

COMPETITIVE-BASED CONTRACTS FOR THE NEW POWER BUSINESS

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I. INTRODUCTION

Competition is increasing every day in the power business. The old world of franchised service areas with clear boundaries is disintegrating. Federal regulation began changing in 1978 with passage of the Public Utility Regulatory Policies Act (PURPA).¹ That was just the start. Now, deregulation of the power business is in full swing. PURPA has been followed by the Energy Policy Act of 1992 (EPAAct),² a proposed rulemaking by the Federal Energy Regulatory Commission (FERC),³ and several proposed rulemakings by the state utility commissions,⁴ all directed toward increasing competition. In addition, the New York Mercantile Exchange (NYMEX) has recently announced plans to launch an electricity futures contract in early 1996.⁵ The power business is well down the path to competition, and its principal commodity, electricity, is well down the path to commoditization.⁶

The fundamental changes in the power business of competition and commoditization are the catalyst for the development of a much different form of electricity contract.⁷ In a world driven by the ever-increasing need to lower costs and the continuously-changing energy prices on the "screen," service agreements referring to tariffs are out of place. Parties need contracts that are clear and concise in detailing all the terms of a proposed transaction and contracts that can be modified in a matter of min-

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1. Pub. L. No. 95-617, 92 Stat. 3117 (1978) (codified as amended in scattered sections of 16 U.S.C.).

2. Pub. L. No. 102-486, 102 Stat. 2776 (1992), *amended by* Pub. L. No. 103-437 (1994) (codified at 42 U.S.C. §§ 3201-13556 (Supp. V 1993)) (relevant portions found in title VII, 106 Stat. 2905-2921 (1992)).

3. Notice of Proposed Rulemaking and Supplemental Notice of Proposed Rulemaking, *Promoting Wholesale Competition Through Open Access Non-discriminatory Transmission Services by Public Utilities, Recovery of Stranded Costs by Public Utilities and Transmitting Utilities*, IV F.E.R.C. STATS. & REGS. ¶ 32,514, Fed. Reg. (1995) [hereinafter *Mega-NOPR*].

4. *See, e.g., Proposed Policies Governing Restructuring California's Electric Services Industry and Reforming Regulation*, 161 Pub. Util. Rep. 4th (PUR) 217 (1995).

5. NEW YORK MERCANTILE EXCH., NOTICE NO. 95-84 (1995).

6. *See* James E. Rogers, *Deregulation of Bulk Power and Transmission Markets—A CEO's Vision*, NAT. RESOURCES & ENERGY L.J., Winter 1994; Richard D. Kinder, *The Monolith is Cracking: Electric Restructuring and its Implications for Gas*, 133 PUB. UTILS. FORT., Sept. 15, 1995, at 22.

7. For a discussion of similar changes impacting gas contracts, see Mark Haedicke, *Contracts for the New Natural Gas Business*, 13 ENERGY L.J. 313, 314 (1992).

utes—not a contract governed by a tariff that the parties themselves often cannot modify quickly or at all. In the following pages, deregulation of the power industry is summarized in Part II, the commoditization of electricity is explored in Part III, and a new form of electricity contract—hereinafter called the “competitive-based electricity contract”—is proposed in Part IV. Lastly, Part V examines the possible long-term direction of competitive-based electricity contracts in the context of the entire family of energy contracts.

II. DEREGULATION OF THE POWER INDUSTRY

The regulatory framework for the power industry consists of a complex web of federal, state, and local regulation.⁸ The developments leading to deregulation of the power business are equally complex. Part II summarizes the key statutory and regulatory developments that have been propelling the industry at an accelerating pace toward greater competition,⁹ as well as a few of the significant impediments to deregulation of the power business.

A. Federal Developments

1. Public Utility Regulatory Policies Act

Section 210 of PURPA¹⁰ can fairly be credited with providing the initial impetus towards competition. PURPA, enacted in response to the energy crisis of the 1970s, promoted the energy independence of the United States through the development and conservation of domestic fossil fuel supplies. Section 210 encourages non-utility entrepreneurs to develop generating facilities that rely principally on non-fossil energy sources, such as solar, wind, water and waste, or that use the energy from fossil fuels to sequentially produce both electricity and useful thermal energy. Facilities that meet the size, ownership, and fuel use criteria stated in the federal rules implementing PURPA are “qualifying facilities” (QFs).¹¹ To assure that developers could obtain financing to construct these types of facilities, section 210 and the federal rules provide QF owners with a right to: (i) require electric utilities to purchase all QF energy at a price that does not exceed the utility’s incremental—or avoided—cost;¹² (ii) obtain backup

8. It is beyond the scope of this article to review the entire power industry regulatory framework. Many excellent texts serve this purpose, however, including CHARLES F. PHILLIPS, JR., *THE REGULATION OF PUBLIC UTILITIES* (2d ed. 1984) and LEONARD S. HYMAN, *AMERICA'S ELECTRIC UTILITIES: PAST, PRESENT AND FUTURE* (5th ed. 1994).

9. See also Harriet Liza Moses, *The Changing Regulatory Framework: Federal Legislation, in REINVENTING ELECTRIC UTILITY REGULATION* 40 (Gregory B. Enholm & J. Robert Malko eds., 1995).

10. Pub. L. No. 95-617, 92 Stat. 3117 (1978) (pertinent part codified at 16 U.S.C. § 824a-3 (1994)).

11. 16 U.S.C. § 796(17)-(18) (1994). See also 18 C.F.R. §§ 292.201-211 (1995). The technical criteria for qualifying small power production facilities and qualifying cogeneration facilities are enumerated in the federal regulations. See *id.* § 292.203.

12. 16 U.S.C. § 824a-3(a), (b) (1994); 18 C.F.R. § 292.304(a) (1995). Incremental cost means “with respect to electric energy purchased from a [QF], the cost to the electric utility of the electric energy which, but for the purchase from such [QF], such utility would generate or purchase from

power from the local utility at a non-discriminatory price;¹³ (iii) obtain transmission service from any transmitting utility to any other purchasing utility;¹⁴ and (iv) receive an exemption from certain provisions of the Federal Power Act (FPA),¹⁵ the Public Utility Holding Company Act of 1935 (PUHCA),¹⁶ and state utility-type regulation for QFs and their owners.¹⁷ To prevent traditional utilities from dominating this sector of the industry, utilities and utility holding companies cannot own more than fifty percent of a QF's equity.¹⁸

Developers of QFs have a vastly different outlook on the power business than do managers of traditional utilities. A QF developer does not have to answer to ratepayers or state public utility commissions (PUCs). Instead, because QFs are project financed, a developer focuses on, among other things, issues important to financial institutions. Financing is based on the revenue stream from a QF's long-term electricity sale contract at the purchasing utility's avoided cost rates.¹⁹

PURPA delegates to the states responsibility for supervising utilities' estimation of avoided cost in a manner consistent with the federal rules.²⁰ Though the definition of avoided cost requires consideration of both the utility's own production costs and the cost of purchasing power from alternative sources (i.e., the market), administratively-determined, long-term forecasts of utility production costs have been the principal basis for avoided cost rates. More recently, most states have supplemented this information by considering market-based competitive bidding. Thus, while developers of QFs are entrepreneurial, they are nonetheless restricted by the criteria for QF status and dependent upon state regulatory decisions for a significant determinant of their profits. PURPA was just the start.

2. Energy Policy Act of 1992

The next major legislative step on the path to competition in the power business was the EPAct.²¹ The EPAct provided a significantly greater opportunity for competition by allowing independent power produ-

another source." 16 U.S.C. § 824a-3(d) (1994). The same concept is denoted by the term "avoided cost" used in the federal regulations. 18 C.F.R. §§ 292.101(b)(6), .303 (1995).

13. 16 U.S.C. § 824a-3(c) (1994); 18 C.F.R. § 292.305 (1995). This provision is particularly important to assure that back-up power will be available to a cogeneration QF's thermal host. *Alcon (Puerto Rico), Inc.*, 38 F.E.R.C. ¶ 61,042 (1987), *reh'g denied*, 38 F.E.R.C. ¶ 61,301 (1987).

14. 16 U.S.C. § 824i (1994); 18 C.F.R. § 292.303(c) (1995).

15. 16 U.S.C. §§ 791a-828c (1994).

16. 15 U.S.C. §§ 79-79(2)-6 (1994).

17. 16 U.S.C. § 824a-3(e) (1994); 18 C.F.R. §§ 292.601-.602 (1995).

18. 16 U.S.C. § 796(17)(C)(ii), (18)(B)(ii) (1994); 18 C.F.R. § 292.206 (1995).

19. QFs may choose between selling energy on an as-available basis, which is useful for industrial QFs that self-generate power to serve their electricity requirements, or pursuant to a legally enforceable obligation (i.e., a long-term contract). 18 C.F.R. § 292.304(d) (1995). QFs that choose a long-term contract (as most do) may elect to have the contract price based upon avoided costs for all or part of the contract term forecast at the time the legally enforceable obligation to deliver power is incurred, or based upon avoided costs at the time of delivery, from time to time. *Id.* § 292.304(d)(2).

20. 16 U.S.C. § 824a-3(f) (1994).

21. *See supra* note 2.

cers (IPPs) to develop non-QF generating projects in any location without becoming subject to PUHCA, and by improving the FERC's statutory authority to require transmission-owning utilities to wheel power for any wholesale power seller.

The EPAct created a new class of participant in the power industry: the exempt wholesale generator (EWG).²² An EWG is engaged exclusively in the business of owning and/or operating a stand-alone generating facility and selling electricity at wholesale. Like a QF, an EWG is exempt from PUHCA. Unlike a QF, however, an EWG does not need to satisfy the technical criteria for QF status, and there is no limit on a utility's ability to invest in EWGs.²³ And whereas QF owners may sell electricity at retail if permitted by state law,²⁴ an EWG is limited to the wholesale market and is regulated as a public utility under the FPA.²⁵

When an EWG and its affiliates are found to lack market power, that EWG typically receives the same regulatory treatment that the FERC had accorded to pre-EPAct IPPs. Such treatment includes authorization to sell electricity at wholesale at a rate negotiated with the customer, instead of one based upon the seller's costs, waiver of regulatory reporting requirements associated with cost-based rates, and lightened filing obligations for provisions of the FPA that cannot be waived.²⁶ EWGs are much more attuned to market forces than the traditional utility. There are no captive customers to depend upon for support; the terms of an electricity sales agreement are the key to whether or not it can operate profitably. However, projects have to date been financed primarily on the basis of a long-term electricity sales agreement, rather than as merchant plants which depend mainly on the potential for future sales at market rates.

