

Utility Tariff Bonds: New and Refined Applications for Proven Stranded Cost Securitization Technology

With the demonstrable performance of prior utility tariff bonds, U.S. regulated electric utilities likely will expand their use of this securitization method. It is only sensible to use the technique to allow a utility to recover mandated costs over which the utility has no particular control in the most efficient manner possible. U.S. regulated electric utilities face a period of disruptive change, which will potentially increase significantly the financial risks faced by affected utilities that will add substantial rate recovery pressure.

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I. Introduction

It is likely that U.S. regulated electric utilities face an almost unprecedented period of disruptive change and the relating funding/cost recovery challenges that this presents. A recent Edison Electric Institute (EEI) report titled "Disruptive Challenges: Financial

Implications and Strategic Responses to a Changing Retail Electric Business" described these changes (called "disruptive challenges" in the report) as:

due to a convergence of factors, including: falling costs of distributed generation and other distributed energy resources (DER); an enhanced focus on development of new DER technologies;

increasing customer, regulatory, and political interest in demand side management technologies (DSM); government programs to incentivize selected technologies; the declining price of natural gas; slowing economic growth trends; and rising electricity prices in certain areas of the country. Taken together, these factors are potential “game changers” to the U.S. electric utility industry, and are likely to dramatically impact customers, employees, investors, and the availability of capital to fund future investment. The timing of such transformative changes is unclear, but with the potential for technological innovation (e.g., solar photovoltaic or PV) becoming economically viable due to this confluence of forces, the industry and its stakeholders must proactively assess the impacts and alternatives available to address disruptive challenges in a timely manner

and the related financial risks to affected utilities as follows:

declining utility revenues, increasing costs, and lower profitability potential, particularly over the long-term. As DER and DSM programs continue to capture “market share,” for example, utility revenues will be reduced. Adding the higher costs to integrate DER, increasing subsidies for DSM and direct metering of DER will result in the potential for a squeeze on profitability and, thus, credit metrics. While the regulatory process is expected to allow for recovery of lost revenues in future rate cases, tariff structures in most states call for non-DER customers to pay for (or absorb) lost revenues. As DER penetration increases, this is a cost-recovery structure that will lead to political pressure to undo these cross subsidies and may result in utility stranded cost exposure.

The EEI report may be criticized as being unduly optimistic in one important respect: the EEI report suggests that the existing rate recovery mechanisms for utility investments will permit affected utilities and their investors, lenders, and other stakeholders the time necessary to undertake a proactive assessment and adequate planning to address these disruptive challenges. In the

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opinion of this author, the EEI reports focuses almost exclusively on DER/DSM and pays inadequate attention to several other and equally important factors, including the accelerated retirement of substantial coal-fired plant capacity due to increased environmental requirements for regulated electric utilities, the requirements for substantial investment in transmission and distribution systems to permit the integration of increasing mandated renewable resources and, in at least in certain portions of the U.S., required or desirable investments to “harden” the

transmission grid to reduce its vulnerability to storms of increasing severity, and, of course, the risk that declining natural gas prices may not continue indefinitely and that rising natural gas prices will, when coupled with these other factors, put substantial rate recovery pressure on affected utilities credit. However, the EEI report is correct when it notes the self-reinforcing cycle that this rate recovery pressure will trigger: namely, increasing rates will accelerate the adoption of DER/DSM and the loss of market share and related revenue.

Utility credit has been declining steadily since 2000¹ and, as investors and other stakeholders (including rating agencies) begin to question the continuation of the rate recovery mechanisms that have permitted higher levels of leverage and better ratings than for comparable corporates, this will also increase the cost of capital to the affected utilities and/or the accelerate required deleveraging to maintain existing ratings.

One financial product that affected U.S. electric utilities might use to mitigate these negative factors is the utility tariff bond (also called “rate reduction bonds,” “ratepayer obligation charges,” etc.) and the underlying “stranded cost” securitization methodology and related rate treatment. The key benefits of the utility tariff bond are the relatively high rating (often “AAA”/“Aaa”), relatively long tenor (up to 20-plus years), and the important

treatment that the bond does not constitute debt of the related utility for credit-rating purposes.

