

**GETTING MORE OUT OF THIS “RELATIONSHIP”:
RE-EXAMINING FERC’S GENERATOR
INTERCONNECTION AUTHORITY TO HELP MORE
RENEWABLE RESOURCES INTERCONNECT UNDER
FERC’S INTERCONNECTION POLICY**

MICHAEL G. HENRY*

I. INTRODUCTION.....	312
II. THE INCREASED DEVELOPMENT OF RENEWABLE RESOURCES PLACES PRESSURE ON FERC INTERCONNECTION POLICY.....	313
A. Increased Development of Renewable Resources.....	313
B. Recent Proceedings Suggest FERC is Determining How Best to Apply Interconnection Policy to Renewable Resources	314
III. FERC INTERCONNECTION POLICY.....	319
A. Interconnection Basics.....	319
B. FERC Interconnection Authority as Set Forth in Order No. 2003	322
C. FERC’s Jurisdiction Decision in Order No. 2003.....	326
D. Analysis of FERC’s Authority as Expressed in Order No. 2003 in Light of Judicial Precedent.....	328
E. Aftermath of Order No. 2003 – Problems Arise.....	330
IV. HOW CAN FERC EXPAND THE REACH OF ITS INTERCONNECTION POLICY?	333
A. Revisit the Jurisdiction Discussion in Order No. 2003.....	333
B. Other Sources for Action Under the FPA	334
V. CONCLUSION	336

* Michael G. Henry is a managing attorney in the Office of the General Counsel at the Federal Energy Regulatory Commission. He received an A.B. from Georgetown University and a J.D./M.P.Aff. from the School of Law and the Lyndon B. Johnson School of Public Affairs at the University of Texas at Austin. The views expressed in this article do not necessarily represent the views of the Federal Energy Regulatory Commission or the United States. The author wishes to thank Jan Macpherson and Larry Greenfield for their input and guidance, and his family for their patience and support.

I. INTRODUCTION

In coming years an increasing number of new renewable energy resources likely will seek to interconnect to the nation's electric grid. This article begins by briefly describing the trend toward increased use of renewable resources, and the kind of pressure this increase has placed on the Federal Energy Regulatory Commission (FERC) to accommodate that increase, including the strain on FERC's interconnection policy. In its Order Nos. 2003¹ and 2006², FERC adopted a comprehensive policy for interconnecting generators, some of which will be renewable resources.³ The applicability of FERC's interconnection policy is circumscribed by FERC's jurisdictional reach as established in the Federal Power Act (FPA).⁴ An analysis of judicial opinions that address the boundary between state and federal authority under the FPA—particularly one recent opinion that examined interconnections as “relationships”—suggests that FERC does not exercise the full extent of its legal authority to apply its interconnection policy.⁵ This emphasis on the jurisdictional interconnection “relationship” rather than the jurisdictional status of the facility to which the generator is interconnecting suggests that FERC has authority to require an interconnection—even an interconnection to a facility otherwise beyond FERC authority—as long as the interconnecting generator will make wholesale sales in interstate commerce. This article concludes by recommending several policy options available to FERC for expanding the reach of its interconnection authority to require or ensure a larger number of interconnections under FERC-established terms and conditions, including the interconnection of renewable resources.

1. Standardization of Generator Interconnection Agreements and Procedures, Order No. 2003, 18 C.F.R. § 35, FERC Stats. & Regs. ¶ 31,146 (2003), *order on reh'g*, Order No. 2003-A, FERC Stats. & Regs. ¶ 31,160 (2004), *order on reh'g*, Order No. 2003-B, FERC Stats. & Regs. ¶ 31,171 (2004), *order on reh'g*, Order No. 2003-C, FERC Stats. & Regs. ¶ 31,190 (2005), *aff'd sub nom. Nat'l Ass'n of Regulatory Util. Comm'rs v. FERC*, 475 F.3d 1277 (D.C. Cir. 2007) (*NARUC v. FERC*).

2. Standardization of Small Generator Interconnection Agreements and Procedures, Order No. 2006, FERC Stats. & Regs. ¶ 31,180, *order on reh'g*, Order No. 2006-A, FERC Stats. & Regs. ¶ 31,196 (2005), *order granting clarification*, Order No. 2006-B, FERC Stats. & Regs. ¶ 31,221 (2006), *appeal pending sub nom. Consolidated Edison Co. of New York, Inc., et al. v. FERC* (U.S.C.A., D.C. Circuit, Docket Nos. 06-1018, et al.).

3. A renewable resource can be defined as a unit generating electricity from wind, organic waste, biomass, or a hydroelectric, geothermal, solar thermal, photovoltaic, tidal, wave, or other nonfossil fuel or nonnuclear source.

4. Federal Power Act, 16 U.S.C.A. §§ 791a-825 (West Supp. 2006).

5. See *infra* sections III.D & IV.B.3.

II. THE INCREASED DEVELOPMENT OF RENEWABLE RESOURCES PLACES PRESSURE ON FERC INTERCONNECTION POLICY

A. *Increased Development of Renewable Resources*

Public opinion polls,⁶ introduction of legislation,⁷ and highly publicized efforts by business⁸ all suggest that renewable resources are enjoying a surge in popularity. But in spite of being widely popular, renewable resources provide just six percent of the total energy consumed in the United States and just three percent without the inclusion of hydropower.⁹ Nevertheless, the public and political popularity of renewable resources has produced legislative trends suggesting that that share will increase over the next few decades.

One manifestation of the popularity of renewable resources among legislatures is the development and implementation of renewable portfolio standards. Renewable portfolio standards require that a utility serve its customers with a certain amount of energy from renewable resources. The standards increase the demand for renewable energy, and likewise the pressure to develop new renewable resources. Federal efforts to adopt a national renewal portfolio standard stalled before Congress enacted comprehensive energy legislation as the Energy Policy Act of 2005 (EPAcT 2005).¹⁰ Earlier incarnations of comprehensive legislation had included a renewable portfolio standard, but that provision was eliminated due in part to the concern or belief that the states were already adopting these standards and that standards were best formulated, implemented, and enforced on the state level.¹¹

Although EPAcT 2005, which has been interpreted as a law heavily favoring non-renewable resources, did not contain a renewable portfolio standard, it did contain some provisions encouraging the development of renewable resources.¹² It also contained production tax incentives for

6. A recent poll found that 77% of U.S. voters surveyed believed that the country should do more to promote renewable technologies. *Americans Overwhelmingly Say U.S. Must Do More to Spur Green Tech, Says Poll*, GREENBIZ.COM, January 18, 2007, available at http://www.greenbiz.com/news/news_third.cfm?NewsID=34453.

7. In the early days of the 110th Congress, 19 different bills have been introduced in the House and Senate that address “renewable energy.” Search of Thomas legislative search engine for term “renewable energy,” February 6, 2006, available at <http://thomas.loc.gov>.

8. See Pete Engardio, *Beyond the Green Corporation*, BUS. WK., January 29, 2007, at 51, 52 (identifying the purchase of energy from renewable resources as an example of a sustainability goal adopted by a “remarkable number” of businesses).

9. RENEWABLE ENERGY SOURCES: A CONSUMER’S GUIDE, Energy Information Administration, undated brochure (released 12/1/2005), available at <http://www.eia.doe.gov/neic/brochure/renew05/renewable.html>.

10. Pub. L. No. 109-058, 119 Stat. 594, 962 (2005).

11. Mary Ann Ralls, *Congress Got It Right: There’s No Need to Mandate Renewable Portfolio Standards*, 27 ENERGY L.J. 451, 454-56 (2006).

12. Energy Policy Act of 2005 § 1251(a), 16 U.S.C.A. § 2621(d)(12) (2007) (amending the Public Utility Regulatory Policies Act of 1978 (PURPA) § 111(d), 16 U.S.C. § 1261(d)(12))

renewable resources.¹³ The effort to adopt a national renewable portfolio standard percentage continues in the new 110th Congress.¹⁴

Despite the failed effort to adopt a national standard, states continue to adopt programs that will increase the demand for renewable energy. Twenty-three states and the District of Columbia had renewable portfolio standards or other comparable renewable programs in place as of December 2006.¹⁵ The adoption of these standards is expected to have a significant effect on the demand for renewable resources and to bring a fourfold increase in renewable resources between 2003 and 2015.¹⁶ But even with state and federal pressure to increase the development and use of renewable resources, policies determining how to interconnect these resources can affect the cost and viability of renewable resource projects.¹⁷

B. Recent Proceedings Suggest FERC Is Determining How Best to Apply Interconnection Policy to Renewable Resources

Proceedings arising from renewable portfolio standards have come before FERC when renewable resources seek to interconnect to the interstate transmission grid to make their energy available for delivery and sale. One recent noteworthy proceeding before FERC involved a public utility's plans to encourage the development of renewable resources in its service territory to accommodate a state renewable portfolio standard.¹⁸ This and two other recent proceedings suggest that FERC is determining how to respond to arguments that renewable resources require policies and standards different from those applied to traditional, fossil-fueled generators. Although the focus of this paper is

(requiring electric utilities both to reduce dependence on one fuel source and to ensure that energy sales are from a diverse range of fuels and technologies, including renewables).

