common Carrier Bureau, Federal Communications Commission, March 1991. In connection with encouraging migration to other, non-radio alternative media, we ask for comment on whether we should award tax certificates to fixed microwave licensees who receive financial compensation from an entity seeking to use the spectrum for new technology as part of an agreement to surrender their license and use other, non-radio alternative media. Grant of tax certificates in such circumstances would appear to be similar to our recent decision to award tax certificates to AM broadcast licensees receiving financial compensation for surrendering their licenses for cancellation. See Review of Technical Assignment Criteria for the AM Broadcast Service, 6 FCC Rcd 6273, 6472 (1991). We also seek comment on whether the Commission is authorized to grant tax certificates to non-broadcast licensees. See 26 U.S.C. Sec. 1071. In this regard, we request comment on the applicable precedent that could support the use of tax certificates in this proceeding. (See, e.g. Telocator Network of America, 58 RR 2d 1443 (1985), recon. dismissed, 1 FCC Rcd 509 (1986)).

18 This matter has been raised in a preliminary fashion with NTIA. It should also be noted that there are government space, fixed, mobile, and aeronautical operations in this band that support national security and other governmental services to the public.

19 We request comment on the appropriateness of this "cutoff" date.

20 Our principal desire is to compensate existing 2 GHz users for the costs of relocation. We recognize, however, that such market-based negotiations could possibly result in windfalls for the incumbent 2 GHz licensees. We request comment on the likelihood that such windfalls would occur and the impact they might have on the initiation of new services.

SEPARATE STATEMENT OF COMMISSIONER ANDREW C. BARRETT

In re: Amendment of Section 2.106 of the Commission's Rules to Allocate Emerging Technology Bands for Future Requirements.

This Notice of Proposed Rulemaking [Notice] begins a difficult, but necessary, proceeding to identify available spectrum for emerging communications technologies. Since my arrival at the Commission, I have kept abreast of the ongoing technological developments occurring in the digital audio, personal communications and mobile communications areas. Many of these technological advances have been integrated into new services that are now being offered in markets overseas. If the U.S. proponents of emerging technologies and services are going to remain competitive in a global context, I believe the Commission must address the spectrum issues that will allow such services to be launched. Thus, I support this Notice.

I write separately to highlight several issues in this docket. First, the Notice proposes to reallocate emerging technologies 220 MHz of the 1.85-2.20 GHz band that is now used for existing fixed microwave services. I note that the Commission already has received requests totaling more than 370 MHz for new services and technologies [i.e., personal communications, data, Low-Earth orbit, digital audio or mobile satellite services]. Such requests clearly exceed the 220 MHz being examined in this Notice. Thus, I think it is important that, while the Commission proceeds with this docket, we also remain abreast of ongoing legislative efforts taking place between Congress and the National Telecommunications and Information Administration to identify additional spectrum for commercial use. I hope that commenters will address the adequacy of the spectrum band proposed in this Notice with respect to the spectrum needs of emerging technologies.

Second, I hope to see comments in this docket which will address the technical feasibility of operating public safety microwave systems on a co-primary basis with other new services. Proponents of emerging technologies and services should not only justify their particular spectrum requirements, but also should provide alternative plans for addressing the needs of incumbent operators impacted by any reallocation decisions. This is particularly true where public safety operations are involved.

Finally, I would like to see commenters address the feasibility of utilizing additional market incentives to shift incumbent operators from their current frequency bands. Specifically, I am interested in reviewing the feasibility of using the tax certificate as an additional market incentive for commercial, microwave operators to sell their operations, turn in their licenses and shift their facilities to non-radio alternative media such as fiber optics. Such a use of the tax certificate could be analogous to action the Commission took in the AM [Radio] Improvement broadcast docket. I look forward to reviewing comments on the feasibility and legality of using the tax certificate in the context of this docket.
SEPARATE STATEMENT OF COMMISSIONER ERVIN S. DUGGAN

In Re: Amendment of Section 2.106 of the Commission’s Rules to Allocate Emerging Technology Bands for Future Requirements.

I support this item, whose laudable purpose is to further the development of new and promising technologies. By clearing more space for new technologies, the Commission seeks to foster technological progress without directing specific results — an impartial but significant act to encourage new communications services.

At the same time, however, I wish to express my strong concern that when there is any danger of displacing proven communications services in favor of unproven or speculative services, a heavy burden of proof rests upon us. I believe that the Commission must always demonstrate maximum sensitivity to the needs of incumbent users — especially those in the public safety community — who have for long periods acted in good faith and have abided by our rules.

Specifically, we need to ensure, when change appears warranted and necessary, that we have built in ample transition periods, measures for ensuring adequate compensation, and generous substitute spectrum positions for those who must move. And we need to consider the interests of consumers, who have come to rely on many of these existing communications services.

My general inclination, moreover, will be to support a limited or tentative grant of spectrum to a promising but speculative new service. This will enable the Commission to reclaim any unused or seriously underused spectrum if a market does not develop as hoped for the new service.

Because this proposal seems to me to express careful regard for the interests of incumbents, I support it. I think it important also to remind existing licensees that they need to become efficient users of spectrum as the electromagnetic spectrum becomes more crowded.
Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of
Expanding the Economic and Innovation
Opportunities of Spectrum Through Incentive
Auctions

GN Docket No. 12-268

REPORT AND ORDER

Adopted: May 15, 2014
Released: June 2, 2014

By the Commission:

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I. INTRODUCTION

1. This Order adopts rules to implement the broadcast television spectrum incentive auction. The incentive auction is a new tool authorized by Congress to help the Commission meet the Nation’s accelerating spectrum needs.1 Broadcasters will have the unique financial opportunity in the “reverse

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auction” phase of the incentive auction to return some or all of their broadcast spectrum usage rights in exchange for incentive payments. By facilitating the voluntary return of spectrum usage rights and reorganizing the broadcast television bands, we can recover a portion of ultra-high frequency (“UHF”) spectrum for a “forward auction” of new, flexible-use licenses suitable for providing mobile broadband services. Payments to broadcasters that participate in the reverse auction can strengthen broadcasting by funding new content, services, and delivery mechanisms. And by making more spectrum available for mobile broadband use, the incentive auction will benefit consumers by easing congestion on the Nation’s airwaves, expediting the development of new, more robust wireless services and applications, and spurring job creation and economic growth.