Originally developed to compensate U.S. electric utilities for regulatory assets rendered uneconomic by deregulation, utility tariff bonds are finding new applications. Examples include financing mandatory pollution control equipment and other similar investments; funding of catastrophic storm reconstruction expenditures; recovery of power plant development and construction costs and, as described below, potentially to fund (1) the early retirement and clean-up of coal-fired power plants due to more stringent environmental requirements, (2) the required investments to integrate increasing renewable resources, and (3) necessary or desirable investments to “harden” the grid against severe storms, as well as necessary upgrades for a “Smart Grid” to enable the full realization of benefits of energy efficiency and conservation investments and other DSM.

For many U.S. electric utilities, deregulation of wholesale power supply markets in the late 1990s rendered substantial plant, equipment, and other regulatory assets economically obsolete. As compensation, the affected utilities, regulators, and consumer representative groups crafted stranded-cost securitizations to permit utilities to recover the related stranded costs through special rates charged to customers and the

sale proceeds of bonds backed by such charges. These bonds in many cases were somewhat euphemistically referred to as “rate-reduction” bonds, although the securitization charges often increased rates to affected customers. In connection with such securitizations, the primary U.S. rating agencies developed and maintain specific criteria and methodologies for such stranded-cost securitizations.²

Ideally, the basic foundation for a stranded-cost securitization is a sound legislative and regulatory scheme.

To date, utilities have issued approximately \$45 billion of stranded-cost and similar securitizations. That number could increase dramatically and relatively quickly if the U.S. regulated electric utility industry applies this well-tested securitization technique to the extraordinary cost recovery challenges it faces in the future in any significant degree.

II. Stranded-Cost Securitizations

Stranded-cost securitizations represent a refinement of several

prior transactions, including: (1) the special transition charges that gas transmission and distribution companies were permitted³ to collect as part of the resolution of disputes regarding so-called “take or pay” contracts when U.S. gas supply and transportation services were unbundled in the mid-1980s; (2) the securitization of special charges to customers of affected utilities to finance compensation payments to such utilities under legislated nuclear power plant moratoria in Italy and Spain in the early 1990s⁴; and (3) a 1995 securitization by Puget Sound & Light⁵ to finance a DSM program (essentially cash incentives to customers to replace less energy-efficient appliances with more energy-efficient items).

Ideally, the basic foundation for a stranded-cost securitization is a sound legislative and regulatory scheme that provides for the following:

- An adequate hearing on the merits regarding the costs to be recovered and the alternative means of financing these costs—with securitization found to be demonstrably superior to other such financing alternatives. Practically, this often will be the case since the securitization will allow a highly rated financing of 100 percent of such costs. In addition, such a hearing will substantially mitigate the risk of later reversal or adverse modification of the related regulatory approval;
- A related regulatory approval, commonly referred to as a “financing order,” authorizes

the issuance of bonds that are secured or otherwise backed by the recovery of the costs, and any related securitization, through non-bypassable charges to the utility's customers. Sometimes this is referred to as a "network" charge, because the charge is payable by all customers using such network, and not readily avoided by electing utility services that are not subject to such charges;

- The characterization as a separate property right of the right to levy and collect the charges—and any increases required to true-up the amounts to be levied and collected to ensure full and timely repayments of the bonds backed by such charges;
- The "true sale" of the related property rights to the issuer in the related securitization to secure or otherwise back the issuer's securitization; and
- A pledge by the applicable state not to impair such property right or securitization.

Additionally, as a practical matter, the charges (and any likely required increase for true-up amounts) should be sufficiently modest to reduce the risk of later impairment from customer or political objections.⁶

The legal effect of such a state pledge, and applicable limitations on it, depend on Constitutional protections under the Contract Clause⁷ and under against improper takings.⁸ Questions might arise about the degree to which prior orders of one regulatory authority bind a

later regulatory authority, or the deference the prior order will receive in any subsequent regulatory proceedings.⁹ However, the rating agencies apparently have become comfortable with these risks, since they rate these transactions in their highest rating categories (although they may require legal opinions regarding the applicable Constitutional protections¹⁰).

Recently, some utilities have used additional transactions utilizing stranded-cost securitization methodologies to finance mandated pollution control equipment and to recover storm recovery and reconstruction costs.

On June 28, 2002, the Internal Revenue Service (IRS) issued Revenue Procedure 2002-49¹¹ (Rev. Proc. 02-49) to clarify the conditions under which a state-regulated electric utility can securitize customer charges without recognizing immediate tax gain. Rev. Proc. 02-49 also expedited stranded-cost securitizations by eliminating the issuer's need to seek a private letter ruling. Later, on Sept. 12, 2005, Rev. Proc. 05-62,¹² expanded the scope of Rev. Proc. 02-49 beyond stranded costs, removing the requirement for level payments and adding a requirement that securitization

payments be made at least semi-annually.