13. Energy Policy Act of 2005 § 1301, 26 U.S.C.A. § 45 (2007).

14. *See, e.g.*, S. 309, 110th Cong. § 713 (2006); H.R. 969, 110th Cong. § 1 (2007) (both proposing national renewable portfolio standards).

15. *States with Renewable Portfolio Standards*, Pew Center on Global Climate Change, (Dec. 2006), available at http://www.pewclimate.org/what_s_being_done/in_the_states/rps.cfm.

16. *See* Michael Eckhart, President, Am. Council on Renewable Energy, *State of Renewable Energy 2006* (January 17, 2006), available at <http://www.acore.org/pdfs/State-of-RE-ACORE-1-17-2006.pdf> (reproducing renewable portfolio standard targets from a study conducted by Navigant Consulting, Inc., in September 2005 and noting that renewable programs would increase total renewable resources from ten gigawatts in 2003 to forty gigawatts in 2015).

17. *See* George Lobsenz, *California Utilities Making "Little Progress" on Renewables Goal*, January 12, 2007, *ENERGY DAILY* at 1, 2 (recounting a California state report that cited a variety of problems in developing renewable energy to meet the California renewable portfolio standard, "most notably slow action on developing transmission capacity to serve remote areas with promising wind and solar power resources").

18. *See* Southern California Edison Co., 112 FERC ¶ 61,014, at P 5-6, *order on reh'g*, 113 FERC ¶ 61,143 (2005).

In 2001 FERC began numbering the paragraphs in the text of its orders to achieve a uniform citation format. Fed. Energy Regulatory Comm'n, Notice Regarding Paragraph Numbering in Commission Orders (Dec. 19, 2001). FERC uses "P" to cite paragraph numbers within FERC orders. The same convention is used in this article.

the extent of FERC’s ability to set interconnection policy, a look at these three proceedings suggests the way that, once authority is established, FERC policy can affect interconnections subject to its jurisdiction.

The orders also reveal a tension between two interpretations of FERC authority. One views any treatment favoring a single fuel source—here renewable resources—as unlawful “undue discrimination” based at least in part on the theory that the FPA contains no provisions that expressly allow FERC to discriminate based on fuel source alone.¹⁹ The other views renewable resources as worthy of special treatment because, as a new and significant source of supply—also a principle important in the FERC’s mandate under the FPA²⁰—it can benefit the entire grid. FERC interconnection policy currently rests closer to the former view.

In one of the three orders, FERC relied on the technical characteristics of wind generation as a basis for applying different interconnection standards to large wind generators. In the Order No. 661 proceeding, FERC added to its interconnection procedures and agreement several provisions applicable to the interconnection of large wind plants.²¹ FERC explained that it was adopting certain different procedures and technical requirements for large wind generators because wind generators presented unique interconnection issues: “[T]hey use induction generators, consist of several or numerous small generators connected to a collector system, and do not respond to grid disturbances in the same manner as large conventional generators.”²² But in Order No. 661-A, the order on rehearing of Order No. 661, Chairman Joseph T. Kelliher concluded that the more lenient reactive power provisions applied to wind generators constituted undue discrimination. In a partial dissent, he questioned whether the “technical” justification offered by the majority of the commissioners for allowing wind generators to receive treatment different from other resources amounted to little more than granting preferential treatment because to do otherwise would be costly to wind

19. PURPA contains a statutory basis for providing special treatment for certain generators based on fuel source or generator configuration. Pub. Util. Regulatory Policy Act § 201; 16 U.S.C. §796 (17) – (18). But the operating and ownership restrictions for generators that qualify under PURPA limit its applicability, and EAct 2005 eliminated the financial incentive that encouraged many generators to choose to qualify under PURPA in spite of the operating and ownership requirements. Energy Policy Act of 2005 § 1253, 16 U.S.C.A. § 824a-3 (2007).

20. Under the FPA and its legislative history, the “public interest” charged to FERC is “to encourage the orderly development of plentiful supplies of electricity . . . at reasonable prices.” Nat’l Ass’n for the Advancement of Colored People v. Fed. Power Comm’n, 425 U.S. 662, 670 (1976).

21. Interconnection for Wind Energy, Order No. 661, FERC Stats. & Regs. ¶ 31,186 (2005); *order on rehearing*, Order No. 661-A, FERC Stats. & Regs. ¶ 31,198 (2005).

22. Order No. 661, *supra* note 21, at P 12.

generators.²³ The majority of the FERC disagreed, and the reactive power provisions were adopted.²⁴

A different view of FERC's authority to act in favor of renewable resources was espoused by Chairman Kelliher's predecessor in a proceeding that involved a project designed to meet the California renewable portfolio standard. Southern California Edison Company asked FERC to conclude that a facility that would interconnect a large number of wind energy resources to the transmission grid be treated for ratemaking purposes as a transmission facility.²⁵ The proposal was supported by California state regulators because of its potential to bring significant amounts of currently unavailable wind energy onto the California grid.²⁶ FERC concluded that the facility in question was not a transmission facility (or network upgrade) eligible to be included in the rates of all transmission customers in California.²⁷ Rather, because the facility appeared to be a generation-tie facility, under FERC policy it was appropriate to recover the facility's cost from the relevant generators, not all transmission customers in California.²⁸ In a partial dissent, then-chairman Pat Wood III expressed disappointment that the order did not create a new category of transmission facilities that enabled the development of "multiple location-dependent generation resources" because they provide access to "significant and diverse supplies of energy" and "provide benefits to all users of the grid."²⁹

In both proceedings, FERC sought a non-fuel-specific distinguishing characteristic to justify the special treatment due to wind generation. In the first, FERC concentrated on the technical characteristics of wind to distinguish the favorable treatment of wind.³⁰ In the second, the failed justification would have used the remoteness of a significant source of energy supply as a distinguishing characteristic.³¹ When FERC considers issues arising from a particular generation technology, it ensures that it does not allow the public utilities within its jurisdiction to violate section 205 of the Federal Power Act by "mak[ing] or grant[ing] any undue preference or advantage to any person or subject[ing] any person to any

23. Chairman Joseph T. Kelliher, partial dissent to Order No. 661-A, *supra* note 21.

24. Order No. 661, *supra* note 21, at P 50-52.

25. Southern California Edison Co., 112 FERC ¶ 61,014, at P 20-25, *order on reh'g*, 113 FERC ¶ 61,143 (2005).

26. 112 FERC ¶ 61,014 at P 5-8, 34,

27. *Id.* at P 42.

28. *Id.*

29. Chairman Pat Wood III, partial dissent to *id.*; *see also* Cal. Indep. Sys. Operator Corp., 98 FERC ¶ 61,237 at 62,377 (2002) (approving tariff modifications to accommodate wind and solar resources based in part on the "public's interest in encouragement of diverse sources of power").

30. Order No. 661, *supra* note 21.

31. Southern California Edison Co., 112 FERC ¶ 61,014, at P 20-25, *order on reh'g*, 113 FERC ¶ 61,143.

undue prejudice or disadvantage.”³² When FERC is asked to approve a tariff provision that favors renewable energy, for example, it examines whether there is a not unduly discriminatory basis for approving the provision, such as the technical characteristics of a particular type of generation that affects its ability to adhere to provisions designed for more traditional generation resources.³³ Although Chairman Kelliher’s position currently prevails, a recent proceeding suggests that FERC may consider remoteness as an acceptable means for identifying a class of generators that includes renewable resources and warrants special treatment.³⁴

FERC recently upheld a proposal by the Midwest Independent Transmission System Operator, Inc. (Midwest ISO) to implement an interconnection cost allocation methodology that deviated from the 100 percent reimbursement scheme typically applied to network upgrade costs that arise from generator interconnection.³⁵ While consistent with other proceedings in which FERC allowed alternatives to 100 percent reimbursement for independent system operators and regional transmission operators like Midwest ISO,³⁶ here FERC expressed concern regarding the lack of full reimbursement for renewable resources.³⁷ A commenter asserted that the proposal “presents a disadvantage to smaller generation projects that are located remotely from the transmission grid or aggregate load.”³⁸ FERC ordered Midwest ISO to prepare a report detailing whether such projects, which FERC acknowledged included renewable resources,³⁹ were “disproportionately affected” by the new cost allocation methodology and, if so, to propose revisions to the methodology to correct the imbalance.⁴⁰ In this way, FERC acted affirmatively to ensure that renewable resources would not be adversely affected by the change in Midwest ISO’s tariff.

