

UNSTRANDING “STRANDED COST” SECURITIZATIONS: NEW APPLICATIONS FOR A PROVEN TECHNOLOGY

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Originally developed to compensate U.S. electric utilities for regulatory assets rendered uneconomic by deregulation, so-called “stranded cost” securitization techniques are finding new applications for the financing of mandatory pollution control equipment and other similar expenditures, for catastrophic storm reconstruction expenditures and, as proposed by the author, possibly for “synthetic” carbon emission reduction for new fossil-fueled power plants or purchases.

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, since these assets were not competitive in the newly-deregulated wholesale power markets. To compensate the affected utility for such obsolescence, affected utilities, regulators, and consumer representative groups crafted so-called “stranded cost” securitizations, which permitted an affected utility to recover the related stranded costs in rates charged to customers and to issue bonds backed by such charges. These bonds were in many cases euphemistically referred to as “rate reduction” bonds (although the securitization charges actually increased rates to affected customers). In connection with such securitizations, the primary U.S. rating agencies developed specific criteria and methodologies for such stranded cost securitizations.² To date, there has been a total of approximately \$40 billion of stranded cost securitizations.³

Stranded Cost Securitizations

Stranded cost securitizations represented a refinement of several prior transactions: including (1) the special transition charges that gas transmission and distribution companies were permitted⁴ to collect as part of the resolution of disputes regarding so-called “take or pay”

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² See, for example, Fitch Research’s *Guidelines for Rating Debt Backed by Regulatory Assets*, September 30, 1996 and Fitch Ratings’ *Rating Criteria for U.S. Utility Tariff Monetization Bonds*, September 11, 2006. Similarly, Standard & Poor’s *Securitizing Stranded Costs*, January 18, 2001.

³ Fitch Ratings’ *Rating Criteria for U.S. Utility Tariff Monetization Bonds*, September 11, 2006, at p.1.

⁴ See Federal Energy Regulatory Commission’s Order 500, described at:

http://www.eia.doe.gov/oil_gas/natural_gas/analysis_publications/ngmajorleg/ferc500.html

(this link and, unless otherwise noted, all other links herein last viewed on February 25, 2008) and the preceding superceded Order 436, described at:

http://www.eia.doe.gov/oil_gas/natural_gas/analysis_publications/ngmajorleg/ferc436.html.

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 1990s;⁵ and (3) a 1995 securitization by Puget Sound & Light⁶ to finance a demand-side management 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:

(1) an adequate hearing on the merits regarding the “costs” to be recovered and the alternative means of financing thereof (with the stranded costs securitization to be demonstrably superior to other such financing alternatives; however, this will often be the case since the securitization will allow a highly-rated financing for 100% of such costs), so as to substantially mitigate the risk of later reversal or adverse modification of the related regulatory approval;

(2) a regulatory approval (usually referred to as a “financing order”) that authorizes the issuance of bonds that are secured or otherwise backed by the recovery of such costs and related securitization through non-bypassable charges to customers of the utility (sometimes referred to as a “network” charge – referring to the fact that the charge is payable by all customers using such network – and not readily “bypassable” by electing utility services that are not subject to such charges);

(3) the characterization of the right to levy and collect the charges (and any increases therein required to “true-up” the amounts to be levied and collected so as to be sufficient to ensure full and timely repayments of the bonds backed by such charges) as a separate property right;

(4) the “true sale” of the related property rights to the issuer in the related securitization to secure or otherwise back such securitization; and

(5) a “pledge” by the applicable State to not impair such property right or the securitization thereof.

Additionally, as a practical matter, the level of such charges (and any likely required increase therein for such “true up” amounts) should be small enough that the risk of later customer or other political objection thereto and the resulting risk of impairment thereof is not significant.⁷

A full discussion of the legal effect of, and applicable limitations on, such a State “pledge” (involving analysis of the applicable constitutional protections under the Contract

⁵ See, for example, Moody’s Investors Service’s New Issue Report for Nuclear Moratorium Asset Securitization Fund.

⁶ See Moody’s Investor Service’s New Issue Report dated May 29, 1998 for Puget Power Conservation Grantor Trust 1995-1 (reprinted from an original report dated December 15, 1995).

⁷ See, for example, Fitch Ratings’ *Rating Criteria for U.S. Utility Tariff Monetization Bonds*, September 11, 2007 at p.9.