2. Our central objective in designing this incentive auction is to harness the economics of demand for spectrum in order to allow market forces to determine its highest and best use. We are also mindful of the other directives that Congress established for the auction, including making all reasonable efforts to preserve, as of the date of the passage of the Spectrum Act, the coverage area and population served of remaining broadcast licensees. The auction affords a unique opportunity for broadcasters who wish to relinquish some or all of their spectrum rights, but we emphasize that a broadcaster’s decision to participate in the reverse auction is wholly voluntary. We are committed to removing barriers to this voluntary participation. In particular, the reverse auction in which broadcasters will have the opportunity to return spectrum rights will be transparent and easy to participate in. In the descending clock auction format we choose, for example, a broadcaster need only decide whether it is willing to accept one or more prices offered to it as the reverse auction proceeds; if at any point the broadcaster decides a price is too low, it may drop out of the reverse auction. No station will be compensated less than the total price that it indicates it is willing to accept.

3. The auction presents a once-in-a-lifetime opportunity for broadcasters, and we are committed to providing them with information about both our process and the financial opportunity the auction represents to enable them to make informed business decisions about whether and how to participate. We have conducted numerous workshops and other direct outreach efforts. We also have developed the Learn Everything About Reverse Auctions Now (“LEARN”) program to provide useful

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2 Spectrum Act § 6403(a)(1) (mandating “a reverse auction to determine the amount of compensation that each broadcast television licensee would accept in return for voluntarily relinquishing some or all of its broadcast television spectrum usage rights in order to make spectrum available for assignment through a system of competitive bidding under subparagraph (G) of section 309(j)(8) of the Communications Act of 1934, as added by section 6402.”); see § IV.B (Reverse Auction).
3 Spectrum Act § 6403(c)(1) (A) (requiring the FCC to conduct a “forward auction” to assign licenses for the use of spectrum reallocated from broadcast television as part of the incentive auction); see § IV.C (Forward Auction).
4 Spectrum Act § 6403(b)(2).
5 See § IV.B (Reverse Auction).
6 See § III.B.1 (Repacking Process Overview); Spectrum Act § 6403(b).
7 See para. 453.
We anticipate offering demonstrations of the auction bidding system, interactive tutorials, and other opportunities for broadcasters to familiarize themselves with the reverse auction application and bidding processes in advance of the reverse auction. We also recognize the importance of broadcasters that choose not to participate in the reverse auction. To free up a portion of the UHF spectrum band for new, flexible uses, Congress authorized the Commission to reorganize the broadcast television spectrum so that the stations that remain on the air after the incentive auction occupy a smaller portion of the UHF band. The reorganization (or “repacking”) approach we adopt will avoid unnecessary disruption to broadcasters and consumers and ensure the continued availability of free, over-the-air television service.

Ultimately, our actions will benefit consumers of telecommunications services. While minimizing disruption to broadcast television service, we seek to rearrange the UHF spectrum in order to increase its potential to support the changing needs of 21st Century consumers. We recognize that the same individuals may be consumers of television, mobile broadband—using both licensed and unlicensed spectrum—and other telecommunications services. To benefit such consumers, and consistent with the framework of the Spectrum Act, we have strived for balance in our decision-making process between television and wireless services, and between licensed and unlicensed spectrum uses.

We adopt a “600 MHz Band Plan” for new services in the reorganized UHF spectrum. By maximizing the spectrum’s value to potential bidders through features such as paired five megahertz “building blocks,” the Band Plan will help to ensure a successful auction. By accommodating variation in the amount of spectrum we recover in different areas, which depends on broadcaster participation and other factors, the Band Plan will ensure that the repurposing of spectrum for the benefit of most consumers nationwide is not limited by constraints in particular markets. The Band Plan will promote competition and innovation by creating opportunities for multiple license winners and for future as well as current wireless technologies. Because it is composed of a single band of paired spectrum blocks only, our Band Plan also simplifies the forward auction design. We adopt for new licensees flexible-use service rules, and technical rules similar to those governing the adjacent 700 MHz Band, an approach that should speed deployment in the 600 MHz Band. Devices will be required to be interoperable across the entire new 600 MHz Band.

Our repacking methodology will ensure an efficient television channel assignment scheme while avoiding unnecessary disruption to broadcasters and consumers. Repacking presents a complex engineering problem that must be solved repeatedly during the course of the reverse auction bidding process: namely, how to determine which channels to assign to stations that will stay on the air, consistent with statutory requirements, as well as the technical requirements that we establish. For the incentive auction to succeed, we need a methodology capable of solving the problem quickly and with certainty as the reverse auction bidding proceeds. Our repacking methodology will address these needs by simplifying the problem. During the reverse auction bidding process, provisional channel assignments that satisfy applicable requirements will be identified, ensuring that a feasible channel is available for every station that remains on the air. After the reverse auction bidding ends, final channel assignments will be optimized to strive for additional goals, such as minimizing relocation costs for broadcasters.

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9 See http://www.fcc.gov/learn.

10 See Spectrum Act § 6403(b)(1) (requiring the FCC, in order to “mak[e] available spectrum to carry out the forward auction,” to “evaluate the broadcast television spectrum,” and authorizing it, “subject to international coordination . . .” to “make such reassignments of television channels as the Commission considers appropriate” and “reallocate such portions of such spectrum as the Commission determines are available”).