Historical performance of these stranded-cost securitizations generally has been sound¹³ and, accordingly, prior investor experience has been positive. Notably, this history has included a related utility bankruptcy (Pacific Gas & Electric) and a utility merger (Northwestern's acquisition of Montana Power).

III. Securitizing Pollution Control

Recently, some utilities have used additional transactions utilizing stranded-cost securitization methodologies to finance mandated pollution control equipment and to recover storm recovery and reconstruction costs. The rating agencies have duly noted these more recent opportunities.¹⁴

Perhaps the first attempt to extend stranded-cost securitization techniques to mandated pollution-control requirements was the proposed \$490 million of so-called "environmental trust bonds" authorized for issuance by Wisconsin Electric Power Co. (WEPCO) in October 2004 under 2003 Wisconsin Act 152.¹⁵ This Act authorizes Wisconsin utilities to use environmental trust bonds to finance environmental improvements on utility facilities. It calls for the environmental trust bonds to be repaid from revenues collected from a specified fee, and

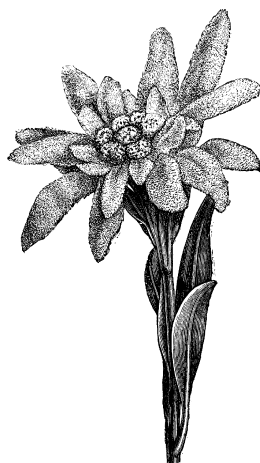
states that the bond issue is governed by a Wisconsin Public Service Commission's financing order, which among other things, creates a property right to the collection of the fees from utility customers and to the collected revenues. The Act also provides that the utility will transfer this right to a third party, which will collect the fees for repayment of the debt. Further, the Act expressly states that the debt associated with the bonds will not be shown on the books of the related utility.¹⁶

Several other states have adopted similar legislation, including Florida, Texas, and West Virginia.

A subsequent attempt occurred in May 2007, when Allegheny Energy, parent of Monongahela Power (senior secured rating: "Baa3") and Potomac Edison (senior secured rating: "Baa3"), issued \$345 million and \$115 million, respectively, of environmental control bonds under West Virginia Code §24-2-4e.¹⁷ The bonds were used to finance the installation of flue-gas desulphurization units (commonly referred to as "scrubbers") and related facilities on the Fort Martin coal-fired power plant in Monongalia County, W.Va. The bonds were rated "AAA" by Standard & Poor's and "Aaa" by Moody's Investors Services—superior to the related utilities' own "Baa3" ratings at that time. The required financing order was issued after a protracted proceeding and later

was amended by joint stipulation to accelerate the securitization in order to take advantage of attractive interest rates and avoid the risk of further escalation of project costs for the scrubbers and related facilities and other material negative consequences.

The costs of implementing the Clean Air Act's Phase II



reductions under Title IV, §405,¹⁸ as well as mercury limitations under the proposed Clear Skies Act,¹⁹ are estimated to exceed \$60 billion by 2020.²⁰ Of course, the U.S. Court of Appeals for the District of Columbia Circuit struck down EPA's 2004 Clean Air Mercury Rule²¹ on Feb. 8, 2008, for exempting power plants from more stringent mercury pollution requirements under the proposed cap-and-trade scheme. In addition, this same Court found "several fatal flaws" in EPA's Clean Air Interstate Rule and, as a result, vacated the rule in its entirety and remanded the matter back to EPA to promulgate a rule consistent with the Court's opinion. The EPA adopted a final

rule²² for Mercury and Air Toxics Standards for New Power Plants on April 24, 2013, and has also adopted or proposed more stringent particulates,²³ coal combustion residuals, and cooling water intake structures. The industry is challenging many of these (and other) rules due to the significant compliance costs involved.

Nevertheless, future clean air and other coal-related environmental requirements likely will generate significant opportunities to finance mandated pollution compliance costs using securitization techniques—without burdening electric utility balance sheets with the related funding obligations.