With respect to the transmission of electricity, the EPAct broadened the FERC's authority to order utilities owning or operating transmission facilities²⁷ to provide transmission service to any person selling electricity at wholesale, including QFs, EWGs, power marketers, and traditional utilities.²⁸ Prior to the EPAct, there were significant impediments facing an

22. 15 U.S.C. § 79z-5a(a)(1) (1994).

23. *Id.* § 79z-5a(e).

24. *Union Carbide Corp.*, 48 F.E.R.C. ¶ 61,130 (1989), *aff'd sub nom.*, *Gulf States Utils. Co. v. FERC*, 922 F.2d 873 (D.C. Cir. 1991).

25. 16 U.S.C. § 824 (1994).

26. *See, e.g., Commonwealth Atl. Ltd.*, 51 F.E.R.C. ¶ 61,368 (1990); *Doswell Ltd.*, 50 F.E.R.C. ¶ 61,251 (1990).

27. 16 U.S.C. § 824(i) (1994). A "transmitting utility" is any electric utility, qualifying facility, or federal power marketing agency that owns or operates transmission facilities which are used for the sale of electricity at wholesale. *Id.* § 796(23). This is true irrespective of whether the transmitting utility is a "public utility" pursuant to section 201(e) of the Federal Power Act (FPA), 16 U.S.C. § 824(e) (1994). *See Minnesota Mun. Power Agency v. Southern Minn. Mun. Power Agency*, 68 F.E.R.C. ¶ 61,060 (1994).

28. 16 U.S.C. §§ 824j-k (1994). An "electric utility" is any person or state agency that sells electric energy, including the Tennessee Valley Authority (TVA), but excluding any federal power marketing agency, whether or not its sales are in interstate commerce. *Id.* § 796(22). Though PURPA had amended the FPA to permit the FERC to require a utility to provide wheeling services, the statute limited the circumstances in which the FERC could exercise its authority. *Southeastern Power Admin. v. Kentucky Utils. Co.*, 25 F.E.R.C. ¶ 61,204 (1983), *reh'g denied*, 26 F.E.R.C. ¶ 61,127 (1984). The

electricity seller lacking its own transmission facilities and wanting to transact with a number of customers, particularly where distance or the use of different transmission contract paths at different times was involved. The EPAct amended sections 211 and 212 of the FPA and added section 213 to remove these limitations and empower the FERC to mandate transmission service when certain public interest standards are satisfied.²⁹

The FERC has used its new powers to revise the way transmission service is offered and priced. The FERC adopted regulations governing the procedures for requesting transmission service,³⁰ interpreted the FPA section 205 prohibition against discriminatory rates to mean that a transmitting utility must offer transmission customers "comparable" access to its system,³¹ determined that a transmitting utility must offer "network" service as well as point-to-point service,³² and announced its willingness to approve a rate for transmission service that is based on a methodology other than the traditional rolled-in, system-wide embedded cost.³³ The FERC in 1995 also proposed new regulations (discussed below) that would require every public utility owning and/or controlling facilities used for the transmission of electricity to file tariffs of general applicability for transmission services—including ancillary services—over these facilities on both a point-to-point basis and a network basis on terms and conditions at least as favorable to customers as those in the FERC's model tariffs.³⁴

There is no question that the EPAct has dramatically expanded the forces of competition to the wholesale markets of the power industry. One of the clearest signs is the growth of companies intending to act as power marketers, which are wholly dependent upon the market (and often the short-term market) for revenues.³⁵ Even traditional utilities have been creating affiliates to sell electricity at market-based rates, though the FERC has imposed certain restrictions on transactions between a vertically inte-

FERC issued only one wheeling order under the PURPA transmission provisions between 1978 and 1992, and this was simply an approval of a settlement between the parties. *Central Power & Light Co.*, 17 F.E.R.C. ¶ 61,078 (1981), *order on reh'g*, 18 F.E.R.C. ¶ 61,100 (1982).

29. 16 U.S.C. § 824k(a) (1994).

30. See Policy Statement Regarding Good Faith Requests for Transmission Services and Responses by Transmitting Utilities Under Sections 211(a) and 213(a) of the Federal Power Act, as Amended by the Energy Policy Act of 1992, 18 C.F.R. § 2.20 (1994).

31. *American Elec. Power Serv. Corp.*, 67 F.E.R.C. ¶ 61,068 (1994), *order on clarif.*, 67 F.E.R.C. ¶ 61,317 (1994) (holding that a transmission tariff that fails to offer third parties access on the same or comparable basis, and under the same or comparable terms and conditions, as the transmission provider's uses of its system, constitutes an "unduly discriminatory" tariff under section 205 of the FPA).

32. *Florida Mun. Power Agency v. Florida Power & Light Co.*, 65 F.E.R.C. ¶ 61,125, *reh'g dismissed*, 65 F.E.R.C. ¶ 61,372 (1993), *final order*, 67 F.E.R.C. ¶ 61,167 (1994).

33. See Policy Statement on the Inquiry Concerning the Commission's Pricing Policy for Transmission Service Provided by Public Utilities Under the Federal Power Act, 59 Fed. Reg. 55,031 (1994).

34. Mega-NOPR, IV F.E.R.C. STATS. & REGS. ¶ 32,514, at 33,154.

35. As of the end of 1995, over 100 companies had applied for authorization to sell electricity at wholesale at market-based rates. See, e.g., *Marketers Double Sales in 3rd Quarter, Report \$150 Million-Plus in Revenues*, POWER MKTS. WK., Nov. 27, 1995, at 4, 5.

grated utility and its affiliated marketer.³⁶ As a result, there has been a dramatic increase in the demand for, and interest in, competitive-based electricity contracts.

3. Mega-NOPR

On March 29, 1995, the FERC issued its notice of proposed rulemaking, "Promoting Wholesale Competition Through Open Access Non-discriminatory Transmission Services by Public Utilities, Recovery of Stranded Costs by Public Utilities and Transmitting Utilities" (Mega-NOPR).³⁷ "Competition" is recited in the title and this proposed rulemaking appears aimed at transforming the entire interstate wholesale power industry into one where competition is the order of the day, every day.

Specifically, the FERC proposed the following:

a. Unbundling of Transmission and Ancillary Services

The proposed rule would require each transmission-owning public utility to file a tariff that offers to provide open access, non-discriminatory transmission, and ancillary services on an unbundled basis to all wholesale electricity sellers.³⁸ This requirement provides electricity customers and suppliers an opportunity to buy transmission service from a utility that is not a party to the electricity transaction. A tariff allows transmission customers to know in advance what general terms and conditions will apply to the service, thereby avoiding the time-consuming and possibly litigious processes contemplated by section 211 of the FPA.

b. Comparability of Unbundled Services

Under the proposed rules, the unbundled services covered by the tariff must be offered at rates and terms that are the same as or comparable to the rates and terms on which the utility makes use of its own system for purposes of making wholesale power sales.³⁹ This requirement is intended to provide a level playing field for transmission "haves" and "have-nots." However, vertically integrated utilities also use their transmission systems

36. See, e.g., *Heartland Energy Servs., Inc.*, 68 F.E.R.C. ¶ 61,223 (1994). The general principles governing affiliate transactions set forth in *Heartland* included a requirement that each electricity transaction between the marketer and the affiliated utility be specifically approved by the FERC under section 205, in addition to a ban on non-electricity transactions that would result in the marketer being subsidized by the utility's captive ratepayers. The FERC requires a demonstration that the applicant and its affiliates lack or have mitigated their market power in the transmission and generation markets, and in markets for inputs to generation. See, e.g., *Kansas City Power & Light Co.*, 67 F.E.R.C. ¶ 61,183 (1994). More recently, the FERC explained how these principles applied to the relationship between a utility's affiliated marketer and its affiliated QFs or EWGs. *Southern Co. Servs., Inc.*, 72 F.E.R.C. ¶ 61,324 (1995), *reh'g granted*, 73 F.E.R.C. ¶ 61,226 (1995).

37. Mega-NOPR, IV F.E.R.C. STATS. & REGS. ¶ 32,514.

38. *Id.* at 33,078-83.

39. *Id.* at 33,080-83.

for the benefit of their native load customers,⁴⁰ which may affect the FERC's interpretation of comparability under different circumstances.⁴¹

c. Access to Information

The FERC has recognized that utilities have access to essential information regarding their transmission systems. The FERC has initiated a comment and technical conference process to identify the information, such as real time information about transmission availability, which must be disseminated to the market place and how such dissemination will occur.⁴² The FERC has also required that the utility's electricity sales personnel rely on the same information source as that made available to the rest of the marketplace.

d. Functional Unbundling

The FERC recognized that utilities engage in both competitive and monopoly enterprises. Utilities buy and sell electricity in an increasingly active and competitive bulk electricity market, but they also control essential facilities (e.g., transmission) which must be used by all parties who expect to participate in the competitive market. The FERC has proposed for comment the "functional unbundling"—or separation—of competitive activities from monopoly activities under the same corporate umbrella. The FERC has not gone so far as to propose the complete separation of ownership (i.e., divestiture) of these activities, however.⁴³

e. Stranded Cost Recovery

The FERC anticipates that the changes in the industry brought about by open access transmission will result in the reduced recovery of certain utility investments (i.e., stranded costs) as these investments are exposed to falling electricity prices in a competitive marketplace. The FERC has proposed to permit full recovery of the costs stranded in the transition to a competitive market.⁴⁴

The Mega-NOPR represents a giant step forward on the path toward competition. If the proposed regulations are adopted, they will likely break the logjam of barriers to transmission on the wholesale level, and generally reduce impediments to entry into the power industry. The result

40. Native load customers are captive wholesale and retail requirements customers.

41. See, e.g., *AES Power*, 69 F.E.R.C. ¶ 61,345 (1994) (holding that it is acceptable for the TVA to provide a power marketer transmission service that is comparable to its use of its own system for its off-system wholesale sales).

42. Notice of Proposed Rulemaking, *Real Time Information Network and Standards of Conduct*, Dkt. No. RM95-9-000 (Dec. 13, 1995); *New Reporting Requirement Implementing Section 213(b) of the Federal Power Act and Supporting Expanded Regulatory Responsibilities Under the Energy Policy Act of 1992*, 62 F.E.R.C. ¶ 61,297 (1993).