11 Under this framework, we can generally make available for new uses the amount of spectrum we recover in most top markets, while offering different amounts in constrained markets (such as those that border Canada and Mexico) where we may recover less spectrum. See § III.A.2.d (Market Variation).

12 See § III.B.1 (Repacking Process Overview).
assigned to new channels. This approach will meet the practical requirements of conducting a successful auction without sacrificing other objectives.

7. Our repacking approach will also fulfill Congress’s mandate to use “all reasonable efforts to preserve,” as of the date of the passage of the Spectrum Act, the coverage area and population served of each remaining broadcast licensee. In particular, our approach will ensure that each station serves essentially the same viewers that it served before the incentive auction, and that no station causes more than a minimal (0.5 percent) amount of new interference to another station. The statutory mandate covers facilities operating as of February 22, 2012, but we will extend the same protection to certain facilities authorized after that date, having determined that the benefits of doing so outweigh the potential costs to our flexibility in reorganizing the broadcast television spectrum.

8. In addition to repurposing UHF spectrum for new licensed uses, the rules we adopt in this Order will make a significant amount of spectrum available for unlicensed use, a large portion of it on a nationwide basis. Unlicensed devices complement licensed services, serve a wide range of consumer needs, and contribute tens of billions of dollars to our economy annually. To prevent harmful interference between licensed services, our 600 MHz Band Plan includes a number of guard bands, which we intend to make available for use by unlicensed devices. Moreover, we will allow unlicensed use of channel 37, and allow television white space (“TVWS”) devices as well as wireless microphones to operate on any unused television channels following the incentive auction. We also intend to designate one unused channel in each area following the repacking process for shared use by wireless microphones and TVWS devices.

9. To facilitate broadcaster participation, we are striving for simplicity in designing the reverse auction. Broadcasters will be able to participate online through an easy-to-use computer interface. They will have several bid options, including relinquishing their licenses, moving to a lower band, and sharing a channel. The descending clock format to collect bids will enable broadcasters to gain information during the bidding, and will not require them to reveal how much compensation they ultimately would accept; they need indicate only whether they accept the opening price and—if so—any subsequent prices. If at any point a broadcaster decides prices are too low, it may drop out of the auction. No station will be compensated less than the total price that it indicates it is willing to accept. We will evaluate and select bids in conjunction with the repacking process, based on their potential impact on the recovery of spectrum and other factors. We will keep the identity of broadcasters that participate confidential, and that period of confidentiality will extend for two years after the incentive auction, except for winning bidders.

10. For the incentive auction to succeed, the reverse auction and the repacking process must work seamlessly with the forward auction of new, flexible-use 600 MHz Band licenses. We are designing the forward auction for speed, so that reverse auction participants need not await its outcome for weeks or months. In particular, by conducting bidding for generic or interchangeable spectrum blocks rather than specific frequencies, we can condense the time required for bidding significantly. We establish a final stage rule to assure that the forward auction raises enough proceeds to satisfy the minimum proceeds

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13 See Spectrum Act § 6403(b)(2) (requiring “all reasonable efforts to preserve, as of the date of the enactment of this Act, the coverage area and population served of each broadcast television licensee, as determined using the methodology described in OET Bulletin 69”).

14 See § III.B.2 (Implementing the Statutory Preservation Mandate).

15 See § III.B.3 (Facilities to Be Protected); Spectrum Act § 6403(b)(2).

16 See § III.C (Unlicensed Operations).

17 See § IV.B.1 (Reverse Auction Pre-Auction Process); Spectrum Act § 6403(a)(3) (requiring “all reasonable steps necessary to protect the confidentiality of Commission-held data of a licensee participating in the reverse auction . . . , including withholding the identity of such licensee until the [spectrum] reassignments and reallocations (if any) . . . become effective”).
requirements that we establish, but bidding will continue as long as demand for wireless licenses in any area exceeds the number available in that area. In the Mobile Spectrum Holdings Report and Order adopted today, we establish a market-based spectrum reserve in the forward auction designed to ensure against excessive concentration in holdings of low-band spectrum, and we adopt certain secondary markets limitations regarding 600 MHz Band licenses.

11. Following the conclusion of the incentive auction, the transition to the reorganized UHF band will be as rapid as possible without causing unnecessary disruption. Television stations that voluntarily turn in their licenses or agree to channel share must transition from their pre-auction channels within three months of receiving their reverse auction payments. The time required for stations reassigned to a new channel to modify their facilities will vary, so we will tailor their construction deadlines to their situations. This approach will ensure that stations transition as quickly as their circumstances allow, and allow coordination of deadlines where, for example, one station must vacate a channel before another can begin operating on its new channel. No station will be allowed to operate on a channel that has been reassigned or repurposed more than 39 months after the repacking process becomes effective. In other words, the repurposed spectrum will be cleared no later than 39 months after the effective date. Most new licensees should have access to 600 MHz spectrum well before then. Consistent with Congress’s mandate, we also establish procedures to reimburse costs reasonably incurred by stations that are reassigned to new channels, as well as by multichannel video programming distributors to continue to carry such stations.

12. As Congress recognized, the incentive auction and the transition that follows require coordination with our cross-border neighbors, Canada and Mexico. Because of these common borders, the Commission has established processes and agreements to protect television and wireless operations in border areas from harmful interference. The FCC staff has used these processes to fully inform Canadian and Mexican officials regarding the incentive auction and, beginning in 2013, formed technical groups to meet routinely to plan for harmonious use of the reorganized UHF band following the incentive auction. Commission leadership has supplemented these efforts, meeting with their Canadian and Mexican counterparts to emphasize the need for and mutual benefits of harmonization. We are confident that the long and successful history of close cooperation with Canada and Mexico regarding the use of radio spectrum along our common borders will continue before, during, and after the incentive auction.