It is noteworthy that the three proceedings described above share a basic subject matter: the interconnection of renewable resources. They

32. Federal Power Act § 205(b); 16 U.S.C. § 824d(b) (2000).

33. See, e.g., Order No. 661, *supra* note 21, at P 12; *Cal. Indep. Sys. Operator Corp.*, 98 FERC at 62,377 (both approving provisions that accommodate the characteristics of intermittent resources such as wind).

34. *Midwest Indep. Transmission Sys. Operator, Inc.*, 117 FERC ¶ 61,241 (2006), *order on reh’g*, 118 FERC ¶ 61,208 (2007).

35. *Id.* Midwest ISO filed a proposal to replace the 100 percent reimbursement approach then present in its tariff.

36. See, e.g., *Southwest Power Pool, Inc.*, 111 FERC ¶ 61,118, at P 71, *order on reh’g*, 112 FERC ¶ 61,319 (2005); *New England Power Pool*, 105 FERC ¶ 61,300, at P 3, 21-23 (2003), *order on reh’g*, 109 FERC ¶ 61,252 (2004) (both allowing a form of direct assignment or “participant funding” as a departure from the full refund of network upgrade costs associated with generator interconnection).

37. *Midwest Indep. Transmission Sys. Operator, Inc.*, 117 FERC ¶ 61,241 at P 83..

38. *Id.*

39. *Id.* at n.67.

40. *Id.* at P 83.

suggest that the agency is trying to determine how it can accommodate renewable resources as much as possible even as it works within a statutory framework that may limit its ability to act decisively in favor of renewable resources.⁴¹ The particulars of FERC's interconnection policy have been set forth in Order Nos. 2003 and 2006, but FERC nevertheless may accommodate renewable resources on an ongoing basis within its established policy or waive its policy (as long as the outcome remains acceptable under the FPA).⁴² Such decisions are subject to the majority vote of the commissioners and are liable to change with FERC's composition.

Whichever direction FERC takes its policy for interconnecting renewable resources, the extent of its authority regarding which lines it can order interconnection to determines the extent of its reach. In Order No. 2003, as argued below, FERC adopted a narrow view of its authority, which likely puts many interconnections to low-voltage facilities beyond its jurisdictional reach. If FERC decides that it wants to help develop the most renewable resources possible under the existing FPA, it must revisit its authority to set interconnection policy as set forth in Order No. 2003.

It is FERC's authority to examine the rates, terms, and conditions of jurisdictional generator interconnections that makes the application of its authority important for the development of renewable resources. This article next describes the basic elements of FERC's interconnection policy.

41. FERC recently announced that it would conduct a number of public conferences to discuss critical issues facing wholesale power markets, including renewable energy. Press Release, FERC, Commission Convenes Series of Public Conferences to Examine State of the Competitive Markets (Dec. 19, 2006), *available at* <http://www.ferc.gov/press-room/press-releases/2006/2006-4/12-19-06.asp>.

42 A recent decision, too new to be included in the body of this article, suggests that FERC has moved decisively in favor of accommodating the interconnection of renewable resources. In *California Independent System Operator Corp.*, 119 FERC ¶ 61,061 (2007), FERC explained that its interconnection policies were established "prior to recent initiatives to develop renewable energy resources on a much larger scale" and acknowledged that the trend toward increased development of renewable resources has created the "need for flexibility" when applying those policies. *Id.* at P 65-66. In that proceeding, FERC accepted a proposed mechanism for financing interconnection facilities for location-constrained renewable resources seeking to interconnect to the grid operated by the California Independent System Operator. Under certain conditions set forth in the proposal, the cost of interconnection facilities that normally would be directly assigned to generators would be partially paid for by all grid users. *Id.* at P 65. In support of its conclusion, FERC pointed to the proposal's consistency with the State of California's renewable portfolio standard and federal policies encouraging the use of renewable resources. *Id.* at P 68. Regarding undue discrimination, FERC concluded that location-constrained resources are not similarly situated to other resources, and, therefore, the special treatment afforded by the proposal did not constitute illegal undue discrimination. *Id.* at P 69-70.

III. FERC INTERCONNECTION POLICY

A. *Interconnection Basics*

Before a generator can connect to the grid and make its energy available, it must interconnect to a utility’s transmission or distribution system. Renewable resources, like any other generators, are subject to FERC’s basic interconnection policy.

An interconnection is the physical and contractual means by which a generator connects to a transmission or distribution system. A generator developer or owner typically starts the process by contacting the utility in which the generator will be located and requesting an interconnection.⁴³ The utility subjects the request to several technical studies to determine whether the transmission or distribution system can accommodate the additional energy to be provided by the utility, and what, if any, equipment and system upgrades are necessary to complete the interconnection.⁴⁴ At the end of the study process, the interconnection customer and utility enter into an interconnection agreement, which governs the construction of any necessary equipment and upgrades, as well as the operation of the interconnection and possibly the generator itself.⁴⁵

FERC regulates the terms and conditions of interconnection as a necessary component of its authority over interstate transmission and the delivery of interstate wholesale sales of electric energy.⁴⁶ FERC has explained that generator interconnection, as an element of transmission service, must be provided under the open access transmission tariff⁴⁷ and concluded that it may order generic interconnection terms and conditions pursuant to its authority to remedy undue discrimination under the FPA.⁴⁸

43. Order No. 2003, *supra* note 1, at P 35.

44. *Id.* at P 36.

45. *Id.* at P 38.

46. *See id.* at P 18-20 (explaining that FERC’s authority to regulate the terms and procedures of generator interconnection follows from its authority under sections 205 and 206 of the FPA, which provides for regulation of interstate transmission and wholesale sales in interstate commerce).

47. In Order No. 888, FERC established a *pro forma* open access transmission tariff, which ensures non-discriminatory open access transmission services by public utilities. Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities, Order No. 888, FERC Stats. & Regs. ¶ 31,036 (1996), *order on reh’g*, Order No. 888-A, FERC Stats. & Regs. ¶ 31,048 (1997), *order on reh’g*, Order No. 888-B, 81 FERC ¶ 61,248 (1997), *order on reh’g*, Order No. 888-C, 82 FERC ¶ 61,046 (1998), *aff’d in relevant part sub nom.* Transmission Access Policy Study Group v. FERC, 225 F.3d 667 (D.C. Cir. 2000), *aff’d sub nom.* New York v. FERC, 535 U.S. 1 (2002).

48. Order No. 2003, *supra* note 1, at P 19-20 (citing *Tennessee Power Co.*, 90 FERC ¶ 61,238, *reh’g dismissed*, 91 FERC ¶ 61,271 (2000)).

FERC established its policy for generator interconnections subject to its jurisdiction in Order Nos. 2003, 2006, and 661. These rulemakings established the procedures for processing and studying interconnection requests and the terms and conditions for interconnection agreements. Order No. 2003 addressed large generators (i.e., generators greater than 20 megawatts in size).⁴⁹ Order No. 661 addressed interconnection issues that arise for wind resources that are large generators.⁵⁰ Order No. 2006 addressed small generators (i.e., generators less than or equal to 20 megawatts in size).⁵¹

1. Interconnection Policy and Interconnection Costs

Each generator interconnection has two main physical components: (1) the interconnection facilities associated with the generator (although some may be owned by the transmission provider) and (2) any system or network upgrades necessary to accommodate the presence of the generator's output on the system. The "point of interconnection" is the point at which the interconnection facilities associated with the generator connect to the public utility's network (specifically, its transmission or distribution system).⁵² All facilities on the generator's side of the point of interconnection are paid for by (directly assigned to) the generator or, in Order No. 2003 parlance, the interconnection customer.⁵³ Any necessary improvements to transmission facilities or network equipment at or beyond the transmission provider's side of the point of interconnection are considered network upgrades.⁵⁴

Although the physical equipment necessary to interconnect is the most significant cost facing any interconnecting generator, study costs and contractual terms contain other significant costs as well. For example, a review process that requires three rounds of engineering studies is typically required for the interconnection process for generators larger than 20 megawatts under Order No. 2003.⁵⁵

Aside from the study process, the terms of an interconnection agreement also may result in significant costs for a generator. If system upgrades are required, the way that the agreement allocates upgrade costs (including whether it includes an opportunity for the generator to

49. *Id.* at P 1.