43. Mega-NOPR, IV F.E.R.C. STATS. & REGS. ¶ 32,514, at 33,080.

44. *Id.* at 33,096.

will be new market participants, a more integrated marketplace, a more commoditized power industry, and increased competition. An ever-increasing number of participants will require and demand competitive-based electricity contracts.

4. Public Utility Holding Company Act

The Public Utility Holding Company Act (PUHCA) provides for extensive regulation of "holding companies"⁴⁵ which, through their ownership of securities, control utility companies with significant interstate utility businesses.⁴⁶ As a result of the burden of regulations applied to registered holding companies, PUHCA is a serious consideration in most of the proposed and possible restructuring transactions in the power industry.⁴⁷ In fact, many economically viable restructuring transactions are either not carried out or designed specifically for the purpose of avoiding PUHCA regulation.

For example, except when a few limited exemptions are available, a non-utility company seeking—through direct or indirect subsidiaries—to own or operate facilities (i.e., physical assets) in different states used for the generation, transmission, or distribution of electricity for sale, must register under PUHCA as a public utility holding company and face a panoply of regulations that will generally cause the company to refrain from making the contemplated investment or participating in the desired transaction. In addition, because of the significant uncertainty surrounding PUHCA's application to many contemplated electric restructuring transactions, participants are exposed to unnecessary risks, costs, and delays in analyzing the statute's implications. This represents a sizable barrier to entry into the power industry and is an impediment to the further development of competition.

Over the past few years, additional exceptions to PUHCA regulation have been added. As mentioned above, PURPA exempts QF owners, and the EPAct exempts EWGs. The Staff of the Securities and Exchange Com-

45. A company that owns or operates facilities for the generation, transmission, or distribution of electricity for sale is an "electric utility company" under section 2(a)(3) and a "public utility company" under section 2(a)(5) of PUHCA. 15 U.S.C. § 79b(a)(3), (5) (1994). A company that holds ten percent or more of the voting securities of an electric utility company is a "holding company" under section 2(a)(7) of PUHCA. *Id.* § 79b(a)(7).

46. A holding company that does not satisfy the criteria for exemption from registration stated in article 3 of PUHCA must register and become subject to the regulatory requirements therein. *Id.* § 79d. Under article 3, traditional utility holding companies may qualify for the "intrastate" exemption which is available to holding companies whose utility subsidiaries are organized and doing business in the same state, 15 U.S.C. § 79c(a)(1) (1994), or for the "primarily operating company" exemption which is available to holding companies that are operating utilities. *Id.* § 79c(a)(2). Companies that are principally engaged in a non-utility business (such as manufacturing), that are only temporarily a holding company, or that derive no material part of their income from utility operations in the United States also are exempt from registration under sections 3(a)(3), (4), and (5) respectively. *Id.* § 79c(3), (4), (5).

47. *Id.* § 79b(a)(7). See also Peter Navarro, *A Guidebook and Research Agenda for Restructuring the Electricity Industry*, 16 ENERGY L.J. 347 (1995).

mission (SEC) consistently has recommended no regulation of power marketers.⁴⁸ This trend is likely to continue. In addition, the SEC issued a Concept Release⁴⁹ that requests comments on further relaxing PUHCA restrictions that are incompatible with a competitive power industry in the late 1990s. Congress also has been considering this issue. Over the last several years, bills have been introduced to further limit or repeal PUHCA.⁵⁰ Support for an outright repeal of PUHCA appears to be growing on Capitol Hill.

B. State Developments

California, through its state Public Utilities Commission (CPUC), has taken an aggressive look at deregulation of its massive power industry. The debate has been extensive and far-reaching. The CPUC just recently abandoned traditional rate base regulation in favor of performance-based ratemaking, opting for an approach that combines the direct access model of restructuring with the centralized wholesale pooling model.⁵¹

Other states are deregulating their power industries or considering some form of deregulation. In Massachusetts and Rhode Island, for example, detailed restructuring proposals which would make the industry far more competitive are being debated. In Michigan, that state's PUC has approved a limited retail wheeling plan.⁵² Approximately one-half of the states are currently debating restructuring their power industries.⁵³

The stakes with respect to the foregoing debate are high on many accounts. From a deregulation and competition point of view, retail wheeling cannot be mandated under the EPAct, since this is the province of the states. The absence of retail wheeling, if states refuse it, could leave the industry in a half-on, half-off state of deregulation.

C. Power Pools and Reliability Councils

Power pools and reliability councils are an important part of the power industry. Power pools, such as the New England Power Pool (NEPOOL) and the Pennsylvania-New Jersey-Maryland Interconnection (PJM), where

48. *Enron Power Mktg., Inc.*, SEC No-Action Letter, 1994 LEXIS 42 (January 5, 1994); *CRSS Power Mktg., Inc.*, SEC No-Action Letter, 1994 LEXIS 431 (March 31, 1994); *Electric Clearinghouse, Inc.*, SEC No-Action Letter, 1994 LEXIS 452 (April 13, 1994); *Inter-Coast Power Mktg. Co.*, SEC No-Action Letter, 1994 LEXIS 886 (December 6, 1994); *AIG Trading Corp.*, SEC No-Action Letter, 1995 LEXIS 195 (January 20, 1995).

49. See generally DIVISION OF INVESTMENT MANAGEMENT, SEC. & EXCH. COMM'N, CONCEPT RELEASE, June 1995.

50. See, e.g., S. 1317, 104th Cong., 2d Sess. (1995).

51. See Benjamin A. Holden, *California Regulators Approve Plan to Deregulate Market for Power by '98*, WALL ST. J., Dec. 21, 1995, at A2; *Re-Proposed Policies Governing Restructuring California's Electric Services Industry and Reforming Regulation*, 161 Pub. Util. Rep. 4th (PUR) 217 (1995); Navarro, *supra* note 47, at 347.

52. See *The News in Focus*, ELEC. J., May 1994, at 6.

53. See, e.g., Brian Gish, *Electric Industry Restructuring: The States Forge Ahead*, 133 PUB. UTILS. FORT., Oct. 1, 1995, at 49 (indicating that approximately 30 states have begun to consider instituting retail wheeling, functional unbundling, and alternative rate regulation).

utilities interconnect their facilities and coordinate their activities, are intended to promote both reliability and economic efficiency.⁵⁴ Most power pools and reliability councils have published detailed standards and practices which address many issues, including reserve requirements and operating and curtailment procedures. These standards and practices are typically incorporated into any electricity contract with a pool member.

Although generally serving a worthy purpose with respect to the reliability function, these standards and practices can be both a barrier to entry and an impediment to competition by, at times, having a negative impact on the viability or economics of a proposed transaction. For example, a customer located within the pool may require delivery of power. Since power pools often provide their members with preferential transmission rates not available to non-members, a non-member may be unable to compete with a pool member for the proposed transaction.

As the industry continues to deregulate, it is important to recognize that these standards can be adverse to competition, and an effort should be made to limit their role to the essential reliability functions that they have historically performed in order to ensure that they do not impede the progress towards deregulation. The nature of power pools and the FERC's authority is likely to be addressed in the near future.

D. Other

A few additional catalysts to increase competition in the power business are worth mentioning. The advance of technology is one. New power plants can now be constructed more cheaply than plants could in the past and have much greater fuel efficiency. The successful deregulation of the gas industry at the wholesale level and the increased ability to arbitrage between gas and electricity creates a further incentive. Taking these two factors together, the catalyst to deregulation of the power industry is even stronger.

E. Conclusion

The aforementioned developments have had a very significant impact on the power industry. Although this impact is somewhat disparate, the undeniable result is competition now and more competition to come. This has resulted in electricity evolving from a service into a commodity. Part III of this article examines this commoditization.

54. The FERC in 1994 initiated a notice of inquiry on alternative power pooling institutions, as well as on the role of traditional power pools in an era of increased competition. *Inquiry Concerning Alternative Power Pooling Institutions Under the Federal Power Act*, IV F.E.R.C. STATS. & REGS. ¶ 35,529, 59 Fed. Reg. 54,851 (1994).

III. COMMODITIZATION OF ELECTRICITY

A. *Commoditization of Energy*

The commoditization of energy started with heating oil. On November 14, 1978, the NYMEX introduced its Heating Oil Contract.⁵⁵ Approximately five years later, on March 30, 1983, the NYMEX introduced its Crude Oil Contract.⁵⁶ The march to commoditize energy, all forms of energy, had begun. These commodities could be bought and sold physically or financially. A sophisticated infrastructure was developed with respect to these commodities. Pricing became transparent; price risk could be managed quickly and efficiently.

The Heating Oil and Crude Oil Contracts were followed by New York Harbor Gasoline (introduced December 3, 1984), Propane (introduced August 21, 1987), Natural Gas (introduced April 3, 1990), Sour Crude (introduced February 28, 1992), Gulf Coast Gasoline (introduced September 18, 1992) and various options on the foregoing commodities.⁵⁷ One of the most successful NYMEX contracts is the Natural Gas Contract. On the first day of trading, 918 gas contracts were traded.⁵⁸ On January 4, 1993, 14,478 gas contracts were traded, and the number reached 31,558 on January 3, 1995.⁵⁹ The success of the gas contract (as well as nearly all of the NYMEX energy contracts) illustrates both the demand for commoditized energy and the progression toward commoditization of all forms of energy. Electricity is the next logical energy form to commoditize.

B. *Emergence of Physical Trading of Electricity*

The starting point in the commoditization of any form of energy is the development of physical trading. The byproduct of physical trading is the development of the necessary infrastructure for commoditization. A multitude of buyers and sellers emerge. Regulatory barriers are removed or diminished. New, more efficient contract forms are developed and negotiated. Transportation facilities are tested. New technologies are applied to solve problems. For electricity, the starting point for physical trading (usually called "power marketing") can be traced to the mid-1980s.

In 1986, Citizens Energy Corporation (Citizens), a non-profit company, became the first company to apply for and receive authority from the FERC to market electricity.⁶⁰ Citizens received authority to purchase wholesale electricity from utilities and resell such electricity to other utili-

55. New York Mercantile Exch., *Energy in the News*, Summer 1995, at 24.

56. *Id.*

57. *Id.*

58. STATISTICS DEP'T, NEW YORK MERCANTILE EXCH., *DAILY FUTURES SUMMARY* (Apr. 3, 1990).

59. STATISTICS DEP'T, NEW YORK MERCANTILE EXCH., *DAILY FUTURES SUMMARY* (Jan. 4, 1993); STATISTICS DEP'T, NEW YORK MERCANTILE EXCH., *DAILY FUTURES SUMMARY* (Jan. 3, 1995).