13. We intend to conduct the broadcast television spectrum incentive auction as soon as possible. We must proceed deliberately, however, as the auction will be the first of its kind. We also are committed to an open, transparent process with meaningful public input. The Commissioners and staff have engaged in significant public discourse throughout the course of this proceeding. In addition to the

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18 See § IV.C.2 (Forward Auction Bidding Process).
20 See § V.C.2.b (Transition Procedures for Winning License Relinquishment and Channel Sharing Bidders).
21 See § V.C.2.a (Construction Period for Stations with New Channel Assignments). We note that no broadcaster will be required to relocate its transmission facilities. Stations that are reassigned to new channels will have to modify their facilities to operate on the new channels, however.
22 See id. Thirty-nine months includes the thirty-six month construction period provided under current FCC rules, plus three months between the effective date—when the repacking process results are announced—and the deadline for stations to file construction permit applications to modify their facilities.
23 See Spectrum Act § 6403(b)(4)(A); § V.C.5 (Reimbursement of Relocation Costs).
24 See Spectrum Act § 6403(b)(authorizing such reassignments of television channels as the Commission considers appropriate, and reallocation of such spectrum as it determines is available for reallocation, subject to international coordination along the border with Mexico and Canada).
usual comment and reply process, the record reflects more than 400 ex parte meetings, numerous public notices and workshops on specific incentive auction-related issues, and a series of Incentive Auction Task Force presentations at Commission open meetings, which have provided critical input for the decisions we make today. These decisions provide the essential framework for the incentive auction. But they will not, by themselves, enable us to implement the incentive auction. Based on the framework we establish today, we will develop the detailed procedures necessary to govern the auction process, which will be based on additional record input on the remaining, narrower set of important issues, such as auction design and issues arising from our decision to accommodate market variation in the 600 MHz Band Plan.  

14. Our experience with spectrum auctions over the past 20 years supports our conclusion that the public interest is best served by acting now to establish the basic framework for the incentive auction, and thereafter resolving discrete outstanding issues and adopting final auction procedures, through a process that allows additional public input and concludes well in advance of the auction itself. The Commission’s past practice has been to first establish general rules governing spectrum license auctions in reports and orders, and then specific requirements through public notices that provide the opportunity for comment by interested parties, including on critical matters such as bid collection, assignment, and payment procedures and final stage rule. This approach has worked well, and a similar one is all the more necessary for the incentive auction due to its novelty and complexity. Consistent with this approach, today’s Order determines many of the significant elements of the incentive auction, which are set forth in the following Executive Summary.

15. In the coming months, the Commission will solicit public input on final auction procedures by Public Notice (“Incentive Auction Comment PN” or “Comment PN”). This Public Notice will include specific proposals on crucial auction design issues such as opening prices, factors for setting reverse auction prices, and how much market variation to accommodate in the 600 MHz Band Plan. Well in advance of the auction, also by Public Notice, the Commission will resolve these implementation issues, and provide detailed explanations and instructions for potential auction participants (“Incentive Auction Procedures PN” or “Procedures PN”).  

26 We do not modify the Wireless Telecommunications Bureau’s (“WTB” or “Wireless Bureau”) well-established authority to adopt final auction procedures through a pre-auction public notice process. Compared to our typical spectrum auctions, many aspects of the broadcast television spectrum incentive auction are unique, and in this proceeding we intend to establish certain procedures by Commission vote. The WTB may continue to establish final auction procedures in this proceeding concerning those matters that it typically handles under existing delegations of authority.

16. The Commission will resolve outstanding issues that fall outside the rubric of the Comment PN and the Procedures PN, including a methodology for preventing co- and adjacent channel interference between television and wireless services in certain areas, and proposals for an aggregate cap on interference to television stations in the repacking process, through a separate process that will conclude in advance of decisions on the final auction procedures. The discussion that follows identifies such issues that are not being resolved in this Order and, where appropriate, delegates authority to one or more of the Commission’s Bureaus and Offices to resolve those issues in accordance with our decisions.


26 We refer generally to the “pre-auction process” in this Order, which includes the Comment PN and Procedures PN. We may seek comment on, and/or resolve, certain final auction procedures in separate public notices if doing so better conduce to the proper dispatch of business. See 47 U.S.C. § 154(j). Any such public notices will be released during the pre-auction process and well in advance of the auction.

27 See 47 C.F.R. § 0.131(c).

II. EXECUTIVE SUMMARY

17. **600 MHz Band Plan.** We adopt a 600 MHz Band Plan with specific paired uplink and downlink bands, comprised of five megahertz “building blocks.” We find that specific uplink and downlink bands that support Frequency Division Duplex (“FDD”) technologies are best suited for the new 600 MHz Band at the present time in light of current technology, the Band’s propagation characteristics, and potential interference issues present in the Band; and that offering paired spectrum blocks will best facilitate the rapid deployment of networks, including by smaller carriers and new entrants. The uplink portion of the Band will begin at channel 51 (698 MHz) and expand downward, followed by a duplex gap and then the downlink portion of the Band. The Band Plan can accommodate variation in the amount of spectrum recovered in different geographic areas in order to prevent the “least common denominator market” from limiting the quantity of spectrum we can offer generally across the nation.29

18. In addition, the Band Plan we adopt incorporates technically reasonable guard bands, including the duplex gap, to prevent harmful interference between licensed services.30 We adopt Partial Economic Areas (“PEAs”) as the service area for the 600 MHz Band, finding that PEAs permit entry by providers that contemplate offering wireless broadband service on a localized basis, yet may be easily aggregated by carriers that plan to provide service on a larger geographic scale. Consistent with the Spectrum Act’s directives, we also adopt “flexible use” service rules for the 600 MHz Band.31