50. Order No. 661, *supra* note 21, at P 1.

51. Order No. 2006, *supra* note 2, at P 1.

52. Order No. 2003, *supra* note 1, at P 298 (LGIA article 1, definitions).

53. *See generally*, Order No. 2003, *supra* note 1.

54. *Id.* at P 65-66.

55. *Id.* at P 36. That process is more extensive than the process available to a subset of small generators under Order No. 2006 (i.e., generators no larger than 2 MW), which allows a generator to be interconnected if it passes a certain number of screens that verify that its effect on its host system would be small. Order No. 2006, *supra* note 2, at P 36, 42-46.

recover a full or partial refund of those costs) can significantly affect a project’s economic viability. The other terms of an interconnection, such as minimum insurance coverage or required reliability hardware, also can significantly increase costs.

For these reasons, the entity establishing the terms and conditions of interconnection can hinder or facilitate the interconnection process and correspondingly make interconnection more or less costly. And while FERC establishes the terms and conditions for interconnection subject to its jurisdiction, there is no single organization to establish enforceable national interconnection terms and conditions for those interconnections outside FERC’s jurisdiction.

2. The Limits of FERC Authority to Apply Interconnection Policy

In the Order No. 2003 proceeding, FERC concluded that it could require interconnection to all jurisdictional transmission facilities, but to only a limited class of local distribution—i.e., low-voltage—facilities typically used to deliver energy in one direction to retail end-users.⁵⁶ When FERC adopted the same approach for small generators in Order No. 2006, it similarly acknowledged that order’s “limited applicability,” since it expected that many small generators would interconnect to local distribution facilities beyond FERC authority.⁵⁷ It explained that the order harmonized state and federal interconnection efforts by adopting many interconnection rules recommended by state regulators.⁵⁸ FERC also expressed its “hope” that states would use the rule to formulate their own interconnection rules.⁵⁹

Like small generators, it is likely that many renewable resources, such as wind or solar resources, will interconnect in remote areas to low-voltage or local distribution facilities beyond FERC’s jurisdictional reach. It follows that many of these interconnections would not be subject to FERC authority to set terms and conditions for interconnection.

The jurisdiction issue is significant because it determines whether a single policy-making body (i.e., FERC) can address complications that may arise as significant numbers of generators (renewable or otherwise) attempt to interconnect to sell energy.

56. Order No. 2003, *supra* note 1, at P 803-809. FERC reads the FPA and precedent as limiting its authority to require interconnection when the facility to which the generator is seeking interconnection is a “local distribution” facility. *Infra* subsection IV.B.2.a.

57. Order No. 2006, *supra* note 2, at P 8, 502.

58. *Id.* at P 4.

59. *Id.* at P 4, 8.

B. FERC Interconnection Authority as Set Forth in Order No. 2003

In Order No. 2003, FERC addressed the extent of FERC's authority under the FPA to require interconnection under the standard procedures and agreement set forth in the order. As explained further below, FERC had to interpret the potentially contradictory state and federal grants of authority in the FPA. Complicating matters was potentially adverse judicial precedent and the strongly held belief of state regulators that FERC in Order No. 2003 was over-reaching into authority that Congress left exclusively to the states.

We begin the discussion here with the FPA itself, then FERC's interpretation of it in the landmark Order No. 888 and subsequent judicial opinions. The discussion then sets forth FERC's justification for its conclusion on the extent of its authority in Order No. 2003⁶⁰ and the recent ruling of the D.C. Circuit upholding it. The conclusion of this section suggests that it is likely that FERC could extend the reach of its interconnection authority without violating the FPA.

FERC has had to make sense of potentially contradictory grants of authority in the FPA. Part II of the FPA establishes FERC's authority to regulate the terms and conditions of services that are subject to its authority or jurisdiction. The two main components or prongs of that authority under FPA section 201 are (1) "the transmission of electric energy in interstate commerce" and (2) "the sale of electric energy at wholesale in interstate commerce."⁶¹ The FPA reserves to the states the authority to regulate the sales of electric energy to end-users (or retail customers, in FPA parlance) and the delivery of electric energy to end-users through "local distribution" facilities.⁶² The FPA sought to establish a clear demarcation between state and federal jurisdiction.⁶³ For this reason, the FPA also states that FERC "shall not have jurisdiction, except as specifically provided in [Parts II and III of the FPA], . . . over facilities used in local distribution."⁶⁴

Although it was the intent of Congress to clearly demarcate state and federal jurisdiction, in the more than seventy years since the FPA was enacted,⁶⁵ changes in the organization and structure of the electric

60. FERC adopted the same approach to its authority in Order No. 2006. *Id.* at P 481.

61. Federal Power Act § 201(b), 16 U.S.C. § 824(b) (2000).

62. *See id.*

63. *See, e.g.,* *Duke Power Co. v. Fed. Power Comm'n*, 401 F.2d 930, 937 (D. C. Cir. 1968) (concluding that relevant legislative history indicates that Congress sought to define "separate spheres for federal and state regulation").

64. 16 U.S.C. § 824(b).

65. The FPA was enacted when electric energy was sold by utilities that owned and constructed their own power plants, transmission lines for wholesale sales, and local delivery systems for sales to end users. *New York v. FERC*, 535 U.S. 1, 5 (2002). The FPA was enacted to fill the famous *Attleboro* Gap, which was created when the Supreme Court decided that the State of Rhode Island could not regulate rates charged by a Rhode Island plant selling electricity

industry have brought to light a potential contradiction. Specifically, FPA section 201(b)(1) gives FERC authority to regulate “all facilities” used for interstate transmission and wholesale sales.⁶⁶ But the same provision denies FERC jurisdiction “over facilities used in local distribution” except as specifically provided in Parts II and III of the FPA.⁶⁷ Because the statute is silent on how FERC should interpret its authority if a normally nonjurisdictional local distribution facility is used to deliver an exclusively FERC-jurisdictional wholesale sale, it is unclear from the statute alone whether in such instance the state retains its overriding exclusive authority over the facility or whether FERC has any authority to regulate the facility itself under its wholesale sales authority.⁶⁸ FERC has significant flexibility under *Chevron* to interpret its statutory authority.⁶⁹ As explained below, the courts approved FERC’s interpretation of its jurisdiction in Order No. 888⁷⁰ and Order No. 2003 as well.⁷¹ The Order No. 2003 interpretation arose from the appeals of Order No. 888 and related proceedings.

1. FPA as Interpreted in Order No. 888 and by the Courts in Order No. 888 Appeal

On review of Order No. 888, the court discussed the two prongs of FERC’s authority under Parts II and III of the FPA. With respect to the first prong, the court concluded that FERC in Order No. 888 reasonably interpreted its statutory authority over transmission to apply to both retail and wholesale transmission.⁷² It found that the seven-factor test established by FERC to examine a facility’s primary function and identify and define what the FPA calls “facilities used in local distribution” was a

to a Massachusetts company without infringing on federal interstate commerce jurisdiction. *Id.* at 21 (citing *Pub. Util. Comm’n v. Attleboro Steam & Electric Co.*, 273 U.S. 83 (1927) (*Attleboro*)).

66. 16 U.S.C. § 824(b)(1) (2000).

67. *Id.*

68. On appeal of Order No. 888, the D.C. Circuit explained at length the two prongs of FERC jurisdiction under the FPA. Doing so, it acknowledged the lack of clear boundaries between state and federal jurisdiction in the FPA: “Just as FPA § 201 gives FERC jurisdiction over transmissions in interstate commerce and sales at wholesale, the statute also clearly contemplates state jurisdiction over local distribution facilities and retail sales. The statute is much less clear about exactly where the lines between those activities are to be drawn.” The Court of Appeals for the D.C. Circuit concluded that where the FPA lacked clarity on the division between state and federal jurisdiction, FERC’s interpretation of the FPA was worthy of deference under *Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837 (1984) (*Chevron*). *Transmission Access Policy Study Group v. FERC*, 225 F.3d at 694-95 (D.C. Cir. 2000); *accord* *New York v. FERC*, 535 U.S. 1, 15-16 (2002).

69. *Detroit Edison Co. v. FERC*, 334 F.3d 48, 53 (D.C. Cir. (2003) (citing *Transmission Access Policy Study Group*, 225 F.3d at 694 (*TAPS v. FERC*)).

70. *Transmission Access Policy Study Group*, 225 F.3d at 694; *New York v. FERC*, 535 U.S. at 28.