Clause⁸ and against improper “takings”⁹), the degree to which prior orders of one regulatory authority bind a later regulatory authority or the deference in any subsequent regulatory proceedings to be afforded to the prior order, and these other requirements are beyond the scope of this article;¹⁰ however, the rating agencies apparently have become comfortable with these risks, since they rate these transactions in their highest rating categories.

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 and, by eliminating the need for otherwise required or advisable private letter rulings, to expedite stranded cost securitizations.

Importantly, and recognizing the limitation of Rev. Proc.02-49 to stranded cost securitizations, the IRS issued Revenue Procedure 2005-62¹² on September 12, 2005 to expand the scope of Rev. Proc. 02-49 beyond stranded costs, to remove the requirement for level payments therein and to add a requirement that securitization payments be made at least semi-annually.

Historical performance of these stranded costs securitizations generally has been sound¹³ and, accordingly, prior investor experience with respect to such securitizations 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).

Extension of Stranded Cost Securitization to Mandated Pollution Control

Recently, there have been some other transactions that utilize stranded costs securitization methodologies to allow utilities to finance mandated pollution control equipment and other similar environmental capital expenditures and, especially for affected coastal utilities, to recover or provide for storm recovery and reconstruction costs. The opportunity to extend stranded costs securitization techniques to these other applications has been duly noted by the rating agencies.¹⁴

Perhaps the first attempt to extend stranded costs securitization techniques to mandated pollution control requirements was the proposed \$490 million of so-called “environmental trust bonds” authorized¹⁵ for issuance by Wisconsin Electric Power Company (WEPCO) in October

⁸ U.S. Constitution, Contracts Clause. In addition, individual State constitutions often include similar protections.

⁹ U.S. Bills of Rights, Fifth Amendment.

¹⁰ Other reviews of stranded costs securitizations include the Congressional Budget Office’s *Electric Utilities: Deregulation and Stranded Costs*, October 1998, available at: <http://www.cbo.gov/ftpdocs/9xx/doc976/stranded.pdf>.

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*, February 4, 2000 and *Stranded Costs: A Resilient Asset Class*, January 3, 2005. Similarly, Fitch Ratings’ *Utility Tariff Monetization Performance Review*, April 22, 2005.

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

¹⁵ The related October 12, 2004 financing order is available at: http://psc.wi.gov/apps/erf_share/view/viewdoc.aspx?docid=22888. The 90-page financing order includes extensive

significant opportunity to efficiently finance such mandated pollution compliance costs using stranded cost securitization techniques, without burdening electric utility balance sheets with the related obligations.

Extension of Stranded Cost Securitization to Storm Reconstruction

Similarly, stranded cost securitization techniques have been used to finance storm recovery or reconstruction costs for affected coastal utilities.

Following Hurricane Andrew in 1995, commercial insurance for property or casualty damage to electric transmission and distribution facilities of coastal utilities became substantially more expensive (even with substantially larger deductibles or self-insurance) or unavailable on commercially acceptable terms. For the following decade, coastal utilities were often permitted to charge rates in amounts thought sufficient to establish appropriate reserves for storm recovery and reconstruction. These reserves were effectively depleted in the devastating U.S. hurricane season of 2005, which included Hurricanes Katrina, Rita and Wilma (in insurance and other circles commonly referred to as “KRW”), and the reserve accounts of affected coastal utilities were rendered substantially negative.²³

As to be expected, the States of Florida, Louisiana, Mississippi, and Texas all passed laws facilitating storm recovery securitization.²⁴ The first completed transaction to take advantage of these new laws was the \$652 million of FPL Recovery Funding’s Senior Secured Bonds authorized by a financing order for Florida Power & Light²⁵ and rated AAA by Standard & Poor’s and Aaa by Moody’s Investors Services and, as before, these ratings were superior to those of the related utility at the time. Closely following thereafter were Entergy’s authorized and partially consummated Louisiana²⁶ and Texas²⁷ transactions. Only Entergy Gulf States

power plants from more stringent mercury pollution requirements under the proposed cap-and-trade scheme. It is, at the time of this article’s writing, unclear as to when the US EPA will promulgate a new mercury rule and, further, what such rule would require.

²³ 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 University School of Law, and *Addendum* thereto last updated October 30, 2006 available at: <http://cipp.gmu.edu/archive/4StateProjectCompositeFinal.pdf>.