19. **Repacking the Broadcast Television Bands.** In reorganizing the television bands to make spectrum available to carry out the forward auction, the FCC must “make all reasonable efforts to preserve, as of [February 22, 2012], the coverage area and population served of each broadcast television licensee, as determined using the methodology described in OET Bulletin 69 of the Commission’s Office of Engineering and Technology” (“OET-69”).32 We interpret this mandate to require that we strive to preserve full power and Class A stations’ existing service as of that date without sacrificing the objectives of the incentive auction. While we will use the methodology described in OET-69 to determine the coverage area and population served of each station, we must update the computer software and input values used to implement that methodology. Among other things, doing so will ensure that our software is capable of the rapid, complex calculations necessary to support the reverse auction and the repacking process, and that we are relying on the most accurate population and other data available. We will protect full power stations’ coverage areas based on their “service areas,”33 and protect the coverage areas of Class A stations, which do not have “service areas” under FCC rules or OET-69, based on their “protected contours.”34 Rather than merely attempting to preserve the same total population served by each station, we will make all reasonable efforts to preserve the same specific viewers it served as of

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29 If the 600 MHz Band Plan could not accommodate some market variation, we would be forced to limit the amount of spectrum offered across the nation to what is available in the most constrained market (the “least common denominator”), even if more spectrum could be made available in the vast majority of the country. See § III.A.2.d (Market Variation).

30 See § III.A.2.e (Guard Bands). The size of the guard band between 600 MHz downlink and television depends on how much spectrum is repurposed through the incentive auction. The duplex gap will be 11 megahertz, and the potential size of the guard band between 600 MHz downlink and television is seven to 11 megahertz. If 84 megahertz or more is repurposed, there will be a three-megahertz guard band or bands between 600 MHz operations and channel 37. See id.; § III.D.1 (Channel 37 Services).

31 See § VI.B.2 (600 MHz Band Service Rules); Spectrum Act § 6402 (granting incentive auction authority “to permit the assignment of new initial licenses subject to flexible-use service rules”).

32 Spectrum Act § 6403(b)(2).

33 See § III.B.2.c (Preserving Coverage Area); 47 C.F.R. § 73.622(e); OET-69 at 1.

34 See § III.B.2.c (Preserving Coverage Area); 47 C.F.R. § 73.6010.
February 22, 2012. We will not allow any channel assignments that, considered on a station-to-station basis, would reduce a station’s population served by more than a de minimis (0.5 percent) amount.\textsuperscript{35}

20. **Television Facilities to Be Protected in the Repacking Process.** As Congress required, we will protect full power and Class A facilities that already were operating pursuant to a license (or a pending application for a license to cover a construction permit) on February 22, 2012.\textsuperscript{36} We also exercise our discretion to protect facilities in addition to those the statute requires us to protect, based on consideration of the potential impact on our flexibility in the repacking process and our auction goals, whether failing to protect would strand investment by broadcasters licensed on a primary basis, the loss of service to existing viewers, and the potential impact on the Class A service’s digital transition. In particular, we will protect:

- the small number of new full power television stations that were authorized, but not constructed or licensed, as of February 22, 2012;
- full power facilities authorized in construction permits issued to effectuate a channel substitution for a licensed station;
- modified facilities of full power and Class A stations that were authorized by construction permits granted on or before April 5, 2013, the date the Media Bureau issued a freeze on the processing of certain applications; and
- minor change facilities authorized to implement Class A stations’ mandated transition to digital operations.\textsuperscript{37}

21. Except in very limited circumstances, we will limit discretionary protection to the above categories. We conclude that protecting other categories of facilities, including low power television ("LTPV") stations and television translator ("TV translator") stations, which are secondary in nature and are not entitled to protection from primary services under our current rules, would unduly constrain our flexibility in the repacking process and undermine the likelihood of meeting our objectives for the incentive auction. To help preserve the important services provided by LPTV and TV translator stations, we will open a special filing window for such stations that are displaced to select a new channel and will amend our rules to expedite the process for displaced stations to relocate. We also intend to initiate a rulemaking proceeding after the release of this Order to consider additional means to mitigate the potential impact of the incentive auction and the repacking process on LPTV and TV translator stations.

22. **Unlicensed Operations.** We will make the 600 MHz Band guard bands available for unlicensed use, thereby making spectrum available for unlicensed devices nationwide. Depending on the amount of spectrum repurposed through the incentive auction, we will make a total of 14 to 28 megahertz of guard band spectrum available for unlicensed use. In addition, we will make an additional six megahertz of spectrum available by allowing unlicensed use of channel 37 at locations where it is not in use by channel 37 incumbents, subject to the development of the appropriate technical parameters to protect the incumbent Wireless Medical Telemetry Service ("WMTS") and Radio Astronomy Service ("RAS") from harmful interference.\textsuperscript{38} Following the incentive auction and the post-auction transition,

\textsuperscript{35} We will resolve proposals for an additional, aggregate cap on interference to television stations through a separate process that will conclude in advance of decisions on the final auction procedures. See § III.B.2.d (Preserving Population Served).

\textsuperscript{36} See § III.B.3 (Facilities to Be Protected); Spectrum Act § 6403(b)(2).

\textsuperscript{37} See § III.B.3 (Facilities to Be Protected); In order to ensure that we have a largely static view of the facilities that will be protected in advance of the repacking process, we generally will limit our discretionary protection to facilities constructed and licensed on or before a Pre-Auction Licensing Deadline to be announced by the Media Bureau. We anticipate that the Public Notice will give stations at least 90 days prior notice of this deadline.