71. *Nat’l Ass’n Regulatory Util. Comm’rs v. FERC*, 475 F.3d 1277, 1279 (D.C. Cir. 2007).

72. *Transmission Access Policy Study Group*, 225 F.3d at 694.

reasonable and permissible interpretation of a statutory term by FERC that was entitled to deference.⁷³

Regarding the second prong, wholesale sales, the court distinguished FERC's wholesale sales authority from its authority over transmission.

The court explained that, in contrast to the transmission prong, which requires an examination of the facility in question, under the wholesale sales prong of its jurisdiction, FERC asserts jurisdiction whenever a public utility is engaged in wholesale delivery.⁷⁴ Applying FPA section 201(a), which the court explained grants FERC authority over "all aspects of wholesale sales . . . regardless of the facilities used," the court concluded that "FERC's assertion of jurisdiction over all wholesale transmissions, *regardless of the nature of the facility*, is clearly within the scope of its statutory authority."⁷⁵

Of particular importance in the interconnection context, the court in *TAPS v. FERC* found nothing objectionable in FERC's position in Order No. 888 that its "*unqualified authority*" extends to the "facility" itself when there is a wholesale sale.⁷⁶ The court also found that previous case law supported FERC's position that it "regulates all aspects of wholesale sales."⁷⁷

The conclusion was consistent with prior court orders that looked at the FPA's legislative history and concluded that the language denying jurisdiction "over facilities used in local distribution" should not be

73. *Id.* at 696. One appellant in *TAPS v. FERC*, Enron Power Marketing, Inc., argued that under the FPA, FERC was required to assert jurisdiction over all retail transmission, regardless of whether it remained bundled with retail service. In Order No. 888 and on appeal, FERC had reasoned that when transmission is bundled with retail sales and generation and delivery services and is sold to a consumer as a single product, the transmission component remains a component of a retail sale, and remains subject to state jurisdiction. *Id.* at 692. The Court of Appeals for the D.C. Circuit noted the FPA's lack of clarity on the division between state and federal jurisdiction and concluded that FERC's decision to "characterize bundled transmissions as part of retail sales subject to state jurisdiction . . . represent[ed] a statutorily permissible policy choice" worthy of deference under *Chevron*. *Transmission Access Policy Group v. FERC*, 225 F.3d at 694-95. This appellant brought its argument to the Supreme Court, and although the Court ruled against it, *New York v. FERC*, 535 U.S. 1, 28 (2002), the argument found sympathetic ears in the three justices that dissented on this point. *See id.* at 29 (Thomas, J., dissenting) (explaining that FERC failed to properly justify why it was not asserting jurisdiction over unbundled retail transmission).

74. *Transmission Access Policy Study Group*, 225 F.3d at 695.

75. *Id.* at 696 (emphasis added).

76. *Id.* (emphasis added). The court here used "wholesale transmission" to mean the delivery of wholesale sales.

77. *Id.* On review of *TAPS v. FERC*, the Supreme Court explained that it did not address the wholesale sales prong of FERC jurisdiction because petitioners limited their jurisdiction arguments to the scope of FERC jurisdiction over retail transmission. *New York v. FERC*, 535 U.S. 1, 16 (2002). Nevertheless, there is a statement in *New York v. FERC* addressing FERC's exclusive transmission jurisdiction that could be read out of context and misinterpreted as applying to FERC's wholesale sales jurisdiction: the court stated that FERC "has made it clear that it does not have jurisdiction over" facilities "used in local distribution." *Id.* at 23.

interpreted as displacing FERC jurisdiction when wholesale sales occur over local distribution facilities.⁷⁸

2. FPA as Interpreted in *Detroit Edison*

But the interpretation of FERC’s authority over wholesale sales that would prevail in Order No. 2003 was not the unqualified one that the court endorsed in *TAPS v. FERC*. Rather, it was an interpretation that was tempered by FERC’s reading and application of a subsequent appeal, *Detroit Edison Co. v. FERC*.⁷⁹

Detroit Edison involved the transmission prong of FERC’s jurisdiction and concluded that FERC could not accept tariff provisions that effectively allowed it to assert jurisdiction over unbundled retail distribution service.⁸⁰ As for the wholesale sales prong of FERC’s jurisdiction, which was not at issue in *Detroit Edison*, the court interpreted *TAPS v. FERC* in dicta as applying to wholesale “transactions” or “service” and avoided suggesting that FERC must assert jurisdiction over any local distribution facilities used to deliver wholesale sales. The court settled for a description that emphasized the service provided over local distribution facilities:

[W]hen a local distribution facility is used in a wholesale transaction, FERC has jurisdiction over that *transaction* pursuant to its wholesale jurisdiction under FPA § 201(b)(1). In sum, FERC has jurisdiction over all interstate transmission service and over all wholesale *service*, but FERC has no jurisdiction over unbundled retail distribution service—i.e., unbundled retail service over local distribution facilities.⁸¹

The court thus provided FERC with reason to be cautious about going too far when asserting authority over interconnections to local distribution facilities in Order No. 2003, since the court’s wording suggested that FERC’s wholesale sales authority extended to the wholesale transaction itself but stopped short of giving FERC authority to directly regulate the local distribution facility used to deliver the sale.

78. See, e.g., *Transmission Access Policy Study Group*, 225 F.3d at 696 (noting that the “facilities used in local distribution” language is relevant to the transmission prong of FERC’s jurisdiction, not the wholesale sales prong); *United States v. Pub. Utils. Comm’n*, 345 U.S. 295, 316-17 (1953) (noting that the exemption does not apply to jurisdiction over sales for resale in interstate commerce); *Ark. Power & Light Co. v. FPC*, 368 F.2d 376, 383 (8th Cir. 1966) (explaining that in spite of the exception for “facilities used in local distribution” in the statute, “where a company is in fact a public utility, all wholesale sales for resale in interstate commerce are subject to the provisions of Sections 205 and 206 of the [FPA], regardless of the facilities used”).

79. 334 F.3d 48 (D.C. Cir. 2003).

80. *Id.* at 54-55.

81. *Id.* at 51 (emphasis added) (citations omitted).

C. FERC's Jurisdiction Decision in Order No. 2003

Although the *TAPS* opinion anchored FERC's broader interpretation of its authority over wholesale sales in the language of the FPA, it was the more restrictive language in *Detroit Edison* that FERC used to explain the extent of its authority to require interconnection and establish terms and conditions in Order No. 2003.

1. Authority as Explained in Order No. 2003

In Order No. 2003, FERC adopted a conservative approach when it asserted jurisdiction over interconnections to "local distribution" facilities.⁸² Under the wholesale sales prong of its jurisdiction, FERC required that the local distribution facility already be in use for FERC-jurisdictional delivery at the outset of the interconnection process.⁸³ For interconnections to local distribution facilities to become subject to FERC authority to set terms and conditions, the interconnection would have to meet two criteria: (1) the facility to which the generator seeks interconnection must be available for FERC-jurisdictional delivery service under a FERC-approved open access transmission tariff at the time the generator submits a request to begin the interconnection process, and (2) the interconnecting generator must intend to sell its energy at wholesale in interstate commerce (henceforth the two criteria for local distribution interconnection).⁸⁴

The fullest explanation of the statutory basis for FERC's stated authority in the Order No. 2003 proceeding appears in Order No. 2003-C.⁸⁵ There, Southern California Edison Company argued that FERC should assert jurisdiction over all interconnections for wholesale sales, regardless of the jurisdictional status of the facility to which the generator sought interconnection.⁸⁶ In response, FERC explained that its assertion of jurisdiction rested on two grounds: (1) its FPA jurisdiction over "transmission" facilities, which are used to deliver wholesale or unbundled retail sales under the terms of an open access transmission tariff, and (2) its FPA jurisdiction over wholesale sales, which require the use of local distribution facilities that have become subject to an open access transmission tariff for purposes of delivering wholesale sales.⁸⁷

FERC acknowledged that some facilities to which it would order interconnection would be considered "local distribution" facilities under

82. Order No. 2003, *supra* note 1 at P 803.

83. *Id.* at P 804.

84. *Id.* at P 814; Order No. 2003-A, *supra* note 1, at P 730; Order No. 2003-C, *supra* note 1, at P 53.

85. Order No. 2003-C, *supra* note 1, at P 1-3.

86. *Id.* at P 50.