60. *Citizens Energy Corp.*, 35 F.E.R.C. ¶ 61,198 (1986).

ties at attractive rates.⁶¹ The profits from such transactions were placed in a fund to be used to assist needy customers in paying their electric bills.⁶²

Over the next few years, there was a mere sprinkling of applications to market electricity. The power marketing business developed very slowly. However, with the beginning of the 1990s, things started to change. Deregulation and plans for deregulation in the power business were accelerating. By 1995, 116 companies had applied for power marketing certificates, and applications were being made regularly to the FERC by other would-be power marketers.⁶³ Physical trading of electricity was underway.

The FERC has required all power marketers to report their trades quarterly.⁶⁴ The reports reveal a market developing with acceleration. They also reveal a market that may be approaching readiness for a futures contract.⁶⁵

C. *Development of the Financial Markets for Electricity*

The development of physical trading of electricity in the power business is a prerequisite for a successful futures contract. It should be noted that the physical trading of electricity is not nearly as developed as the physical trading of gas was prior to the introduction of the gas futures contract. Nonetheless, the trading infrastructure for electricity is being built each and every day and the experience with natural gas is available by analogy.⁶⁶

The NYMEX began working on its proposed electricity futures contract in 1993 and expects to launch two electricity futures contracts in the first quarter of 1996. The current proposal is summarized⁶⁷ as follows:

<i>Contract Unit:</i>	736 megawatt hours (MWH)
<i>Delivery Rate:</i>	2 megawatts (MW) throughout every hour of the delivery period
<i>Delivery Period:</i>	16 on-peak hours: hour ending 0700 prevailing time to hour ending 2200 prevailing time
<i>Delivery Point:</i>	California/Oregon border or Palo Verde Switchyard in Arizona (one delivery point for each contract)
<i>Security:</i>	Margin is established before trading
<i>Settlement:</i>	Contract may be settled by physical delivery, offset (book out), exchange of future for physical

61. *Id.* at 61,454.

62. *Id.* at 61,455-56.

63. See generally Ray Pospisil, *Power Marketing at the Crossroads*, ELEC. WORLD, Sept. 1995.

64. See, e.g., *Enron Power Mktg., Inc.*, 65 F.E.R.C. ¶ 61,305 (1993), *on reh'g*, 66 F.E.R.C. ¶ 61,244 (1994).

65. See *supra* note 35.

66. See generally David Rappaport, *The Present and the Futures; Energy Futures and Options*, PETROLEUM ECONOMIST, Apr. 1995. It should be noted, however, that the gas analogy is imperfect. For example, electricity does have different physical characteristics than gas, e.g., it cannot be stored or 'transported' like gas. Furthermore, the regulatory history of the two is different in that the federal government played a more dominant regulatory role in gas as compared to electricity.

67. See generally New York Mercantile Exch., *Electricity Futures*, Apr. 1995.

The above-described proposal represents a typical futures contract. It is brief and standardized; there are very limited service exceptions and security and credit are addressed before any trade takes place. Also, a transaction is documented immediately once a price is agreed upon. These are the contract characteristics that are becoming increasingly important as electricity becomes commoditized.

D. Federal Commodity Laws as Applicable to Electricity

Deregulation of the power business is driving innovation with respect to electricity contracts. The traditional electricity contract will be supplemented by competitive-based electricity contracts, electricity futures, electricity swaps, and electricity options. As deregulation continues, it will be increasingly important for electricity lawyers to be well-versed in a body of law generally referred to as commodities law,⁶⁸ which is briefly summarized below.

The starting point is the Commodities Exchange Act (CEA).⁶⁹ The CEA is the foundation for commodities law and regulation in the United States. The CEA creates a framework of federal regulation and industry self-regulation. The general purpose of the CEA is to promote free and honest markets and to protect investors.

The CEA established the Commodities Futures Trading Commission (CFTC),⁷⁰ an independent federal agency, and grants the CFTC the exclusive regulatory jurisdiction over "contracts of sale of a commodity for future delivery" (i.e., futures contracts) and certain other commodity contracts, such as options.⁷¹ If a transaction is within the jurisdiction of the CFTC, then (subject to certain limitations) it is unlawful unless it is conducted on or subject to the rules of a "board of trade" designated by the CFTC as a "contract market" for the particular commodity.⁷² "Contract of sale" is broadly defined to include "sales, agreements of sale, and agreements to sell."⁷³ "Commodity" is broadly defined to include specified agricultural products and "all other goods and articles and all services, rights, and interests in which contracts for future delivery are presently or in the future dealt in."⁷⁴ The term "future delivery" excludes "any sale of any

68. It is beyond the scope of this article to review commodities law in detail. For a detailed review, see PHILIP M. JOHNSON & THOMAS L. HAZEN, *COMMODITIES REGULATION* (2d ed. 1989).

69. Commodities Exchange Act, 7 U.S.C. §§ 1-50 (1994).

70. *Id.* § 4a(a).

71. *Id.* § 2.

72. *Id.* § 6(a)(1). "Board of trade" means any exchange or association, whether incorporated or unincorporated, of persons who are engaged in the business of buying or selling any commodity or receiving the same for sale on consignment. *Id.* § 2. "Contract market" means a board of trade designated by the Commodities Futures Trading Commission (CFTC) as a contract market under the Commodities Exchange Act (CEA) or in accordance with the provisions of part 33 of the CEA. 17 C.F.R. § 1.3(h) (1992). Thus far, the NYMEX and the Kansas City Board of Trade are the only boards of trade designated by the CEA as a contract market that trades in natural gas futures contracts.

73. 7 U.S.C. § 2 (1994).

74. *Id.*

cash commodity for deferred shipment or delivery."⁷⁵ This exclusion is commonly called the "forward contract exception."

The express exclusion from CFTC jurisdiction of forward contracts stems from the objective of not regulating ordinary supply contracts where delivery is deferred for commercial convenience or necessity. Since a futures contract is subject to CFTC jurisdiction, while a forward contract is not regulated by the CFTC, a futures contract not traded on a board of trade designated as a contract market by the CFTC would be an illegal, unenforceable, off-exchange futures contract.⁷⁶

The CFTC also has plenary authority over "commodity option transactions" and "commodity options," that is, any transaction or agreement in interstate commerce that is held out as being in the character of, or is commonly known to trade as, an "option," "privilege," "indemnity," "advance guaranty," "decline guaranty," "bid," "offer," "put," or "call" involving any commodity regulated under the CEA. The CFTC's commodity options regulations generally proscribe options except for CFTC-approved, exchange-traded options or off-exchange options that fall within the CEA's "trade option exemption" created by the CFTC.⁷⁷

Since electricity is probably within the definition of "commodity"⁷⁸ and most contracts to sell or buy electricity in the power business are "contracts of sale" for delivery of electricity at some future time, it is critical to review electricity transactions from a commodities law point of view. As new forms of electricity contracts are drafted and reviewed, the above-described statute must be carefully considered. A series of questions should be asked regarding any proposed transaction. Specifically: Is it an illegal off-exchange futures contract? What is the appropriate categorization for the contract? Is it a forward contract, future, swap, or option? What exception or exemption applies under the CEA and its regulations?

This analysis requires a detailed understanding of the CEA, CFTC regulations, and case law. State commodities law must also be considered. Furthermore, contracts should be periodically reviewed and reassessed after execution for compliance with commodities laws.

E. Global Perspective on Electricity

Deregulation of the power business is accelerating in other countries as well. For example, in Norway, the 1990 Energy Act⁷⁹ established a framework to deregulate the power business and to foster competition.

75. *Id.*

76. *See* *Transnor (Bermuda) Ltd. v. BP N. Am. Petroleum*, 738 F. Supp. 1472, 1489 (S.D.N.Y. 1990).

77. *See* 17 C.F.R. § 32.4(a) (1992).

78. An argument can be made that electricity is not a commodity under the CEA until the electricity futures contract begins trading on the NYMEX. However, based on the legislative history of the CEA, the definition of commodity was intended to be very broad, and given the fact that other energy forms are clearly commodities under the CEA, by far the better argument is that electricity, at least in a consumable form, is a commodity.

79. The Energy Act, No. 50 (Nor. 1990).

The state-owned energy company Statkraft was split into two companies, one for generation⁸⁰ and the other for transmission of electricity to distribution utilities. Most end users, including households, are now able to purchase electricity from several different suppliers. In addition, trading is growing on a 24-hour spot market and a weekly futures market. Electricity has been commoditized in Norway.

In the United Kingdom, deregulation has taken a different form. In England and Wales, most of the power industry became privatized following the enactment of the Electricity Act of 1989.⁸¹ The business is dominated by two main generating companies and twelve regional electric companies. Since 1990, end users with peak electricity demand in excess of 1MW may buy their electricity from the "Pool." Generators sell to the Pool and electricity is purchased from the Pool at average Pool prices. While the Pool-based market structure is not fully competitive,⁸² electricity in the United Kingdom has become commoditized.

IV. NEW CONTRACTS FOR THE POWER INDUSTRY

A. *Traditional Electricity Contracts*

The power industry is a very diverse business, and this has led to great diversity in the contracts for electricity transactions.⁸³ The types of contracts used by participants in the power industry are as varied as the individual participants: investor-owned utilities (IOUs), power pools, IPPs, power authorities, and power marketers. Contracts also vary according to the nature of the proposed transaction (e.g., buy, sell, or both) and whether or not a proposed transaction is short-term (in the power business short-term may mean minutes or hours), long-term, firm, or non-firm. Despite such diversity, it is possible to generalize regarding traditional contracts in the power business.

Today, as in the past, most electricity transactions are documented by service agreements. These traditional contracts are often short, inflexible,

80. Thirty percent (30%) of Norway's generation capacity is owned by Statkraft. The remaining 70% is owned by municipalities and private companies. THE MINISTRY OF INDUSTRY AND ENERGY, THE ENERGY SECTOR AND WATER RESOURCES IN NORWAY 1994 (June 1995).