\textsuperscript{38} See § III.C (Unlicensed Operations). We will initiate a separate rulemaking proceeding to establish technical rules for unlicensed operations in the guard bands and on channel 37.
TVWS devices may continue to operate on channels allocated and assigned for primary television services, consistent with our current rules.\textsuperscript{39} We anticipate that there will be at least one channel not assigned to a television station in all areas at the end of the repacking process,\textsuperscript{40} and we intend, after additional notice and opportunity for public input, to designate one such channel in each area for shared use by wireless microphones and TVWS devices. We expect a significant amount of spectrum to be available for continued TVWS use, particularly outside of the central urban areas of the largest television markets.\textsuperscript{41} Any other unused television channels in a market following the incentive auction will also be available for TVWS device as well as wireless microphone use. We will initiate a rulemaking proceeding after the release of this Order to consider changes to our existing Part 15 rules to facilitate unlicensed use of the television bands, 600 MHz Band guard bands and channel 37.

23. \textit{Other Services.} We will not relocate the WMTS or the RAS from channel 37. To protect these incumbent services from harmful interference, in the 600 MHz Band Plan we adopt guard bands between such services and any new wireless broadband services that may be deployed adjacent to channel 37. Furthermore, we will require coordination with existing RAS facilities so that any new wireless systems can be deployed to cover the broadest area possible with minimal impact to RAS observatories. We will continue to license fixed broadcast auxiliary service (“BAS”) operations on a secondary basis in the post-auction TV bands.

24. We adopt measures to facilitate wireless microphone use of available spectrum in the reorganized UHF band. With regard to the 600 MHz Band guard bands, we will allow broadcasters and cable programming networks to operate licensed wireless microphones in a portion of the duplex gap, and permit users generally to operate wireless microphones in the guard bands on an unlicensed basis.\textsuperscript{42} We will initiate a proceeding to adopt technical standards to govern these uses.\textsuperscript{43} With regard to the remaining television spectrum, while there may no longer be two unused channels for wireless microphones in markets where those channels are currently used for that purpose, as noted above we intend to designate one unused channel in each area following the auction for use by wireless microphones and TVWS devices. We also revise our rules for co-channel operations in the post-auction television bands to expand the areas where wireless microphones may operate. We will continue to permit wireless microphone users of unused television channels to register to obtain needed protection from unlicensed TVWS devices on such channels through the TV bands database registration system, which we plan to improve to make protection more timely and effective. In a companion item that we adopt today, we extend to certain unlicensed wireless microphone users the rights of licensed wireless microphone users.\textsuperscript{44} We will also initiate a proceeding in the near future to find additional spectrum for wireless microphone users in other spectrum bands in order to help address their long-term needs.

25. \textit{Incentive Auction Process: Integration of the Reverse and Forward Auctions.} The reverse and forward auctions will be integrated in a series of stages. Each stage will consist of a reverse

\textsuperscript{39} See generally 47 C.F.R. Part 15; § III.C (Unlicensed Operations).

\textsuperscript{40} See III.C (Unlicensed Operations). For engineering reasons, there may be a few areas with no spectrum available in the television bands for unlicensed devices and wireless microphones to share.

\textsuperscript{41} TVWS devices may continue to operate in portions of the UHF band that will be repurposed until a 600 MHz Band licensee commences operations, and in portions designated for guard band use.

\textsuperscript{42} See § IIID.3 (Low Power Auxiliary Stations and Unlicensed Wireless Microphones). Wireless microphones may operate throughout the 600 MHz Band during the Post-Auction Transition Period. See § V.D.4 (Transition Procedures for Low Power Auxiliary Stations (LPAS) and Unlicensed Wireless Microphones).

\textsuperscript{43} See § III.C (Unlicensed Operations).

auction and a forward auction bidding process, and additional stages will be run if necessary. Prior to the first stage, the initial spectrum clearing target will be determined. Broadcasters will indicate through the pre-auction application process their willingness to relinquish spectrum usage rights at the opening prices. Based on broadcasters’ collective willingness, the initial spectrum clearing target will be set. Then the reverse auction bidding process will be run to determine the total amount of incentive payments to broadcasters required to clear that amount of spectrum. The forward auction bidding process will follow the reverse auction bidding process. If the final stage rule is satisfied, the forward auction bidding will continue until there is no excess demand, and then the incentive auction will close. If the final stage rule is not satisfied, additional stages will be run, with progressively lower spectrum targets in the reverse auction and less spectrum for licenses available in the forward auction, until the rule is satisfied.

26. The final stage rule is a reserve price with two components, both of which must be satisfied. The first component requires that the average price per MHz-pop\(^ {45} \) for licenses in the forward auction meets or exceeds a certain price per MHz-pop benchmark. Alternatively, if the spectrum clearing target at a particular stage is greater than a spectrum clearing benchmark, then the first component will be met if the total proceeds of the forward auction exceed the product of the same price benchmark, the spectrum clearing benchmark, and the total number of pops for those licenses.\(^ {46} \) This alternative formulation will allow the auction to close if the incentive auction repurposes a relatively large amount of spectrum for wireless uses, even if the price per-MHz-pop is less than the benchmark price. The price and spectrum clearing benchmarks will be established by the Commission in the Procedures PN, after an opportunity for additional comment. The second component of the final stage rule requires that the proceeds of the forward auction be sufficient to meet mandatory expenses set forth in the Spectrum Act\(^ {47} \) and any Public Safety Trust Fund amounts needed in connection with FirstNet. If the requirements of both components of the reserve price are met, then the final stage rule is satisfied.\(^ {48} \)

27. Reverse Auction Eligibility and Bid Options. Full power and Class A station licensees will be eligible to participate in the reverse auction. They may bid to voluntarily relinquish the spectrum usage rights associated with station facilities that are eligible for protection in the repacking process. Licensees with pending enforcement matters whose bids may result in their holding no broadcast licenses may participate under a streamlined escrow approach that is consistent with current practice in the sales context. Bidders will have the three bid options specified by the Spectrum Act: (1) license relinquishment; (2) reassignment from a UHF to a VHF channel; and (3) channel sharing. UHF-to-VHF bidders may limit their bids to a high (channels 7 to 13) or low (channels 2 to 6) VHF channel. We will favorably consider post-auction waiver requests involving winning UHF-to-VHF and high-VHF-to-low-VHF bidders’ technical operations. Bidders will have the additional option to bid for reassignment from a high VHF channel to a low VHF channel. Channel sharing bidders may propose licensed community changes if they cannot satisfy signal coverage requirements from their new transmitter sites, provided that

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\(^ {45} \) The term “MHz-pop” is defined as the product derived from multiplying the number of megahertz associated with a license by the population of the license’s service area.