IV. Storm Reconstruction Bonds

Following Hurricane Andrew in 1995, commercial insurance for property or casualty damage to electric transmission and distribution facilities owned by coastal utilities became substantially more expensive—even with larger deductibles or self-insurance—or unavailable on commercially acceptable terms. For the next 10 years, coastal utilities often were permitted to charge rates in amounts thought sufficient to establish appropriate reserves for storm recovery and reconstruction. These reserves were depleted in the devastating U.S. hurricane season of 2005, which included Hurricanes Katrina, Rita, and Wilma.²⁴

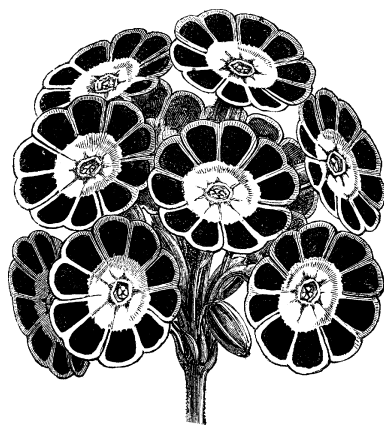
As a result, Florida, Louisiana, Mississippi, and Texas all passed laws facilitating storm-recovery securitization.²⁵ The first completed storm-recovery securitization transaction was FPL Recovery Funding's \$652 million of Senior Secured Bonds, authorized by a financing order for Florida Power & Light (issuer rating: A/A1 and short term rating: A-1/P-1) in June 2007. The bonds were rated "AAA" by Standard & Poor's and "Aaa" by Moody's and, as with Allegheny Energy, these ratings were superior to those of the related utility. Shortly thereafter, Entergy Gulf States' authorized and partially consummated Louisiana and Texas transactions: The Texas transaction—Entergy Gulf States Reconstruction Funding's \$329.5 million of its Series A Senior Secured Transition Bonds—was rated "AAA" by Standard & Poor's and "Aaa" by Moody's and appears to have closed in July 2007 (Entergy Gulf States' senior secured rating at the time of issuance was "BBB"/"Baa3"),²⁶ however, in the Louisiana transaction—Entergy Louisiana Hurricane Recovery Funding—only preparatory SEC filings have been made for an offering of senior secured storm recovery bonds.²⁷

More recently, Cleco Katrina/Rita Hurricane Recovery Funding issued \$180.6 million of its 2008 senior storm recovery bonds rated "AAA" by Standard & Poor's and "Aaa" by Moody's in April 2008, and once again the bond ratings

were superior to those of the servicing utility—CLECO Power, whose senior unsecured rating at the time of issuance was "BBB"/"Baa3."

V. Grid "Hardening"

Following Hurricane Irene in August 2011 and Superstorm



Sandy in October 2012, there is increased discussion regarding the advisability of "hardening" the transmission and distribution grid to minimize the adverse effects of similar events. In congested metropolitan areas, such as exist in the Northeastern U.S., this likely will be extraordinarily expensive and, while the expense may be such as makes these investments more limited, the real possibility is that affected utilities may spend billions in such efforts. While these investments will hopefully reduce outages and garner consumer goodwill, they will not themselves generate substantial "new" revenues that will pay for them.

VI. Transmission Investment to Integrate Renewable Resources

As of March 2013, 48 states and territories²⁸ have so-called "renewable portfolio standards" (RPS) that require incumbent utilities and, in some states, alternative power suppliers, to obtain an increasing portion of their power requirements from renewable resources.

Unfortunately, it is becoming more evident that in order to satisfy these requirements, substantial investment in new long-distance transmission will be required. According to a recent EEI report,²⁹ there are over 150 projects to add or upgrade over 13,300 miles of transmission that will likely cost approximately \$38.7 billion (nominal\$), representing over 75 percent of all planned transmission projects with a total investment cost of over \$51 billion (nominal\$).

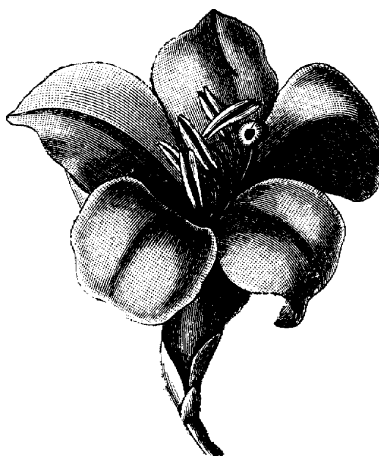
One related and significant issue is how to best structure the procurement of these required renewable resources so that the most efficient are timely built. This has been a challenge as historically incumbent utilities have been reluctant to sign long-term power purchase agreements for these resources (in part due to the fact that these agreements are imputed debt of the utility for rating purposes) and, without such agreements, developers and sponsors have often found it difficult to obtain required financing for their renewable

projects. One unexplored opportunity is to structure such renewable resource procurement in an open and transparent manner and to fund such procurement with optimally-rated, long-term utility tariff bonds.