81. Electricity Act, 1989 (Eng.).

82. See generally, Jeffrey K. Skilling, *Poolco v. Bilateral Markets*, 133 PUB. UTILS. FORT., Jan. 1995, at 35.

83. There is a contract issue that is unique with respect to energy in the form of electricity. The question is whether or not electricity is a "good" under Article 2 of the Uniform Commercial Code (UCC). It is widely accepted that electricity is not a good under Article 2 of the UCC when it is within the provider's distribution system at a voltage too high for general consumer use. However, a split of opinion exists with respect to electricity which has passed through a meter onto a consumer's lines, having dropped through a transformer to a voltage suitable for use. For example, the New York courts have held that electricity is not a good because, by its nature, electricity was not intended to be included in the definition of goods. *Farina v. Niagara Mohawk Power Corp.*, 438 N.Y.S.2d 645, 647 (N.Y. App. Div. 1981). By contrast, a California court determined that once electricity is at a marketable voltage, it is a product and, by analogy, a good. *Pierce v. Pacific Gas & Elec. Co.*, 212 Cal. Rptr. 283, 294 n.12 (Cal. Ct. App. 1985). The significance of the debate is whether or not all the provisions of Article 2 of the UCC apply to the electricity contract at issue, including, *inter alia*, implied warranties and the statute of limitations. This issue must be carefully assessed with respect to electricity contracts.

and not drafted with precision.⁸⁴ They seldom contain all the critical terms and conditions of a transaction—usually a company's tariff is incorporated by reference and relied upon to supply missing terms and conditions.

A typical tariff is often long and detailed. Certain provisions would clearly apply (*e.g.*, rates, payments, and notice provisions), although it is not unusual for tension to exist between such provisions and the text of the service agreement. Moreover, certain tariff provisions may or may not apply (*e.g.*, those regarding facilities, operations, and systems). Tariffs also tend to be one-sided, particularly on the issue of liability (*e.g.*, liability for consequential damages is usually disclaimed only for the seller of electricity). All in all, the union of the service agreement and the tariff is a cumbersome way to clearly and precisely prescribe terms and conditions for electricity transactions.

Even where a tariff is not incorporated by reference, there may be extra-contractual terms and conditions that materially affect a transaction. For example, when members of a power pool sell electricity, they sell subject to all the rules of the pool. Just as in the case of the incorporated tariff, this is a set of terms and conditions that can impact the transaction, yet is outside the control of at least one of the parties to the service agreement, and in many cases outside the control of both parties. Even more troublesome, amendments to the rules are often automatically included by reference.

Electricity contracts used by IPPs (including some owners of QFs and EWGs) and power marketers to document transactions, however, often differ substantially from the contract forms described above. Sales by these entities are performed through negotiated agreements that provide some flexibility and allow the parties to address changes as the power industry evolves. In general, these contracts are more precise and more bilateral in addressing the liability of, and other issues relative to, the buyer and the seller.

The traditional electricity contracts present a great challenge to the power business as deregulation accelerates and competition increases. The traditional contract approach will no longer work. Traditional contracts do not adequately address the risks inherent in electricity transactions in the late 1990s. Accordingly, such contracts must be modified. The next Part of this article focuses on specifically how contracts for long-term, fixed price electricity transactions must change to address the challenges facing the new power business.⁸⁵

84. Such contract forms were developed for a regulated industry. They worked well in a non-competitive environment. This article does not intend to criticize such forms but, rather, to make the point that they do not work in the competitive environment.

85. The focus is on long-term, fixed price contracts, since these contracts must be drafted to manage price risk and all the other risks inherent in a long-term transaction. Contracts that are not used to manage price risk or that are short-term in duration would, in most cases, be a simplified version of the proposals set forth in this article.

B. *Competitive-Based Electricity Contracts*

1. Drafting the Electricity Contract

Contracts for the new competitive power business should be drafted from a commercial, rather than from a regulatory, point of view. Electricity is a commodity that will likely be subject to increased price volatility as the power industry continues to deregulate. It is critical that the new electricity contracts be useful in managing price risk. Such contracts should be drafted so that all the important commercial terms are set forth in the contract with precision and specificity and not incorporated through a tariff or by reference to other extra-contractual standards that may materially alter the commercial terms of the transaction agreed upon by the parties. The contracts also should be bilateral, capable of handling numerous transactions of varying type and duration,⁸⁶ and responsive to the many challenges confronting the power industry, such as the allocation of stranded costs and loop flow concerns. At this point, it is instructive to review the experience of the natural gas industry, the industry most analogous to the power industry.⁸⁷

The natural gas business has preceded the power business in the drive toward deregulation and competition.⁸⁸ With respect to contracts, the real changes did not occur until the early 1990s. Two watershed events occurred early in the decade. First, on April 3, 1990, the NYMEX began trading natural gas futures.⁸⁹ Second, the off-exchange swap market in natural gas began to develop rapidly. The net result was two new types of gas contracts—the gas futures contract and the gas swap contract—drafted with great precision, efficient, relatively easy to use, and largely standardized. These contracts, typically referred to as financial⁹⁰ or paper contracts, were superior to traditional gas contracts in almost every respect. Transactions could be documented quickly and precisely.

It was not long before financial gas contract technology began to cross over to physical gas contracts. Physical gas contracts, particularly those for long-term, fixed priced gas, were completely rewritten. The contracts became bilateral in every sense. Credit and security provisions were adapted from the futures and swap contracts. Master contracts and confirmations which were at first a novelty in the gas business are now very much in the industry mainstream. This concept of borrowing structures and sub-

86. Paul Kemezis, *Options Bidding: A Road to Low-Risk Flexibility*, ELEC. WORLD, July 27, 1995, at 61, 62.

87. See *supra* note 66.

88. See Donald F. Santa, Jr. & Clifford S. Sikora, *Open Access and Transition Costs: Will the Electric Industry Transition Track the Natural Gas Industry Restructuring*, 15 ENERGY L.J. 273 (1994).

89. Barbara Shook, *Natural Gas Futures Open for Business*, NAT. GAS INTELLIGENCE, Apr. 9, 1990, at 2.

90. The term "financial contract" is used where the primary underlying purpose of the contract is to manage price risk. It is true that physical delivery can be accomplished via a NYMEX futures contract, but the primary underlying purpose of the contract is to manage price risk rather than to deliver or receive the commodity. The term "physical contract" refers to a traditional contract and distinguishes such contract from a financial contract. See Haedicke, *supra* note 7, at 314-15.

stantive provisions from the financial contracts for the physical contracts worked very well in the gas industry. Such a lesson should not be lost on the power business as it accelerates on its path to deregulation.

Exactly how should electricity transactions be documented in the new competitive market? What provisions should be added to competitive-based electricity contracts? The answer is not a close call. The power industry should adopt the master contract/confirmation structure. The contracts are precise, efficient, largely standardized, and have a proven track record of success for numerous commodities, including natural gas. The master contract sets forth the core terms and conditions, such as standard representations and warranties, general obligations, events of default and termination, credit matters (including exposure limits and required security), governing law, and definitions. The confirmations, on the other hand, establish: (i) which party is the buyer and which is the seller; (ii) pricing terms; (iii) quantity; (iv) term; (v) delivery points; and (vi) nature of the transaction (i.e. firm or not-firm).⁹¹ The master contract/confirmation structure should be adopted by all segments of the power industry. Any regulatory barriers to such a development should be removed.⁹² The specific provisions recommended for competitive-based electricity contracts are set forth and discussed below.

2. New Provisions in Physical Electricity Contracts

a. Security

With deregulation of the power business and the onset of competition, the most important contract issue is performance and security for performance. In a competitive market, it is up to the participants to seek appropriate assurances of performance. They should not rely on the regulatory process to protect them. The starting point is to scrub down each contract for exceptions, both express and implied, to a party's obligation to perform under the contract (i.e., Service Exceptions).⁹³ In other words, is the party to the contract required to perform? Does the seller of electricity have an excuse under the contract not to deliver electricity? Can the seller opt-out of delivering electricity under a firm contract if it maintains that the electricity is required to serve native load?⁹⁴ Can the buyer audit the seller's books and records to verify the necessity of the electricity for native load? Can a buyer refuse to take the electricity under the contract if it cannot arrange transmission? Once all of the Service Exceptions are addressed,

91. Haedicke, *supra* note 7, at 325-26.

92. State commissions and industry trade groups should facilitate the development of more efficient contract forms. The gas industry has followed the lead of the financial services industry (e.g., the International Swaps and Derivatives Association) and embraced a standardized concept through the Gas Industry Standards Board (GISB).

93. Service Exceptions include force majeure, the failure of transmission, obligations to buy or sell electricity that are less than "firm," unclear specification of damages for non-performance, and no security provisions. See Haedicke, *supra* note 7, at 327.

94. See *supra* note 29.

eliminated, or mitigated, it is time to turn to the classic financial security provisions.

Several factors must be considered. Is the buyer of electricity a credit risk? If the buyer does not pay for electricity delivered, does it have sufficient financial resources to pay if successfully sued by the seller? What if all of the Service Exceptions under the contract were inoperative, yet the seller failed to deliver electricity as provided in the contract? Lastly, if the contract provides for the sale of electricity at a fixed price, and the market price of electricity has risen above the contract price, the buyer could be significantly damaged.⁹⁵ All of the foregoing concerns represent risks of nonperformance, and in reality a credit risk.

In financial contracts, such risks are typically dealt with from the start, in a detailed and precise way, before any transaction is ever completed. Just as it is inadvisable to make a loan and take a credit risk without adequate security up front, it is imprudent to enter into any long-term, fixed price electricity contract without proper security. In the gas futures contract and the forthcoming electricity futures contract, no trade is made until security for performance is assured through establishment of an appropriate margin.⁹⁶ For other financial gas contracts, such as swaps, the master agreement typically contains detailed provisions regarding security. The comprehensive treatment of security in financial transactions must be translated to long-term, fixed price electricity contracts to permit the use of such contracts to effectively manage electricity price risk.

Appendix A suggests several alternatives to secure the risk of non-performance in long-term, fixed price electricity contracts. The starting point is due diligence as to credit and an assessment of the credit risk associated with entering into the contemplated transaction. The credit risk may be high, dictating the need to require collateral (see the alternatives noted) upon execution of the contract. Conversely, the risk may be low, thereby eliminating the need for collateral, except upon the occurrence of a material adverse change in the financial condition of the party. Alternatively, collateral may be required only if the termination payment (explained below) exceeds a certain threshold level.⁹⁷

95. For example, Buyer, an industrial end-user of electricity (Industrial End-User), agrees to buy on a firm basis 25 MWH (24 hours per day) at a fixed price of \$27.00 per MWH for a term of five years. If the market price for electricity for this type of contract subsequently rises to \$35.00 per MWH, stays there for the remainder of the term, and then Seller non-performs after one year, Industrial End-User is facing a loss of economic value of approximately \$7,008,000 (25 x 24 x 365 x 4 x \$8.00) if it must purchase electricity at market prices.