\(^ {46} \) The operation of the final stage rule, including the alternative formulation of the first component, is explained in detail below in § IV.A (Overview and Integration of the Reverse and Forward Auctions). In the pre-auction process, we will consider whether to apply the final stage rule solely to “major markets” and, if so, how to identify such markets. This approach could significantly speed up the determination of whether the final stage rule is satisfied.

\(^ {47} \) The Spectrum Act requires that the forward auction generate proceeds sufficient to pay winning bidders in the reverse auction and cover relevant administrative costs of the auction and an estimate of relocation costs subject to reimbursement. See Spectrum Act § 6403(c)(2).

\(^ {48} \) We note that the first and second components are not cumulative: the auction need not raise sufficient proceeds to satisfy the first plus the second.
the new communities meet the same allotment priorities as the current ones and are located in the same Designated Market Areas (“DMAs”).

28. Reverse Auction Pre-Auction Process. Potential bidders will have to submit certified applications. Consistent with the Spectrum Act, we will protect the identity of licensees that apply to participate in the reverse auction. Specifically, we will maintain the confidentiality of information submitted by all licensees that apply to participate until the results of the reverse auction and the repacking process are announced. We will maintain the confidentiality of information on non-winning bids for an additional two years. Confidential information will include licensees’ names, channels, call signs, facility identification numbers, network affiliations, and any other information necessary to protect licensees’ identities.

29. Between the short-form application filing deadline and the announcement of the results of the reverse auction and the repacking process, all full power and Class A licensees will be prohibited from communicating directly or indirectly any reverse or forward auction applicant’s bids or bidding strategies to any other full power or Class A licensee or forward auction applicant. Recognizing that many broadcasters are not familiar with auction processes, we intend to make education regarding the pre-auction application process, including the scope of the prohibition of certain communications, an important part of our broadcaster outreach efforts.

30. Reverse Auction Bidding Process. We adopt a descending clock format for the reverse auction. In each bidding round, stations will be offered prices for one or more bid options and will indicate their choices at these prices. The prices offered to each station for options will be adjusted downward as the rounds progress in a way that accounts for the availability of television channels in different bands in the repacking process. “Intra-round bidding” will enable bidders to indicate price levels (between the opening- and closing prices in a round) at which they would like to either choose different bid options or drop out of the auction and remain in their home bands. A station will continue to be offered prices for bid options until the station’s voluntary relinquishment of rights becomes needed to meet the current spectrum clearing target. When all remaining active bidders are needed in this way, the reverse auction for the stage will end. If the final stage rule is satisfied in that stage, then the active bidders are winning bidders, and the price paid to each will be at least as high as the last price it agreed to accept.

31. Forward Auction Pre-Auction Process. At this time we adopt the same size-based bidding credits for the forward auction as the Commission applied in auctioning 700 MHz Band spectrum: 15 percent for small businesses (defined as entities with average annual gross revenues for the

49 The Commission’s television allotment priorities implement the policy goals of § 307(b) of the Communications Act. 47 U.S.C. § 307(b). See § IV.B.1.b.iii (Bid Options/Channel Sharing Bid).
50 Potential channel sharers need not submit applications (only sharees), but must certify regarding their channel sharing agreements. “Sharer” refers to a licensee that agrees to share its channel with another licensee, but does not bid to relinquish spectrum usage rights to its channel in the reverse auction. “Sharee” refers to a licensee that bids to relinquish spectrum usage rights to its channel in the auction to share a different channel with another licensee.
51 See Spectrum Act § 6403(a)(3) (“The Commission shall take all reasonable steps necessary to protect the confidentiality of Commission-held data of a licensee participating in the reverse auction . . . , including withholding the identity of such licensee until [the repacking process has] become effective . . . .”).
52 The prohibition will apply to all controlling interest holders in the licensee, and all directors and officers of the licensee. The prohibition will not apply to communications between (a) licensees that share a common controlling interest, director or officer (and between a licensee and a forward auction applicant that have similar overlapping interests) and (b) parties to a channel sharing agreement that is disclosed on a reverse auction application. See § IV.B.1.c (Confidentiality and Prohibition on Certain Communications).
53 The more potential for interference a station has, the more assigning it a channel is likely to limit the availability of channels for other stations, increasing the likely value of its bid to voluntarily relinquish spectrum usage rights.
preceeding three years not exceeding $40 million) and 25 percent for very small businesses (defined as entities with average annual gross revenues for the preceding three years not exceeding $15 million). Soon we will initiate a separate proceeding to review our Part 1 designated entity rules. As part of that proceeding, we will consider whether any revisions made to the rules should apply to the incentive auction. Forward auction applicants will be subject to our existing Part 1 competitive bidding rules, with modifications we adopt today that, among other things, provide for the selection of generic licenses and prohibit communications with full power and Class A licensees during the auction process.

32. **Forward Auction Bidding Process.** We adopt an ascending clock auction format for the forward auction. Bidders will be able to bid for generic licenses in one or more categories. Intra-round bidding will be allowed. There will be a separate clock price for each category in each geographic area, and bidders will indicate the number of licenses that they demand at the current prices. The prices generally will rise from round to round, as long as the demand for licenses exceeds their availability. Bidders still demanding licenses when the clock prices stop rising in every license category in every area will become winners of those licenses, provided the final stage rule is satisfied. If the rule is not satisfied, those bidders will have an opportunity to make additional bids in an extended bidding round. Once the rule is satisfied, winners may indicate their preferences for frequency-specific licenses in an assignment round or a series of separate bidding rounds. Final license prices will reflect the winning bid amounts from the clock bidding rounds as well as any adjustments from the extended bidding and assignment rounds.