87. *Id.* at P 51.

the FPA.⁸⁸ It further explained that if a generator seeks interconnection to a local distribution facility that is subject to an open access transmission tariff, FERC jurisdiction is limited to the “wholesale transaction” and FERC could not directly regulate the local distribution facility used to transmit energy being sold at wholesale.⁸⁹ To “properly respect the boundaries in the FPA,” FERC stated that it “may regulate the entire transmission component (rates, terms and conditions) of the wholesale transaction—whether the facilities used to transmit are labeled ‘transmission’ or ‘local’ distribution— [but] it may not regulate the ‘local distribution’ facility itself, which remains state jurisdictional.”⁹⁰

Noting its intent to adhere to the statutory boundaries in the FPA, FERC further explained that “applying [its] interconnection rules to facilities already subject to an [open access transmission tariff] would properly respect the jurisdictional bounds recognized by the courts in upholding Order No. 888 and subsequent cases.”⁹¹ This interpretation of jurisdiction avoided allowing a generator seeking to sell at wholesale to convert a facility subject to exclusive state jurisdiction into a facility also subject to FERC’s interconnection jurisdiction, which to FERC was a statutorily impermissible result.⁹² FERC, however, did not explain why this result was inconsistent with the FPA, particularly an interpretation of the FPA endorsed by the court in *TAPS*.

2. Appeal of Order No. 2003

Several state regulatory agencies and the National Association of Regulatory Utility Commissioners (NARUC), among others, appealed FERC’s jurisdiction conclusion in Order No. 2003.⁹³ The court sided with FERC.

The court rejected the petitioners’ argument that *Detroit Edison* controls. Unlike *Detroit Edison*, which involved the attempt to assert jurisdiction over unbundled retail service without the presence of FERC-jurisdictional sales or transmission, the authority in dispute in Order No. 2003 “applies to jurisdictional transactions only.”⁹⁴ Highlighting the transactional nature of interconnections, the court explained that interconnections are not “facilities” but rather “appear to be relationships between parties with respect to electricity flowing over

88. *Id.* at P 53.

89. *Id.*

90. Order No 2003-C, *supra* note 1, at P 53.

91. *Id.* at P 51 (citing *Detroit Edison*; *DTE Energy Co. v. FERC*, 394 F.3d 954 (D.C. Cir. 2005)).

92. Order No. 2003-C, *supra* note 1, at P 51.

93. *Nat’l Ass’n Regulatory Util. Comm’rs v. FERC*, 475 F.3d 1277, 1279 (D.C. Cir. 2007).

94. *Id.* at 1280.

facilities.”⁹⁵ The standard form interconnection agreements at issue thus are an exercise of jurisdiction “over the *terms* of those relationships.”⁹⁶

The court also rejected arguments that FERC’s asserting jurisdiction over interconnections with dual-use facilities (which are used for both transmission and local distribution) involved improper jurisdictional bootstrapping.⁹⁷ The court explained that FERC exercised jurisdiction only where the interconnection is to a local distribution facility that meets the two criteria for local distribution interconnection, i.e., “when the facility is included in a public utility’s [FERC]-filed [open access transmission tariff] *and* the interconnection is for the purpose of facilitating a jurisdictional wholesale sale of electric energy.”⁹⁸ The court called this approach “the exact opposite of bootstrapping.”⁹⁹

D. Analysis of FERC’s Authority as Expressed in Order No. 2003 in Light of Judicial Precedent

In the appeal of Order No. 2003, no petitioner argued that FERC should have applied its authority more broadly.¹⁰⁰ Nevertheless, the court’s opinion suggests that an interpretation of FERC authority that concentrates on the interconnection “relationship” may not need the two criteria for local distribution interconnection to establish jurisdiction under the FPA.

By requiring that the facility to which the generator is seeking interconnection already be subject to an open access transmission tariff, FERC in Order No. 2003 made doubly sure that the facility would already serve a jurisdictional transmission or wholesale delivery function before FERC’s interconnection terms and conditions would apply; i.e., either the facility is a transmission facility and the interconnection is FERC-jurisdictional, or it is a “local distribution” facility that is used to deliver wholesale sales in interstate commerce under the terms of an open access transmission tariff.¹⁰¹ In the latter case, FERC sought to ensure the proper assertion of jurisdiction by requiring that the

95. *Id.*

96. *Id.* (emphasis in original). The court noted that petitioners could not identify examples in the rule of where FERC regulates engineering or construction of facilities in a manner that exceeds FERC authority over interstate transmission and wholesale sales. *Id.*

97. *Id.* at 1282. Here “bootstrapping” was used to suggest that a jurisdictional wholesale sale may be an improper basis for asserting jurisdiction over an interconnection to a local distribution facility.

98. Nat’l Ass’n Regulatory Util. Comm’rs v. F.E.R.C., 475 F.3d 1277, 1282 (D.C. Cir. 2007) (quoting Order No. 2003-A, *supra* note 1, at P 730) (emphasis added by court).

99. *Id.*

100. *See id.* at 1279. Southern California Edison Co. intervened in the appeal in support of FERC.

101. *See* Order No. 2003, *supra* note 1, at P. 803.

interconnecting generator make clear its intent to engage in wholesale sales.¹⁰²

In Order No. 2003, FERC designed a methodology for establishing jurisdictional interconnections that ensured that the two criteria for local distribution interconnection correspond to the two prongs of FERC authority in the FPA.¹⁰³ But an analysis of FERC authority over interconnection that emphasizes the jurisdictional interconnection “relationship”—rather than the jurisdictional status of the facility to which the generator is interconnecting—suggests that the jurisdictional status of the facility is not essential. In other words, as long as the interconnection serves a FERC-jurisdictional function—here interconnecting a generator to make wholesale sales in interstate commerce—then a court need not be concerned with how the facility to which the generator is interconnecting would be classified under the first prong of FERC authority in the FPA.¹⁰⁴ Rather than the belt-and-suspenders approach, FERC needs only the second prong—wholesale sales—because FERC’s authority over wholesale sales under the FPA is independent of the transmission prong of its authority¹⁰⁵ (thus, the opposite of bootstrapping).

But FERC is effectively stating that in cases in which a generator seeks interconnection to local distribution facilities in order to engage in wholesale sales—sales subject to its exclusive jurisdiction—it will not assert jurisdiction over the related interconnection unless the interconnection meets both the interstate transmission and the interstate wholesale sales prongs of FERC’s FPA authority. The effect of this policy is to make some generator interconnections for wholesale sales non-FERC-jurisdictional. *TAPS* endorsed FERC’s assertion of jurisdiction in Order No. 888 over wholesale delivery “*regardless of the*

102. *See id.* at P 804. Conversely, if the “local distribution” facility is being used to deliver wholesale sales, but the interconnecting generator produces energy that either will be solely consumed on site or will be sold directly to retail end users, then the interconnection would not be FERC-jurisdictional. *See id.* at P 804-05.

A different analysis applies to generators interconnecting as qualifying facilities under the PURPA. Under PURPA, as interpreted by FERC and upheld by the courts, the status of the facility to which the generator seeks interconnection is irrelevant. Rather, the important issue is whether the generator intends to sell all of its output to the utility in whose service area the generator is located, in which case the relevant state regulatory body exercises authority over the interconnection and related costs. *Id.* at P 814 (citing in part *Western Massachusetts Electric Co. v. FERC*, 165 F.3d 922, 926 (D.C. Cir. 1999)). Or the generator intends to sell any portion of its output to a third party at wholesale, in which case Order No. 2003 applies to the interconnection. *Id.*

103. *Id.* at P 803.

104. That is, the court need not consider whether the facility is classified as “local distribution” subject to exclusive state authority or “local distribution” available for FERC-jurisdictional delivery service under a FERC-approved open access transmission tariff. The typical method for determining the former status would be the seven-factor test. *See supra* section III.B.1.

105. Federal Power Act § 201(b); 16 U.S.C. § 824(b) (2000).

nature of the facility,”¹⁰⁶ but FERC in Order No. 2003 did not apply the full extent of this authority. If FERC is to have authority over all wholesale sales, then it must assert jurisdiction over an interconnection to a public utility’s “local distribution” facility that will be used to deliver wholesale sales. Otherwise, FERC would be without a means for requiring delivery or transmission of wholesale sales, thereby diminishing its ability to regulate wholesale sales.¹⁰⁷

E. Aftermath of Order No. 2003—Problems Arise

Several problems relating to the administration and application of FERC’s jurisdictional call in Order No. 2003 suggest that a different approach to jurisdiction may be warranted.