96. See New York Mercantile Exchange Guide (CCH) ¶ 13,651-70 (1991) (margin provision of the natural gas futures contract).

97. See app. A, Selection No. 4.

b. Events of Default

As further protection, the competitive-based electricity contract should provide a list of occurrences (i.e., Events of Default) that would enable a party (i.e., the Non-Defaulting Party) to terminate all of its electricity-based transactions with the other party (i.e., the Defaulting Party).⁹⁸ The traditional electricity contract remedy of awarding the Non-Defaulting Party the cost of cover⁹⁹ if the Defaulting Party fails to perform under one transaction does not provide adequate protection to the Non-Defaulting Party if the Defaulting Party's actions threaten the essential purpose of the relationship between the two: future performance under all electricity-based transactions. More importantly, performance must be measured not only by a party's ability to perform under one transaction, but also by its financial ability to perform under all transactions. If the Defaulting Party fails to make payments under one electricity transaction with the Non-Defaulting Party, the Non-Defaulting Party is at risk for payment under all such transactions with the Defaulting Party.

Accordingly, if an Event of Default occurs and threatens all future performance (e.g., a party fails to make payments or deliver security or a party defaults on third-party indebtedness, suffers a material adverse change, or declares bankruptcy), the Non-Defaulting Party should have the right to terminate any or all of its electricity-based transactions with the Defaulting Party, accelerate each of the terminated transactions, and receive a termination payment (as further discussed below) intended to make the Non-Defaulting Party whole.

The Events of Default, while generally non-controversial in most contracts, are essential in the competitive-based electricity contract to provide each party assurances that it will have adequate remedies if the other party's actions jeopardize future performance. The Events of Default should be carefully drafted so as to avoid any inadvertent terminations, but if an Event of Default does occur, the Non-Defaulting Party should have the right to terminate not only the transaction in which the Event of Default occurred, but any or all electricity-based transactions between the parties.

98. See app. B, Section 4.1.

99. The concept of cover is intended to provide the performing party an adequate financial remedy if the other party fails to perform by allowing the performing party to seek alternative performance in the marketplace and requiring the non-performing party to pay the performing party the difference between the contract price and the current market price for equivalent performance. Accordingly, in the competitive-based electricity contract, if a party fails to deliver or receive the electricity as required pursuant to a transaction, the performing party should be entitled to be made financially whole through the concept of cover. Events of Default, however, should be drafted with a view to "relationship-ending" events between the parties, not just minor non-performances that can be adequately compensated for through periodic financial payments.

c. Termination Payment

It is critical for the competitive-based electricity contract to address exactly how damages are to be calculated if an Event of Default occurs. Without an express provision, neither party will have the legal certainty necessary to manage effectively its position and risk. The establishment of liquidated damages that must be paid upon the occurrence of an Event of Default (i.e., Termination Payment) is the critical link between listing the Events of Default and providing full protection to both parties in the competitive-based electricity contract.

The first essential element to protecting the Non-Defaulting Party upon the occurrence of an Event of Default is to permit the Non-Defaulting Party to "accelerate" its transactions with the Defaulting Party (as opposed to seeking remedy on a "month-to-month" basis as is typical under cover) and calculate its damages for the entire remaining term of each of the terminated transactions. Next, the issue of how a party's "damages" are measured must be re-examined. The traditional method of calculating damages by determining the difference between the fixed price in the agreement and some current index price may not provide an adequate remedy. As the electricity market becomes deregulated, more and more parties will be using competitive-based electricity contracts to manage their price risk. If an electricity transaction is hedged and the other party does not perform, it may be necessary to buy a replacement contract. The cost of a replacement contract is determined from dealers based upon their "forward price curves,"¹⁰⁰ rather than the cost of electricity on a particular day based upon some index price.

The Termination Payment in the competitive-based electricity contract should accurately address the damages the Non-Defaulting Party may incur in an attempt to give the Non-Defaulting Party the full benefit of its original bargain.¹⁰¹ The most accurate approach to damages in a deregulated electricity market is to look to the present value of all terminated transactions, including the replacement costs of terminated transactions. Such a provision can be used to address damages for all breaches, is completely bilateral in nature, and (assuming the Defaulting Party is able to pay the Termination Payment) protects the Non-Defaulting Party's position in the agreement.¹⁰²

100. A forward price curve is a party's projected prices for a commodity in the future, often for a period of several years. The forward price curve is actually two curves, one for bid prices, the other for asked prices.

101. See app. B, Section 4.2.

102. In an attempt to prevent a court from failing to enforce a contract provision for the calculation of damages because it deems it a penalty provision, the competitive-based power contract should also contain a clause to the effect that the amount of damages so calculated is intended to be reasonable compensation for the loss of the bargain (including the loss of risk protection) and, as such, is intended to be a reasonable pre-estimate of the loss rather than a penalty.

In the competitive-based electricity contract, the Non-Defaulting Party would calculate its Gains (resulting from the termination of those transactions that are "out-of-the money" to the Non-Defaulting Party) and its Losses and Costs (resulting from the termination of those transactions that are "in-the-money" to the Non-Defaulting Party) under each terminated transaction in accordance with the measure of damages set forth in this section, and net such amounts into a single amount which would be the Termination Payment, immediately payable by the Defaulting Party. In no event, however, would the Non-Defaulting Party be required to pay the Defaulting Party a Termination Payment (i.e., if the Non-Defaulting Party's Gains exceeded its Losses and Costs, the Termination Payment would be zero).

d. Representations and Warranties

Few physical electricity contracts have standard representations and warranties. As with many of the Events of Default, the basic bilateral representations and warranties relating to a party's authorization to enter into a contract should not be controversial, and such provisions should substantially increase the precision of a contract. Such precision will further reduce or eliminate a party's ability to avoid performance, especially in the context of litigation. The competitive-based electricity contract has such standard representations and warranties.¹⁰³

e. Waiver of Consequential Damages

The majority of current physical electricity contracts do not address the issue of consequential damages. Those physical contracts that do, typically have a unilateral waiver in favor of the seller of electricity. Such unilateral provisions are simply out of place in a competitive-based market. At a minimum, there should be a provision addressing consequential damages, and such provision should be bilateral. This is another example of where precision and certainty are important—in addressing potential liabilities of the parties. Both parties should disclaim any liability for consequential damages; this disclaimer results in damages that are consequential in nature being managed by third parties which have the best opportunity to manage them.

f. Stranded Costs

Few physical electricity contracts have addressed the issue of stranded costs,¹⁰⁴ despite the enormous potential liability associated with such costs.

103. See app. E.

104. See Benjamin J. Holden, *Power Plays: California's Struggle Shows How Hard it is to Deregulate Utilities*, WALL ST. J., Nov. 28, 1995, at A1. "Stranded costs" are the long-term investments that were made in the regulated environment to serve former captive customers, but are to be

Currently, there is complete uncertainty as to how or to what extent such costs will be recovered. Accordingly, it is unrealistic to assume that buyers and sellers of electricity should take the risk of, or assume responsibility for, stranded costs merely because they are availing themselves of the new competitive market.

Because neither party to an electricity contract is able to assess or manage the risks associated with stranded costs, the competitive-based electricity contract should provide a mechanism to address any future imposition of stranded costs on the parties by allowing the affected party to terminate the impacted transaction at a market position.¹⁰⁵ This mechanism provides that if stranded costs are imposed in a manner that materially affects any transaction between the seller and the buyer, but the buyer has the ability to pass on such costs to its subsequent purchasers, the buyer shall be obligated to pay such costs and then seek reimbursement from its subsequent purchasers. If the buyer does not have the ability to pass on such costs to its subsequent purchasers, the parties shall attempt to negotiate a mutual agreement to share the stranded costs.

If the parties are unable to reach a mutual agreement, the party responsible for the stranded costs shall have the option to terminate the transactions affected by the stranded costs. If the option to terminate the affected transactions is exercised, the parties shall determine their termination payment without regard to stranded costs and based upon prices representing mid-points¹⁰⁶ on a forward price curve for electricity. This type of provision attempts to maintain the integrity of the parties' market-based position in the transaction but does not unfairly burden the parties with the unknowable and unquantifiable liabilities associated with stranded costs.

g. Loop Flows

Loop flows¹⁰⁷ represent a significant issue to be resolved as the power industry moves towards a competitive, deregulated environment. The resolution of loop flows, however, most likely impacts transmission providers and not the ultimate buyers and sellers of electricity. Since both the buyer

recovered in the deregulated environment. Stranded costs for the power industry have not been accurately quantified. Such estimates have ranged from tens-of-billions of dollars to hundreds-of-billions.

105. See app. C.

106. Mid-point is that point on the party's forward price curve equally between the party's bid price curve and its asked price curve.

107. "Loop flows" refers to the difference between the path on which parties have contractually agreed to deliver electricity versus the actual path that electricity follows. Electricity flows to the point of least resistance. Accordingly, while a party may contract with and pay a transmission provider to deliver electricity, the actual electricity delivered may follow a completely different path on transmission lines owned by another transmission provider. See, e.g., Ronald D. Jones et al., *Electricity*, 2 ENERGY LAW AND TRANSACTIONS § 52.01[5][b] (David J. Muchow & William A. Mogel eds., 1995); Reinier H.J.H. Lock & Marlene L. Stein, *Electricity Transmission*, 3 ENERGY LAW AND TRANSACTIONS § 81.02[1] (David J. Muchow & William A. Mogel eds., 1995).

and seller have necessarily contracted and paid for transmission services, it is unlikely that the issue of loop flows will be solved by requiring the buyer and/or seller to pay two or more times for the same service. Accordingly, transmission providers will need to determine a compensation scheme in order to take into consideration inadvertent flows of power on the transmission lines of other providers.¹⁰⁸ To allocate any potential burden of loop flows, however, the physical electricity contracts should provide that the seller will be responsible for loop flows upstream of the point of delivery, and that the buyer will be responsible for loop flows at and after the delivery points.

h. Oral Agreements

To respond quickly and efficiently to a liquid, competitive power market, it is critical that the electricity buyer and seller be able immediately and with certainty to enter into a binding agreement. Accordingly, a physical electricity contract should provide that the parties have the right to enter into a binding transaction orally, which transaction may be confirmed in a subsequent writing. If desired, however, a party should have the right to request that a transaction be binding only if reduced to a writing signed by both parties.¹⁰⁹

V. COMPETITIVE-BASED ELECTRICITY CONTRACTS OF THE FUTURE

Looking toward the future, competitive-based electricity contracts will certainly continue to evolve. The master contract will likely become a mainstream contract form for the power business. Long-term, short-term, fixed price, market price, firm or non-firm transactions, or any combination thereof will all be dealt with under a single master electricity contract. In addition, within a few years, it is likely that a new energy contract will be born—one that renders obsolete separate physical contracts for natural gas, electricity, propane, and oil.