²⁴ 2007 Florida Statutes, Chapter 366.8260 (Storm-recovery financing) available 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>.

²⁵ The original financing order is available at: <http://www.floridapsc.com/library/filings/06/04676-06/04676-06.pdf> and the amended order is available at: <http://www.floridapsc.com/library/filings/06/06452-06/06452-06.pdf>. As with similar financing orders, this financing order includes extensive findings of fact the effect of which is intended to preclude or limit subsequent judicial or regulatory modification of such order.

²⁶ The Entergy Gulf States original financing order is available at: <https://p8.lpsc.org/Workplace/getContent?objectStoreName=Orders&vsId=%7B4CEBA417-23CF-4AFC-90D8-24778182106B%7D&objectType=document&id=%7BEAE1DF9B-3EBA-4D2A-81DE-F3CD4C8F7B11%7D> (click for Guest Document Access), the corrected order is available at: <https://p8.lpsc.org/Workplace/getContent?objectStoreName=Orders&vsId=%7B514D187F-7D79-4A49-9253-775D25DBB923%7D&objectType=document&id=%7BCE65C71C-C22E-4056-A056-3ADED2F3921B%7D>, and the second corrected order is available at:

Reconstruction Funding's \$329.5 million of its Series A Senior Secured Transition Bonds, again rated AAA by Standard & Poors and Aaa by Moody's Investors Services, appears to have closed;²⁸ however, Entergy Louisiana Hurricane Recovery Funding made preparatory filings for an offering of its Senior Secured Storm Recovery Bonds with the Securities and Exchange Commission.²⁹

Proposed Extension of Stranded Cost Securitization to Synthetic Carbon Reduction

With growing certainty that greenhouse gas (including carbon dioxide or CO₂, GHG) emissions will become regulated due to climate change concerns, many affected industries are actively exploring ways in which to avoid or limit GHG emissions. One significantly affected industry is fossil-fired power generation, especially coal-fired generation, since combustion of coal produces substantial amounts of carbon dioxide. In fact, coal-fired power plants in the United States emitted almost 2,000 million metric tonnes of CO₂ (equivalent) in 2006,³⁰ representing almost one-third of the total GHG emissions in the United States in 2006.

With large-scale carbon reduction technology for fossil-fired power generation still (at least to most objective observers) not yet commercially proven, fossil-fired plant owners or, even more acutely, fossil-fired plant developers or sponsors face some limited and mostly unattractive options in pursuing coal-fired power plant development or retrofit, including: *first*, wait-and-see what the carbon reduction requirements will be and run the risk that appropriate technology will be (or will not be) then available and, if available, will be available on commercially reasonable terms; *second*, opt for some unproven technology and hope that it works as projected; and, *third*, anticipate likely carbon reduction requirements and satisfy such requirements "synthetically" through tradable carbon reduction instruments,³¹ thereby preserving optionality for the determination of the most appropriate technology to effect the anticipated carbon reduction requirements and theoretically allowing for the most cost-effective means of such carbon reduction through use of traded carbon emission reduction instruments.

<https://p8.lpsc.org/Workplace/getContent?objectStoreName=Orders&vsId=%7B4B822FBC-AC07-4975-A165-1F977DE0108B%7D&objectType=document&id=%7B9620654A-7433-49AC-97B9-E0FA133C78E3%7D>. The Entergy Louisiana original financing order is available at:

<https://p8.lpsc.org/Workplace/getContent?objectStoreName=Orders&vsId=%7B764AA563-97B8-45B1-A1D7-83E629CCAB88%7D&objectType=document&id=%7BD95DA042-DBF4-4F87-AC29-0FE90006437F%7D>, the corrected order is available at:

<https://p8.lpsc.org/Workplace/getContent?objectStoreName=Orders&vsId=%7B035644A6-3A0D-40C9-A619-CA5257D69E0E%7D&objectType=document&id=%7B025C7D6B-193D-4E3E-91D6-7FEA8A1F3102%7D> and the second corrected order is available at:

<https://p8.lpsc.org/Workplace/getContent?objectStoreName=Orders&vsId=%7B8F196349-D74E-4D5B-BEE9-DC468D193C3C%7D&objectType=document&id=%7B9DF90A17-D045-421C-985D-AAACF797955F%7D>.