VII. Coal-Fired Plant Retirements

With seemingly increasing frequency, U.S. electric utilities are announcing their coal-fired plants either as being abandoned or significantly delayed due to community objections³⁰ or regulatory concerns.³¹ In fact, the North American Electric Reliability Corp.'s annual 2012 Long-Term Reliability Assessment³² found that by 2022 about 75 GW of coal-fired generation will be retired³³ and that, as a result, in ERCOT long-term capacity reserve margins are inadequate and that action is required to restore such margins to adequate levels.³⁴ It is unlikely this capacity retirement will be offset through demand-side measures or the addition of renewable or nuclear generation, which require special considerations for planning, design, and operation in bulk power markets. Renewable resources often are characterized by their remote location, interconnection over difficult terrain and, due to their variable nature, the related requirements for baseload dispatch flexibility, spinning reserves, voltage

support, and other ancillary services for the related market. Indeed, as the NERC Reliability Report found,³⁵ the likely replacement capacity will be gas-fired, which will substantially increase the dependence of the electric industry on natural gas and, further, exert greater rate pressure if natural gas costs are rising.



VIII. Repeat Success

With the demonstrable performance of prior utility tariff bonds, U.S. regulated electric utilities likely will expand their use of this securitization method. Indeed, this already has been demonstrated successfully by some transactions for mandated environmental-control expenditures and storm-reconstruction costs. It is only sensible to also use the technique to allow a utility to recover mandated costs over which the utility has no particular control in the most efficient manner possible. These costs will likely include those described above

and perhaps others as a consequence of the disruptive changes that U.S. electric utilities face now and will almost certainly face in the near future. ■

Endnotes:

1. See data at http://www.eei.org/whatwedo/DataAnalysis/IndusFinanAnalysis/Documents/2012_Q4_Credit_Ratings_Charts_Final.xlsx].
2. See, for example, Fitch Research's *Guidelines for Rating Debt Backed by Regulatory Assets*, Sept. 30, 1996. Similarly, Standard & Poor's *Securitizing Stranded Costs*, Jan. 18, 2001. Since the publication of their respective original criteria, the rating agencies have continued to update and refine their related rating methodologies and published criteria: for example, Fitch's *Rating Criteria for U.S. Utility Tariff Bonds*, Dec. 20, 2012; Moody's *Approach to Rating Securities Backed by Utility Cost Recovery Charges*, March 2, 2011, and Standard & Poor's *Securitizing Stranded Costs*, originally published on January 18, 2001 and republished on December 5, 2012.
3. See Federal Energy Regulatory Commission's Order 500, described at: http://www.eia.doe.gov/oil_gas/natural_gas/analysis_publications/ngmajorleg/ferc500.html and the preceding superseded Order 436, described at: http://www.eia.doe.gov/oil_gas/natural_gas/analysis_publications/ngmajorleg/ferc436.html.
4. See, for example, Moody's Investors Service's *New Issue Report for Nuclear Moratorium Asset Securitization Fund*.
5. See Moody's Investor Service's *New Issue Report*, May 29, 1998, for *Puget Power Conservation Grantor Trust 1995-1* (reprinted from an original report dated Dec. 15, 1995).
6. See, for example, Fitch Ratings' *Rating Criteria for U.S. Utility Tariff Bond* at p. 8.

7. U.S Constitution, Contracts Clause. In addition, individual State constitutions often include similar protections.

8. U.S. Bill of Rights, Fifth Amendment.

9. Other reviews of stranded-cost securitizations include the Congressional Budget Office's *Electric Utilities: Deregulation and Stranded Costs*, Oct. 1998, at: <http://www.cbo.gov/ftpdocs/9xx/doc976/stranded.pdf>.