Why not have a single master physical energy agreement with different confirmations for each form of energy? As the number of both transactions and cross-trades between different forms of energy increases, it makes sense from the standpoint of economic efficiency to have a single master physical energy contract. Also, the ability to net out numerous transactions is very helpful from a credit and bankruptcy perspective.

Another possibility is that, over a longer term, a master energy contract will be developed for both physical and financial energy transactions. Thus, if a trade is physical electricity or a financial electricity swap, physical gas or a financial gas swap, etc., it could be performed under one contract. Again, this approach presents tremendous economic efficiency, credit, and

108. See William W. Hogan, *Electricity Transmission and Emerging Competition*, 133 PUB. UTILS. FORT., July 1, 1995, at 32-36.

109. See app. D.

bankruptcy advantages. All energy is being commoditized, and this leads to the concept of a single master energy contract.

VI. CONCLUSION

Deregulation has led to increased competition in the power business. New types of power suppliers—QFs, EWGs, and power marketers—are helping transform the power industry into one where competition rather than regulation is the driving industrial force. In the process, a new type of electricity contract is being developed—a competitive-based electricity contract—which is wholly bilateral, drafted with precision, and structured to document multiple transactions quickly and efficiently. The competitive-based electricity contract is capable of properly balancing and managing all of the risks, including those associated with price and credit, that exist in the new competitive power industry. Those participants that are the first to embrace the new contracts will be the first to reap the rewards of a more competitive and efficient power business.

APPENDIX A
SECURITY ARRANGEMENTS

Select combination of appropriate security arrangements based upon relationship of the Parties and the credit risks involved:

SELECTION 1 - GUARANTY AGREEMENTS - Appropriate if a Party relies upon a third party to enhance creditworthiness:

SECURITY/GUARANTY AGREEMENT. In order to secure all payment obligations of Company to Counterparty hereunder, upon execution of the Agreement Company shall cause _____ ("Company's Guarantor") to execute and deliver to Counterparty the guaranty agreement substantially in the form attached as *Exhibit " "*. In order to secure all payment obligations of Counterparty to Company hereunder, upon execution of the Agreement Counterparty shall cause _____ ("Counterparty's Guarantor") to execute and deliver to Company the guaranty agreement substantially in the form attached as *Exhibit " "*.

SELECTION 2 - HIGH CREDIT RISK - Appropriate if there is a high credit risk involved with a Transaction or a Party:

COLLATERAL REQUIREMENT/GENERAL. It is understood and agreed by the Parties that either Party may request a Letter of Credit or other collateral prior to consummating any Transaction hereunder; provided, nothing herein shall obligate any Party to provide such Letter of Credit or other collateral without having made an agreement to do so prior to entering into such Transaction. [and] [or]

LETTER OF CREDIT. Upon execution of this Agreement, _____ shall execute and maintain throughout the term of the Agreement a Letter of Credit in an amount equal to [the Termination Payment rounded up to the next \$ _____, which amount may be increased or reduced weekly based upon subsequent calculations of the Termination Payment.] or [\$ _____.]

SELECTION 3 - LOWER CREDIT RISK - Appropriate if Parties desire right to ask for collateral upon the occurrence of a Material Adverse Change to the other Party:

Insert as item (v) in Event of Default Section:

(v) the occurrence of a Material Adverse Change with respect to the Defaulting Party; provided, such Material Adverse Change shall not be considered an Event of Default if the Defaulting Party establishes and maintains for so long as the Material Adverse Change is continuing, a Letter of Credit [or other collateral acceptable to the Non-Defaulting Party] in an amount equal to the *sum* of (rounded up to the next \$ _____) (a) the Non-Defaulting Party's Termination Payment [plus (b) if the Non-Defaulting Party is Seller, the aggregate of the amounts Seller is entitled to receive under each Transaction for Energy Buyer is obligated to receive during the 60 day period preceding the Material Adverse Change (the amount of said Letter of Credit [or other collateral] to be adjusted weekly to reflect amounts owing at that point in time.)

SELECTION 4 - MARGIN (COLLATERAL) REQUIREMENT - Appropriate if value of Transactions collectively may exceed a Party's credit worthiness:

COLLATERAL REQUIREMENT/TERMINATION PAYMENT THRESHOLD. If at any time and from time to time during the term of this Agreement (and notwithstanding whether an Event of Default has occurred) the Termination Payment that would be owed to a Party in respect of all Transactions then outstanding should exceed \$ _____, such Party as the Beneficiary Party may request the other Party to establish a Letter of Credit in an amount equal to the Termination Payment in excess of \$ _____ (rounded up to the next \$ _____), [or such other collateral as may be reasonably acceptable to the Beneficiary Party]. The Letter of Credit [or other collateral] shall be delivered within two Business Days of the date of such notice. On a weekly basis, such Letter of Credit [or other collateral] may be increased or reduced based upon subsequent calculations of the Termination Payment (rounded up to the next \$ _____).

SELECTION 5 - DEFINITIONS - Add the following definitions to the extent appropriate:

"*MATERIAL ADVERSE CHANGE*" means (i) with respect to _____, _____ shall have long-term debt unsupported by third party credit enhancement that is rated by S&P below "_____" or by Moody's below "_____" or (ii) with respect to _____, _____ shall have a Current Ratio* less than _____ to 1.00 at the end of any fiscal quarter. *Example of Material Adverse Change triggers - actual trigger will depend upon critical financial factors of the Parties.

"*CURRENT RATIO*" means the ratio of current assets, exclusive of intangible assets and notes receivable, and current liabilities of the subject party, each determined in accordance with generally accepted accounting principles.

"*S&P*" means the Standard & Poor's Rating Group (a division of McGraw-Hill, Inc.) or its successor.

"*MOODY'S*" means Moody's Investor Services, Inc. or its successor.

"*LETTER OF CREDIT*" means one or more irrevocable, transferable standby letters of credit from a major U.S. commercial bank or a foreign bank with a U.S. branch office, with such bank having a credit rating of at least "A-" from S&P or "A3" from Moody's, such Letter of Credit being in a form reasonably acceptable to the party in whose favor the Letter of Credit is issued.

APPENDIX B
EVENTS OF DEFAULT/TERMINATION PAYMENTS

DEFAULTS AND REMEDIES

4.1 EVENTS OF DEFAULT. An "Event of Default" shall mean with respect to a Party ("Defaulting Party"): (i) the failure by the Defaulting Party to make, when due, any payment required if such failure is not remedied within two Business Days after written notice of such failure is given to the Defaulting Party and provided the payment is not the subject of a good faith dispute as described in *Section 6* or (ii) any representation or warranty made by the Defaulting Party herein shall prove to have been false or misleading in any material respect when made or deemed to be repeated or (iii) the failure by the Defaulting Party to perform any covenant set forth in this Agreement (other than its obligations to make any payment or obligations which are otherwise specifically covered in this *Section 4.1* as a separate Event of Default or its obligations to deliver or receive Energy a remedy for which is provided in *Section 3*), and such failure is not excused by Force Majeure or cured within five Business Days after written notice thereof to the Defaulting Party or (iv) the Defaulting Party shall be subject to a Bankruptcy Proceeding or [(v) the occurrence of a Material Adverse Change with respect to the Defaulting Party; provided, such Material Adverse Change shall not be considered an Event of Default if the Defaulting Party establishes and maintains for so long as the Material Adverse Change is continuing, [a Letter of Credit] [or other collateral acceptable to the Non-Defaulting Party] in an amount equal to the *sum* of (rounded up to the next \$_____) (a) the Non-Defaulting Party's Termination Payment [plus (b) if the Non-Defaulting Party is Seller, the aggregate of the amounts Seller is entitled to receive under each Transaction for Energy Buyer is obligated to receive during the 60 day period preceding the Material Adverse Change (the amount of said Letter of Credit to be adjusted weekly to reflect amounts owing at that point in time))] or [(vi) the Defaulting Party fails to establish, maintain, extend or increase a Letter of Credit or other collateral when required pursuant to this Agreement] or [(vii) with respect to Company, at any time, [Company] [Company's Guarantor] shall have defaulted on its indebtedness to third parties resulting in obligations of [Company] [Company's Guarantor] in excess of \$_____, being, or being capable of being, declared accelerated, or with respect to Counterparty, at any time, [Counterparty] [Counterparty's Guarantor] shall have defaulted on its indebtedness to third parties, resulting in obligations of [Counterparty] [Counterparty's Guarantor] in excess of \$_____, being, or being capable of being, declared accelerated] or [(viii) the Guarantor of the Defaulting Party fails to perform any covenant set forth in the guaranty agreement it delivered in respect of this Agreement, the guaranty agreement expires or is terminated or ceases for any reason to guarantee the obligations of the Defaulting Party, any representation or warranty made by such Guarantor in said guaranty agreement shall prove to have been false or misleading in any material respect when made or when

deemed to be repeated or such Guarantor shall take or suffer any actions set forth in item (iv) above as applied to it.]