1. Which Wire is Which?

In the Order No. 2003 proceeding, some commenters objected to FERC’s stated authority, arguing that it would be difficult for a generator to identify which “local distribution” facilities were available for delivery service under an open access transmission tariff and which were not.¹⁰⁸ FERC acknowledged the difficulty and stated that generators would have to rely on the transmission provider to provide them with the correct information about the use of a local distribution facility.¹⁰⁹ On appeal of Order No. 2003, the court concluded that the record contained no grounds for rejecting FERC’s judgment that in most cases this would not present a controversy.¹¹⁰

Nevertheless, this approach does make it administratively more difficult for a wholesale generator to determine whether it can interconnect under Order No. 2003. It would be simpler to require all transmission providers that are public utilities to use the Order No. 2003 procedures and agreement to interconnect generators that plan to make wholesale sales. Since these transmission providers already are subject to FERC jurisdiction as “public utilities” under the FPA,¹¹¹ and FERC’s wholesale jurisdiction would not require the conversion of the “local distribution” facility to exclusive FERC authority,¹¹² there may be more

106. Transmission Access Policy Study Group v. FERC, 225 F.3d 667, 696 (D.C. Cir. 2000) (emphasis added).

107. See Nat’l Ass’n Regulatory Util. Comm’rs v. FERC, 475 F.3d 1277, 1280 (D.C. Cir. 2007) (observing that it was “hard to see” how the FPA “could leave FERC weaponless against conduct that might encourage or cloak the running up of unreasonable costs” subject to FERC authority).

108. Order No. 2003-A, *supra* note 1, at P 707-12.

109. *Id.* at P 712.

110. Nat’l Ass’n Regulatory Util. Comm’rs, 475 F.3d at 1282.

111. Order No. 2003, *supra* note 1, at P 7.

112. A “dual use” facility would serve both a “local distribution” function, which would remain subject to state authority, and a delivery of wholesale sales function, which would be

to gain in convenience and the ability to discourage undue discrimination than would be at risk in reaching facilities not already used to provide service under an open access transmission tariff.

2. First in Time Is Last in Right

There also is a potential inequity involved in FERC’s approach to exercising authority, since the first generator that intends to sell at wholesale will not be eligible for interconnection to a “local distribution” facility under Order No. 2003, but once the output of a generator is delivered under a FERC-jurisdictional open access transmission tariff, the next generator that intends to sell at wholesale seeking interconnection to the same “local distribution” facility will be eligible to interconnect under FERC-jurisdictional terms and conditions.¹¹³

It seems at least unfair, and perhaps even unduly discriminatory, to allow the categorization of a facility to determine the applicability of FERC’s wholesale sales jurisdiction when the *TAPS* court concluded that FERC was within the scope of its authority to assert “jurisdiction over all wholesale transmissions, regardless of the nature of the facility.”¹¹⁴

3. Policing the Jurisdictional Border

Commenters in the Order No. 2003 proceeding expressed concern regarding generators being unable to tell when a “local distribution” facility is available for FERC-jurisdictional interconnection.¹¹⁵ The presumption in FERC’s response was that a transmission provider might not be willing to make this information known, or would discourage a FERC-jurisdictional interconnection.¹¹⁶ It was ironic, then, that the first significant conflict over the classification of facilities and FERC’s jurisdiction conclusion in Order No. 2003 arose because a transmission provider was making FERC-jurisdictional interconnection available to all “local distribution” facilities in its control area, regardless of whether

pursuant to an open access transmission tariff and subject to FERC authority. *See supra* n.100 and accompanying text.

113. This is because the delivery of the first generator’s output would be accomplished through the transmission provider’s open access transmission tariff, thereby ensuring that the facility meets the first of the two criteria for local distribution interconnection described above: the facility would be available for FERC-jurisdictional delivery service under a FERC-approved open access transmission tariff at the time the next generator submits an interconnection request to begin the interconnection process.

114. *Transmission Access Policy Study Group v. FERC*, 225 F.3d 667, 696 (D.C. Cir. 2000).

115. Order No. 2003-A, *supra* note 1, at P 708-709.

116. *See id.* at P 711-12 (explaining that in the event an interconnection customer disagrees with a transmission provider’s decision as to whether a facility is subject to an open access transmission tariff, it should bring the issue to FERC’s attention).

those facilities met the two conditions for local distribution interconnection.¹¹⁷

In *PJM Interconnection, L.L.C.*, FERC concluded that interconnection agreements submitted for two wind generating facilities were not jurisdictional because the interconnections did not meet the two conditions for local distribution interconnection—specifically, FERC found that the “local distribution” facilities to which the generators were seeking interconnection were not being used to deliver wholesale sales at the time the wind generators’ interconnection requests were submitted.¹¹⁸ Of particular note in that proceeding was the fact that the transmission provider’s open access transmission tariff stated that interconnections to distribution facilities for the purpose of delivering energy into its transmission system would be subject to the FERC-jurisdictional interconnection provisions in the tariff.¹¹⁹ FERC explained that the transmission provider’s tariff cannot determine jurisdiction, and FERC thus interpreted the tariff as applying only to local distribution facilities already used to deliver wholesale sales, consistent with the jurisdictional determination in Order No. 2003.¹²⁰

In light of FERC’s decision, PJM recently proposed and received approval for several wholesale market participant agreements.¹²¹ In the filings submitted to FERC, PJM explained that the need for those agreements arose because of FERC’s rejection of the interconnection agreement in *PJM Interconnection*.¹²² The letter orders approving those agreements state that, in each case, the agreement was necessary to “facilitate” the generators’ “intent to engage in wholesale transactions into PJM’s markets.”¹²³

Another unusual outcome of that proceeding was that it put FERC in the position of stating that the interconnection of a renewable resource to a local distribution facility was not jurisdictional even though: (1) the utility owning the facility was a “public utility” subject to FERC jurisdiction under the FPA, (2) the renewable resource that intended to sell at wholesale had entered into a FERC-jurisdictional agreement that established its intent to participate in a FERC-jurisdictional market, (3)

117. *PJM Interconnection, L.L.C.*, 114 FERC ¶ 61,191, *order on reh’g*, 116 FERC ¶ 61,102 (2006).

118. 114 FERC ¶ 61,191 at P 17.

119. *Id.*

120. *Id.*

121. *PJM Interconnection, L.L.C.*, FERC Letter Orders, Docket No. ER07-206-000 (January 4, 2007) and ER06-1343-000 and ER06-1343-001 (December 27, 2006).

122. There is no basis for a wholesale market participation agreement in the *pro forma* open access transmission tariff. Such an agreement serves the purpose otherwise served by an interconnection agreement in that it is a prerequisite for participation in the PJM market.

123. *PJM Interconnection, L.L.C.*, FERC Letter Orders, Docket No. ER07-206-000 (January 4, 2007) and ER06-1343-000 and ER06-1343-001 (December 27, 2006).

the renewable resource in question would take delivery service at a FERC-jurisdictional rate, (4) the transmission provider (and not just the renewable resource) wished to make the interconnection subject to FERC jurisdiction, and (5) no state regulatory body or other commenter intervened to object to the filing.

These problems in administering the Order No. 2003 jurisdictional decision suggest that FERC could simplify the interconnection process by adopting a different approach to its authority. The next section discusses how FERC could revisit its jurisdictional decision or take additional action under the FPA to further its interconnection policy, facilitate more generator interconnections, and accommodate a greater number of renewable resources.

IV. HOW CAN FERC EXPAND THE REACH OF ITS INTERCONNECTION POLICY?

If recent trends continue, it is likely that FERC will be asked to do more to accommodate renewable resources. The following section discusses several policy options that are available to FERC for expanding the reach of its interconnection policy—including a revised approach to the jurisdiction set forth in Order No. 2003.

A. *Revisit the Jurisdiction Discussion in Order No. 2003*

The *TAPS v. FERC* opinion endorsed a view of jurisdiction that allowed FERC authority over wholesale sales to extend to the use of local distribution facilities to deliver wholesale sales. The *NARUC v. FERC* opinion offered an interpretation of FERC authority that, consistent with *TAPS v. FERC*, suggested that even though FERC adopted a more conservative approach to jurisdiction in Order No. 2003, it may be on legally defensible ground if it revisits that conclusion. These opinions suggest that FERC may have the authority to interpret its jurisdiction more expansively to apply to a greater number of interconnections.¹²⁴

As for how to adopt this new approach, since FERC adopted its original statement of interconnection jurisdiction in a rulemaking, another rulemaking would certainly be one appropriate way to adopt a change.¹²⁵ Such change could be based on a finding of continuing undue

124. See *supra* subpart III.D.

125. See, e.g., *Shalala v. Guernsey Memorial Hosp.*, 514 U.S. 87, 100 (1995) (APA rulemaking is required where an interpretation “adopt[s] a new position inconsistent with . . . existing regulations”); *Paralyzed Veterans of Amer. v. DC Arena*, 117 F.3d 579, 586 (D.C. Cir. 1997), *cert. denied*, 523 U.S. 1003 (1998) (“[O]nce an agency gives its regulation an interpretation, it can only change that interpretation as it would formally modify the regulation itself: through the

discrimination by transmission providers in providing access to interconnection for wholesale sales.