10. See, for example, Fitch Ratings' Rating Criteria for U.S. Utility Tariff Bonds at p. 26.

11. Available at: <http://www.irs.gov/pub/irs-drop/rp-02-49.pdf>.

12. Available at: <http://www.irs.gov/pub/irs-drop/rp-05-62.pdf>.

13. See, for example, Moody's Investors Service's *Stranded Utility Costs Securitization: An Energized Market*, Feb. 4, 2000, and *Stranded Costs: A Resilient Asset Class*, Jan. 3, 2005. Similarly, Fitch Ratings' *Outlook and Performance Review for Utility Tariff ABS*, Feb. 1, 2012.

14. See, for example, Fitch Ratings' *U.S. Utility Tariff Bonds: Adaptability of an Asset Class*, Aug. 30, 2007, and Standard & Poor's *Utilities Rediscover a Powerful Tool For Recouping Environmental and Storm Costs*, Oct. 4, 2007.

15. Available at: <https://docs.legis.wisconsin.gov/2003/related/acts/152>.

16. Accordingly, the related environmental trust bond indebtedness will not affect the related utility's regular rates and its external ratings and credit largely will be unaffected by such indebtedness, since such indebtedness belongs to the special purpose entity to whom the stranded-cost charges are assigned in the required "true sale" thereof, and is effectively backed and covered by the permitted charges that are securitized.

17. Available at: <http://www.legis.state.wv.us/wvcode/ChapterEntire.cfm?chap=24&art=2>.

18. Available at: <http://epa.gov/air/caa/>.

19. Available at: <http://www.epa.gov/clearskies/>.

20. See, for example, the estimate of \$64 billion contained in Cambridge Energy Research Associates' study described at: <http://www.cera.com/asp/cda/public1/news/pressReleases/pressReleaseDetails.aspx?CID=6992>.

21. <http://pacer.cadc.uscourts.gov/docs/common/opinions/200802/05-1097a.pdf>.



22. Available at: <http://www.gpo.gov/fdsys/pkg/FR-2013-04-24/pdf/2013-07859.pdf>.

23. Available at: <http://www.gpo.gov/fdsys/pkg/FR-2013-01-15/pdf/2012-30946.pdf>.

24. A more complete historical review is contained in *Critical Electric Power Infrastructure Recovery and Reconstruction: New Policy Initiatives in Four Gulf Coast States After 2005's Catastrophic Hurricanes*, George Mason Univ. School of Law, and *Addendum thereto* last updated Oct. 30, 2006, at: <http://cipp.gmu.edu/archive/4StateProjectCompositeFinal.pdf>.

25. 2007 Florida Statutes, Chapter 366.8260 (Storm-recovery financing) at: http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=Ch0366/SEC8260.HTM&Title=->2007->Ch0366->Section%208260#0366.8260. Louisiana: Texas

Hurricane Reconstruction: http://www.puc.state.tx.us/rules/statutes/Pura07.doc#_Toc175993931; Securitization: http://www.puc.state.tx.us/rules/statutes/_Toc175993931 and Restructuring Act: <http://www.puc.state.tx.us/rules/statutes/Pura07.doc>.

26. The related prospectus was filed with the SEC under registration numbers 333-142252 and 333-142252-01.

27. The related form S-3 was filed with the SEC on Sept. 28, 2007, under registration numbers 333-146380 and 333-146380-01.

28. See, Database for State Incentives for Renewables and Efficiency (DSIRE) at <http://www.dsireusa.org/>.

29. Available at: http://www.eei.org/ourissues/ElectricityTransmission/Documents/Trans_Project_lowres.pdf.

30. See, for example, "Emotions High as Sides Collide at Coal-Plant Hearing," *The Gazette*, Jan. 14, 2008 (at: <http://www.gazetteonline.com/apps/pbcs.dll/article?AID=/20080114/BUSINESS/9347122/1004>). This proposed plant continues to generate controversy, see *EPA: KDHE Lied about Coal Plant Objections*, TOPEKACAPITAL-JOURNAL, Nov. 2, 2011, at: <http://cjonline.com/news/2011-11-02/epa-kdhe-lied-about-coal-plant-objections>.

31. See, for example, the denial by the Kansas Dept. of Health and Environment of a required air permit for the expansion of an existing coal plant near Holcomb, Kan., at: http://www.kdheks.gov/news/web_archives/2007/10182007a.htm.

32. Available at: http://www.nerc.com/files/2012_LTRA_FINAL.pdf (herein, the "NERC Reliability Report").

33. See, Finding 1 of the NERC Reliability Report at 4.

34. See, Finding 2 of the NERC Reliability Report at 11.

35. See, Finding 3 of the NERC Reliability Report at 19.