4.2 EARLY TERMINATION. (i) If an Event of Default occurs with respect to a Defaulting Party at any time during the term of this Agreement, the other Party ("Non-Defaulting Party") may, for so long as the Event of Default is continuing, establish a date (which date shall be between _____ and _____ days after notice is delivered) ("Early Termination Date") on which any or all Transactions selected by it will terminate ("Terminated Transactions") and (ii) withhold any payments due in respect of the Terminated Transactions; provided, however, upon the occurrence of any Event of Default listed in item (iv) of *Section 4.1* as it may apply to any Party, all Transactions and this Agreement in respect thereof shall automatically terminate, without notice, as if an Early Termination Date had been immediately declared prior to such event. If an Early Termination Date has been designated, the Non-Defaulting Party shall in good faith calculate its Gains (as defined herein) or Losses (as defined herein) and Costs (as defined herein) resulting from the termination of the Terminated Transactions. The Gains, Losses and Costs shall be determined by comparing the value of (a) the remaining term, quantities and prices under each Terminated Transaction had it not been terminated to (b) the equivalent quantities and relevant market prices for the remaining term either quoted by a bona fide third party offer or which are reasonably expected to be available in the market under a replacement contract for each Terminated Transaction. To ascertain the market prices of a replacement contract the Non-Defaulting Party may consider, among other valuations, any or all of the settlement prices of NYMEX Power futures contracts, quotations from leading dealers in energy swap contracts and other bona fide third party offers, all adjusted for the length of the remaining term and the transmission differential. It is expressly agreed that a Party shall not be required to enter into replacement transactions in order to determine the Termination Payment. The Non-Defaulting Party shall aggregate such Gains, Losses and Costs with respect to all Transactions into a single net amount ("Termination Payment") and notify the Defaulting Party. If the Non-Defaulting Party's aggregate Losses and Costs exceed its aggregate Gains, the Defaulting Party shall, within 5 Business Days of receipt of such notice, pay the net amount to the Non-Defaulting Party, which amount shall bear interest at the Interest Rate from the Early Termination Date until paid. If the Non-Defaulting Party's aggregate Gains exceed its Losses and Costs, if any, resulting from the termination of the Terminated Transactions, the amount of the Termination Payment shall be equal to zero.

As used herein with respect to each Party: (i) "Costs" shall mean, with respect to a Party, brokerage fees, commissions and other similar transaction costs and expenses reasonably incurred by such Party either in terminating any arrangement pursuant to which it has hedged its obligations or entering into new arrangements which replace a Terminated Transaction, and attorneys' fees, if any, incurred in connection with enforcing its rights under this Agreement; (ii) "Gains" shall mean, with respect to a Party, an

amount equal to the present value of the economic benefit, if any, (exclusive of costs) to it resulting from the termination of its obligations with respect to a Terminated Transaction, determined in a commercially reasonable manner; and (iii) "Losses" shall mean an amount equal to the present value of the economic loss, if any, (exclusive of Costs) to it resulting from the termination of its obligations with respect to a Terminated Transaction, determined in a commercially reasonable manner. At the time for payment of any amount due under this *Section 4.2*, each Party shall pay to the other Party all additional amounts payable by it pursuant to this Agreement, but all such amounts shall be netted and aggregated with any Termination Payment payable hereunder.

4.3 OTHER EVENTS. In the event Buyer is regulated by a federal, state or local regulatory body, and such body shall disallow all or any portion of any costs incurred or yet to be incurred by Buyer under any provision of this Agreement, such action shall not operate to excuse Buyer from performance of any obligation nor shall such action give rise to any right of Buyer to any refund or retroactive adjustment of the Contract Price provided in any Transaction. Notwithstanding the foregoing, if a Party's activities hereunder become subject to regulation of any kind whatsoever under any law (other than with respect to New Taxes or Stranded Costs) to a greater or different extent than that existing on the Effective Date and such regulation either (i) renders this Agreement illegal or unenforceable or (ii) materially adversely affects the business of the Defaulting Party, with respect to its financial position or otherwise, then in the case of (i) above, either Party, and in the case of (ii) above, only the Defaulting Party, shall at such time have the right to declare an Early Termination Date in accordance with the provisions hereof; provided, notwithstanding the rights of the Parties to declare an Early Termination Date as above stated, the Defaulting Party shall be liable for payment of the Termination Payment calculated by the Non-Defaulting Party as provided in *Section 4.2*.

APPENDIX C
NEW TAXES AND STRANDED COSTS

NEW TAXES/STRANDED COSTS. A. Notwithstanding any other provision of this Agreement to the contrary, if (i) a New Tax or a Stranded Cost occurs *and* (ii) Buyer or Seller would be responsible for such New Tax or Stranded Cost *and* (iii) such New Tax or Stranded Cost is (as a result of laws, regulations and applicable contracts of Buyer in effect as of the effective date of the New Tax or Stranded Cost) of the type that Buyer can pass directly through to, or be reimbursed by, another person or entity, Buyer shall pay or cause to be paid, or reimburse Seller if Seller has paid, all such New Taxes or Stranded Costs and Buyer shall indemnify, defend and hold harmless Seller from any Claims for such New Taxes or Stranded Costs.

B. If (i) a New Tax or Stranded Cost occurs *and* (ii) Buyer or Seller would be responsible for such New Tax or Stranded Cost *and* (iii) Paragraph A does not apply, the Party responsible for the New Tax or Stranded Cost ("Affected Party") shall be entitled to declare an Early Termination Date with respect to those Transactions affected by the New Tax or Stranded Cost ("Affected Transactions") in accordance with the provisions of this Agreement subject to the following conditions: (a) the Affected Party must give the other Party ("Non-Affected Party") at least 30 days prior written notice (the "Agreement Period") of its intent to declare an Early Termination Date (and which notice shall be given no later than 90 days after the later of the enactment or effective date of the relevant New Tax or Stranded Cost), and prior to the proposed Early Termination Date, Buyer and Seller shall attempt to reach a mutual agreement as to the sharing of the New Tax or Stranded Cost, (b) if a mutual sharing agreement is not reached, the Non-Affected Party shall have the right, but not the obligation, upon written notice to the Affected Party within the Agreement Period, to pay the New Tax or Stranded Cost for any continuous period it so elects on a month to month basis, and in such case the Affected Party shall not have the right during such continuous period to declare the Early Termination Date on the basis of the New Taxes or Stranded Costs, (c) should the Non-Affected Party at its election agree to pay the New Tax or Stranded Cost on a month to month basis, then upon 30 days prior written notice to the Affected Party of its election to cease payment of such New Tax or Stranded Cost, the Affected Party shall then be liable for the payment of the New Tax or Stranded Cost and the Parties shall again be subject to this *Section 7.2* as if the New Tax or Stranded Cost had an effective date as of the date the Non-Affected Party ceases payment of such New Tax or Stranded Cost, (d) if a mutual sharing agreement is not reached and the Non-Affected Party does not elect to pay the New Tax or Stranded Cost for any period of time within the Agreement Period, the Early Termination Date shall take effect and all Affected Transactions must be terminated and be subject to the same Early Termination Date, (e) the Early Termination Date shall be effected as if an Event of Default had occurred; provided, both Seller and Buyer shall calculate in a commercially reasonable manner their net Gain (amount of Gain after netting Losses and

Costs) or net Loss (amount of Losses and Costs after netting Gains) resulting from the termination of all Affected Transactions as if they each were a Notifying Party; and provided further, that each Party's Gains and Losses shall be determined without taking into effect the impact of the New Taxes or Stranded Costs, (f) (i) if both Parties have a net Gain, the party with the greater net Gain shall pay to the other party fifty percent (50%) of the difference between the two (2) net Gains; (ii) if both Parties have a net Loss, the party with the lesser net Loss shall pay to the other party fifty percent (50%) of the absolute value of the difference between the two (2) net Losses; and (iii) if one party shall have a net Gain and the other party shall have a net Loss, the party with the net Gain shall pay to the other party fifty percent (50%) of the sum of the absolute value of the net Gain and the absolute value of the net Loss, and (g) such payment shall be payable as provided in *Section 4.2*. Prior to and including the initial Agreement Period invoked under this *Section 7.2*, New Taxes and Stranded Costs shall be allocated as if they were Taxes as provided in *Section 7.1*. The intent of this *Section 7.2* is to leave neither party with an unfair burden as a result of New Taxes or Stranded Costs.

"STRANDED COSTS" means any charges or costs that are assessed or levied by any entity, including local, state or federal regulatory or taxing authorities or any Transmission Providers, in order to recoup the expenses and liabilities associated with stranded investments and that would affect an ongoing Transaction, either directly or indirectly; provided, however, such charges or costs must be uniformly applied in a non-discriminatory manner and applicable to all similarly situated parties.

APPENDIX D
TRANSACTION PROCEDURES

TRANSACTION PROCEDURES. During the term of this Agreement, the Parties may notify each other that Energy is available for purchase or sale. Each Transaction shall be effectuated and evidenced (i) by a written Transaction Agreement executed by the Parties or (ii) in a telephone conversation between the Parties whereby an offer and acceptance shall constitute the agreement of the Parties; provided, however, each Party may stipulate by prior notice to the other Party that any particular contemplated Transaction shall be effectuated and formed only by means of procedure (i) above. The specific terms to be established by the Parties shall include the Buyer and Seller, the Period of Delivery, the Contract Price, the Delivery Point(s), the Contract Quantity, whether the Transaction is Firm or Non-Firm and such other terms as the Parties shall agree that are not in conflict with the Master Agreement. _____ may confirm a telephonic Transaction by forwarding to Counterparty a Confirmation, which shall be executed by Counterparty (with any objections noted thereon) and returned to _____ within two Business Days or else be deemed correct as sent; provided, however, that failure to send a Confirmation shall not invalidate any Transaction agreed to by the Parties. The Parties agree not to contest or assert any defense to the validity or enforceability of telephonic Transactions entered into in accordance with the Master Agreement under laws relating to whether certain agreements are to be in writing or signed by the Party to be thereby bound, or the authority of any employee of the Party to enter into a Transaction. Each Party consents to the recording of its representatives' telephone conversations without any further notice. All recordings may be introduced into evidence and used to prove oral agreements between the Parties.

APPENDIX E
REPRESENTATIONS AND WARRANTIES

REPRESENTATIONS AND WARRANTIES. On the Effective Date and the date of entering into each Transaction, each Party represents and warrants to the other Party: (i) it is duly organized, validly existing and in good standing under the laws of the jurisdiction of its formation and is qualified to conduct its business, (ii) it has all regulatory authorizations necessary for it to legally perform its obligations under this Agreement and each Transaction, (iii) the execution, delivery and performance of this Agreement and each Transaction are within its powers, have been duly authorized by all necessary action and do not violate its governing documents or any Law applicable to it, (iv) this Agreement and each Transaction when entered into in accordance with this Agreement constitutes its legally valid and binding obligation enforceable against it in accordance with its terms, subject to any Equitable Defenses, (v) there are no Bankruptcy Proceedings pending or being contemplated by it or to its knowledge, threatened against it, (vi) there are no Legal Proceedings that materially adversely affect its ability to perform this Agreement and each Transaction, and (vii) it has knowledge and experience in financial matters and the electric industry that enable it to evaluate the merits and risks of this Agreement and each Transaction. Each Party covenants that it will cause these representations and warranties to be true and correct throughout the term of the Agreement.