²⁷ The Texas financing order is available at:

http://interchange.puc.state.tx.us/WebApp/Interchange/application/dbapps/filings/pgSearch_Results.asp?TXT_CNT_R_NO=33586&TXT_ITEM_NO=130.

²⁸ The related prospectus was filed with the Securities and Exchange Commission under registration numbers 333-142252 and 333-142252-01.

²⁹ The related form S-3 was filed with the Securities and Exchange Commission on September 28, 2007 under registration numbers 333-146380 and 333-146380-01.

³⁰ See *Emissions of Greenhouse Gases in the United States 2006*, Energy Information Administration, November 2007, available at: <ftp://ftp.eia.doe.gov/pub/oiaf/1605/cdrom/pdf/ggrpt/057306.pdf>.

³¹ For example, the Carbon Financial Instrument® traded on the Chicago Climate Exchange (CCX). For more information regarding such instrument, see: <http://www.chicagoclimatex.com/>.

Interestingly, in the case of several proposed fossil-fired power plants, community objections to carbon emissions (even though technically unregulated) led to negotiated commitments by plant sponsors to implement carbon emission reduction.³² With announced new U.S. coal-fired power plants with an aggregate capacity of around 50 Gigawatts and an ever increasing number thereof being either abandoned or significantly delayed due to community objections³³ or regulatory concerns³⁴ regarding possible carbon controls due to climate change legislation or regulation, the need to deal with anticipated climate change requirements that limit or otherwise restrict emissions of carbon dioxide has become (or will become) a significant issue in the near-term, since it will not be practical to replace such coal-fired capacity with alternative sources, including renewable energy or nuclear generation. In fact, the North America Reliability Corp.'s annual 2007 Long-Term Reliability Assessment 2007-2016³⁵ found long-term capacity reserve margins inadequate and that action is required to restore such margins to adequate levels,³⁶ Areas of most concern include California, New England, Texas and the Midwest³⁷. It is unlikely that this capacity will be available through demand-side measures or the addition of renewable energy (wind or solar) or nuclear generation, which require special considerations for the planning, design, and operation of bulk power markets. Renewable resources are often characterized by their remote location, interconnection over difficult terrain and, due to their intermittent nature, the related requirements for base load dispatch flexibility, spinning reserves, voltage support, and other ancillary services for the related market.³⁸

Since the carbon reduction technologies that will be required are still not yet commercially proven, estimates of the associated costs are more speculative than usual, but it is reasonably certain that the total will be several hundreds of billions of dollars. Again the compliance costs (including the proposed "synthetic" compliance) could be securitized using stranded cost securitization techniques, which would provide efficient financing therefor and permit greater optionality regarding the need for, and timing of, the determination of what are the most appropriate equipment and facilities to effect the required carbon reduction and when to install such equipment and facilities.

Conclusion

With the demonstrable success of stranded cost securitizations, it is not a difficult prediction that similar securitizations should perform well and this has already been successfully demonstrated by some similar transactions for mandated environmental control expenditures and storm reconstruction costs.

³² See, for example, the press release regarding the agreement by Sierra Club with Kansas City Power & Light, dated March 20, 2007 and available at: <http://www.sierraclub.org/pressroom/releases/pr2007-03-20.asp>.

³³ See, for example, *Emotions High as Sides Collide at Coal-Plant Hearing*, The Gazette, January 14, 2008 (available at: <http://www.gazetteonline.com/apps/pbcs.dll/article?AID=/20080114/BUSINESS/9347122/1004>).

³⁴ See, for example, the denial by the Kansas Department of Health and Environment of a required air permit for the expansion of an existing coal plant near Holcomb, Kansas (available at: http://www.kdheks.gov/news/web_archives/2007/10182007a.htm).

³⁵ Available at: ftp://ftp.nerc.com/pub/sys/all_updl/docs/pubs/LTRA2007.pdf (herein, the "NERC Reliability Report").

³⁶ See, Finding 1 of the NERC Reliability Report at p.10.

³⁷ Ibid, p.10.

³⁸ See, Finding 2 of the NERC Reliability Report at p.13.

The opportunity to use stranded cost securitization techniques to satisfy community, regulatory and other requirements for GHG reductions, yet defer critical and potentially imprudent decisions regarding specific related plant and equipment for such reductions until the related reduction technology is commercially-proven, should also be attractive to fossil-fired power plant owners, developers and sponsors.

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