33. **Completion and Effective Dates/Processing of Bid Payments.** Reverse and forward auction “completion,” required for the repacking process to become effective, will occur when the Commission publicly announces that the incentive auction has ended. The repacking process will be “effective,” triggering Commission authority to borrow up to $1 billion from the U.S. Treasury to use toward the payment of relocation costs, when the results of the reverse and forward auctions and the repacking process are announced. We anticipate that the completion and effectiveness announcements will occur simultaneously. As soon as the auction is complete and the repacking process effective, we anticipate borrowing some or all of the available $1 billion from the Treasury for reimbursement of relocation costs. We will share forward auction proceeds with licensees that relinquish rights in the reverse auction as soon as practicable following the successful conclusion of the incentive auction.

34. **Post-Auction Transition.** A public notice will mark the effective date of channel reassignments based on the repacking process and specify any specific channel assignments for television stations that will continue to broadcast. Reassigned stations will have three months to file construction permit applications for any minor changes to their facilities necessary to operate on their new channels. Stations also may request alternate channels or expanded facilities on their new channels. Following the three-month application filing deadline, stations will have up to 36 months to transition to their new channels. Stations may request extensions of time to construct their new facilities, but no station will be allowed to continue operating on a reassigned or reallocated channel more than 39 months after the repacking process becomes effective. Licensees that successfully bid to turn in their licenses or to share a channel will have three months from their receipt of auction proceeds to cease operations on their pre-auction

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54 See § IV.C.1.b (Bidding Credits).
55 See § IV.C.2 (Forward Auction Bidding Process).
56 Spectrum Act § 6403(f)(2).
57 See § V.A (Auction Completion and Effective Date of the Repacking Process).
58 See § V.B (Processing of Bid Payments). We will distribute auction proceeds as they become available.
channels. We also adopt transition requirements for LPTV and TV translator stations, BAS operations, wireless microphones and related services.\(^{59}\)

35. **Reimbursement of Relocation Costs.** We adopt procedures to reimburse costs reasonably incurred by television stations that are reassigned to new channels in the repacking process, as well as by MVPDs to continue to carry such stations, from the $1.75 billion Reimbursement Fund established by Congress for that purpose.\(^{60}\) Under these procedures, we intend to issue eligible stations and MVPDs an initial allocation of funds, in designated individual accounts in the United States Treasury, to cover the majority of their estimated costs. The funds will be available for draw down as expenses are incurred. Additional funds will be allocated as necessary prior to the three-year statutory deadline for all reimbursements. We delegate authority to the Media Bureau to establish a list of eligible expenses and estimated costs, and to calculate the amount of the allocations to eligible entities.\(^{61}\) We adopt measures to minimize administrative burdens and to prevent waste, fraud, and abuse in the reimbursement process.

36. **Post-Auction Broadcast Regulatory Issues.** We will grandfather existing broadcast station combinations that otherwise would no longer comply with the media ownership rules as a result of the reverse auction. We concur with commenters that we should conduct extensive outreach to broadcasters, including minority- and female-owned broadcasters, to ensure that they are fully informed about the incentive auction. The Commission already has made significant efforts to inform broadcasters about the process, and we intend to continue and expand those efforts. To provide guidance to licensees interested in channel sharing and to promote certainty regarding channel sharing relationships following the incentive auction, we will require that channel sharing agreements include certain key provisions regarding licensee rights and responsibilities.\(^{62}\)

37. **600 MHz Band Technical and Service Rules.** We adopt for new 600 MHz Band licensees flexible use service rules under Part 27 of our rules, and technical rules similar to those governing the adjacent 700 MHz Band in order to speed deployment while protecting incumbent 700 MHz Band licensees from harmful interference. We will require mobile devices to be interoperable across the entire 600 MHz Band. We will require new 600 MHz Band licensees to build out to 40 percent of the population in their service areas within six years and to 75 percent of the population by the end of their initial license terms of 12 years.\(^{63}\) Subsequent license terms will be 10 years.

### III. THE REORGANIZED UHF BAND

38. The current UHF band consists of 228 megahertz of spectrum divided into 38 six megahertz channels that are primarily licensed to broadcast television service.\(^{64}\) In the Spectrum Act, Congress authorized the Commission to reorganize the UHF band so that the television stations that will remain on the air after the incentive auction occupy a smaller portion of the band, thereby freeing up a

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\(^{59}\) See § V.D (Transition Procedures for Other Services and Unlicensed Operations).

\(^{60}\) See Spectrum Act § 6403(b)(4)(A); § V.C.5 (Reimbursement of Relocation Costs).

\(^{61}\) In lieu of reimbursement, stations also may request service rule waivers to make flexible use of their spectrum in order to provide non-broadcast services, as long as they continue to broadcast at least one TV program stream. See Spectrum Act § 6403(b)(4)(B); see § V.C.5.e (Service Rule Waiver in Lieu of Reimbursement).

\(^{62}\) See § VI.A.2 (Channel Sharing Operating Rules). We also address in § VI.A.2 termination and assignment or transfer of channel sharing licenses, sharing by stations operating on channels reserved for NCE operations, sharing between full power and Class A stations, the carriage rights of sharing stations, and other issues related to channel sharing relationships.

\(^{63}\) If a licensee fails to meet its interim build-out benchmark, its initial license term will be shortened to 10 years. See § VI.B.2 (License Term, Performance Requirements, Renewal Criteria, and Permanent Discontinuance of Operations).

\(^{64}\) See NPRM, 27 FCC Rpcl at 12362-66, paras. 12-22.