As noted above, as long as an interconnection will further a wholesale sale, the jurisdictional status of the facility to which the generator is interconnecting may be irrelevant. If FERC were to adopt this approach, it would need to decide whether to assert jurisdiction over wholesale interconnections to all local distribution facilities. Relevant precedent, including *NARUC v. FERC*, suggests that interconnection jurisdiction may be extensive, since the jurisdiction exercised by FERC over interconnections to local distribution facilities is a necessary corollary to FERC's exclusive jurisdiction over wholesale sales.¹²⁶ Nevertheless, it could be argued that it would be administratively easier to assert jurisdiction over interconnections for wholesale sales to all local distribution facilities owned by "public utilities" regulated by FERC. This approach would ensure that a generator interconnection does not convert an otherwise nonjurisdictional utility into a FERC-jurisdictional "public utility."¹²⁷ Also, given that state regulators actively participated in Order No. 2003, any expanded authority to require interconnection would likely cause a political problem for FERC. It will be up to the individual members of FERC to decide whether the benefits outweigh the burdens of expanded jurisdiction authority.

B. Other Sources for Action Under the FPA

Beyond FERC's authority under sections 201, 205, and 206 to set terms and conditions for generator interconnection, the FPA contains other potential sources for expanding the reach of FERC's authority, or offering FERC a more active role in establishing interconnection policy in areas ordinarily outside its jurisdiction.

process of notice and comment rulemaking").

126. This argument also suggests that FERC may be on uncertain legal ground to the extent that to date it has effectively ceded jurisdiction over certain interconnections for wholesale sales to the states. Cases as far back as *Attleboro* stand for the proposition that states lack authority under the Commerce Clause to regulate wholesale sales of electric energy. *Pub. Util. Comm'n v. Attleboro Steam & Elec. Co.*, 273 U.S. 83 (1927); *Ind. & Mich. Electric Co. v. Fed. Power Comm'n*, 365 F.2d 180 (7th Cir. 1966). If a generator (interconnection applicant) approached a public utility (i.e., a utility already regulated by FERC) for interconnection to a local distribution facility, and the generator possessed a contract for wholesale sales that would be delivered through the interconnection, it is difficult to see how a reviewing court could conclude that the interconnection is state-jurisdictional. Furthermore, in light of the *NARUC v. FERC* proposition that an interconnection is a relationship, and FERC regulates the terms of those relationships rather than facilities, *Nat'l Ass'n Regulatory Util. Comm'rs*, 475 F.3d at 1280, it is unclear why such regulation could not extend also to interconnections to all local distribution facilities, regardless of whether they meet the two criteria for local distribution interconnection or are owned by FERC-jurisdictional public utilities.

127. *But see* Adam Wenner, *FERC Ruling Frustrates Wind Developers*, MONDAQ, May 30, 2006 (arguing that FERC's jurisdiction over transmission should allow it to assert exclusive jurisdiction over all interconnection facilities when a generator interconnects to engage in wholesale sales).

1. FPA Sections 210, 211, and 212

The FPA provides FERC with the authority to require interconnection to “electric utilities,” which is a larger class of utilities beyond the “public utilities” subject to more traditional Commission jurisdiction. Sections 210, 211, and 212 grant FERC the authority, after following certain procedures, to require that a generator be interconnected¹²⁸ to a non-jurisdictional utility and that the otherwise nonjurisdictional utility provide wheeling (or delivery) service for the generator’s output under FERC-approved terms and conditions.¹²⁹ The interconnection and wheeling can be required of certain utilities that are not public utilities even if the utility is unwilling to provide such services.¹³⁰

FERC could engage in a rulemaking process designed to increase interconnection opportunities for generators under sections 210, 211 and 212, streamlining the procedures in these sections, setting stricter deadlines for required negotiation, and indicating that the established terms and conditions in Order Nos. 2003 and 2006 are the default FERC-approved terms and conditions. The effect of these efforts would be to encourage increased generator interconnections to facilities owned by certain utilities that are ordinarily beyond FERC authority.

2. Joint FERC-State Boards Under FPA Section 209

FERC could establish a joint board with state commissions under FPA section 209¹³¹ for the purpose of establishing greater consistency between the interconnection policies of FERC and those of the states. FERC already indirectly tried to use the approach in Order No. 2006 when it acknowledged the limited applicability of that rule and stated its hope that the rule would serve as a national standard. A joint board would allow FERC to actively engage in standardizing interconnection terms, conditions, and procedures.

128. 16 U.S.C. § 824i-k (2000). In the Order No. 2003 proceeding, FERC explained that it was acting under authority granted by FPA sections 205 and 206, and it explicitly rejected the notion that it was acting under authority conferred in FPA sections 210 to 212. Order No. 2003-A, *supra* n.1, at P 742; *see also* Order No. 2003, *supra* note 1, at P 7, 18 (explaining that the statutory basis for action in the rule was remedying undue discrimination under FPA sections 205 and 206).

129. For example, FPA sections 210 to 212 require that FERC use an atypical set of procedures for issuing a ruling; FERC notifies the relevant state commissions and then issues a proposed ruling and sets a deadline for the generator and utility to agree to terms and conditions for interconnection. 16 U.S.C. § 824i-k (2000). If the parties do not agree to terms or conditions before the deadline (or, in the case of section 210, if FERC does not approve the agreement), FERC issues a proposed order and allows the parties another opportunity to agree to terms or conditions. *Id.* at § 824k(c).

130. *See* 16 U.S.C. § 824k(c)(2).

131. Federal Power Act § 209; 16 U.S.C. § 824h (2000).

3. Take Clearer Action Under EPO Act 2005 Section 1254

The recently adopted EPO Act 2005 contains a provision that addresses generator interconnections. Section 1254 amends PURPA section 111(d) to require states to begin the process of adopting interconnection standards for distributed generation resources.¹³² Under this section, a state must make interconnection available to any electric consumer with on-site generating facility that would be connected to local distribution facilities.¹³³ The standards must follow the Institute of Electric and Electronics Engineers' IEEE Standard 1547 for Interconnecting Distribution Resources with Electric Power Systems.¹³⁴ Also, the agreements and procedures should promote current best practices "including but not limited to practices stipulated in model codes adopted by associations of state regulatory agencies."¹³⁵ Finally, it requires that the agreements and procedures for interconnecting distributed generation "shall be just and reasonable, and not unduly discriminatory or preferential."

However, FERC lacks authority to enforce PURPA section 211.¹³⁶ Nevertheless, this provision could be taken up in conjunction with a FERC-state joint board under FPA section 209, with FERC making plain its wish that states look to FERC's generator interconnection rules, as well as the NARUC standards suggested in the statute, for models of how best to comply with that statute.¹³⁷

V. CONCLUSION

Although FERC took comprehensive action on generator interconnection in Order Nos. 2003, 2006, and 661, these rulemakings should not be considered the final word. Proceedings before FERC continue to raise issues unique to the interconnection of renewable resources, and FERC appears to be interested in accommodating these concerns. With the pressure to develop renewable resources presented most obviously by renewable portfolio standards, many new renewable resources will require interconnections. And since many renewable resources will require interconnection to local distribution facilities, if FERC wishes to take a more active role in their interconnection, it should

132. Energy Policy Act of 2005 § 1254(a), 16 U.S.C.A. § 2621(d)(15) (2007).

133. *Id.*

134. This standard was incorporated into the *pro forma* small generator interconnection procedures as a certification code or standard. Order No. 2006, *supra* note 1, at Attachment 3 (*pro forma* small generator interconnection agreement).

135. Energy Policy Act of 2005 § 1254 (a), 16 U.S.C.A. § 2621(d)(15) (2007).

136. See PURPA § 123; 16 U.S.C. § 1623 (2000) (making state and federal courts the appropriate venues for enforcing the standards set forth in PURPA section 211).

137. See Chris Cook, *Making Sense of EPO Act 05's Nebulous Net Metering, Interconnection Provisions*, CONNECTING TO THE GRID (Interstate Renewable Energy Council), Aug. 2005.

No. 2] GETTING MORE OUT OF THIS “RELATIONSHIP” 337

revisit its jurisdiction determination in Order No. 2003 or take other steps under the FPA.