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New Accounting Standards Provide More Insight About The U.S. Electric Utilities' Use Of Derivatives

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New Accounting Standards Provide More Insight About The U.S. Electric Utilities' Use Of Derivatives

Up until 2008, financial-statement users believed that disclosures did not provide adequate information about derivatives. As a result, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 161, "Accounting for Derivative Instruments and Hedging Activities" (see note 1). After 2009, the financial statements of U.S. companies include greater transparency into derivative activities. The primary objective of the new disclosure requirement is to provide more information about the following:

- How and why a company uses derivative instruments such as forwards, futures, swaps, options, or combinations of these types of contracts;
- How it accounts for derivatives and related hedges;
- Credit-risk contingent features in derivative contracts; and
- How derivative instruments and related hedged items affect a company's financial position, financial performance, and cash flows.

Following a review of 25 rated U.S. electric utilities that applied this standard, Standard & Poor's Ratings Services believes that the additional disclosures provide more insight into the extent to which issuers use derivatives to mitigate their exposure to market risks, such as fluctuating commodity prices, interest rates, and foreign currency exchange rates. Although we may need additional information to completely understand the use and effect of derivatives, we analyze it according to an established framework that is part of our rating methodology (see "Increasing Derivative Use By Corporate Issuers Calls For Closer Scrutiny," published Nov. 9, 2005).

New Disclosures Shed Light On The Utilities' Use Of Commodity Derivatives

The electric utilities' use of commodity derivatives is significant. We observe that a majority of the rate-regulated utilities have not designated commodity derivative instruments for hedge accounting. This type of accounting matches the gains or losses of commodity derivatives with the hedged transaction and lessens earnings volatility. Without hedge accounting, mark-to-market gains and losses would affect income immediately, creating volatility in earnings as market prices fluctuate, sometimes significantly. Although regulated utilities such as Xcel Energy do not use hedge accounting, it may not necessarily result in earnings volatility because state regulators may authorize the deferral of mark-to-market changes in the value of derivative instruments as a regulatory asset or liability.

Most of the sample utilities have explicitly mentioned derivative liabilities subject to credit-risk contingent features that could potentially erode their liquidity. In our view, due to a relatively stable outlook of the sector, we do not expect the credit-risk contingent features to harm an issuer's liquidity. However, given the possibility for derivatives to swing rapidly from assets to liabilities due to large commodity price movements, further collateral posting requirements could reduce liquidity.

Standard & Poor's rates more than 180 U.S. electric utilities, such as electric transmission and distribution companies, integrated electric utilities, and diversified energy companies with regulated utilities and unregulated generation. For our study, we selected a sample of these companies (see table 1) that have various derivative exposures. In the sample, diversified energy companies have the highest derivative exposure, followed by integrated electric utilities, and wires companies have the least.

Table 1

U.S. Electric Utility Companies

Ratings as of Jan. 28, 2011

Issuer	Corporate credit rating
Consolidated Edison Inc.	A-/Stable/A-2
Xcel Energy Inc.	A-/Stable/A-2
Dominion Resources Inc.	A-/Stable/A-2
Duke Energy Corp.	A-/Stable/A-2
NextEra Energy Inc.	A-/Stable/--
Progress Energy Inc.	BBB+/Watch Pos/A-2
Wisconsin Energy Corp.	BBB+/Stable/A-2
MidAmerican Energy Holdings Co.	BBB+/Stable/--
PG&E Corp.	BBB+/Stable/--
PEPCO Holdings Inc.	BBB+/Stable/A-2
DTE Energy Co.	BBB+/Stable/A-2
Northeast Utilities	BBB/Watch Pos/--
American Electric Power Co. Inc.	BBB/Stable/A-2
IDACORP Inc.	BBB/Stable/A-2
CenterPoint Energy Inc.	BBB/Stable/A-2
Entergy Corp.	BBB/Stable/--
Avista Corp.	BBB-/Positive/A-3
Pinnacle West Capital Corp.	BBB-/Positive/A-3
Edison International	BBB-/Stable/--
FirstEnergy Corp.	BBB-/Stable/--
Allegheny Energy Inc.	BBB-/Stable/--
Black Hills Corp.	BBB-/Stable/--
Ameren Corp.	BBB-/Stable/A-3
NV Energy Inc.	BB/Stable/--
PNM Resources Inc.	BB-/Stable/--

Standard & Poor's reviewed available data from each utility's third-quarter 2010 financial statements filed with the SEC, concerning their use of derivative contracts including:

- Types of outstanding commodity contracts (table 2);
- Total derivative asset and liability positions (table 3);
- Derivative asset and liability positions, both designated hedges and undesignated hedges (table 4);
- Rate recovery mechanisms and a company's ability to recover derivative-related costs (table 5); and
- Posted collateral especially following a negative credit event due to liabilities subject to credit-risk contingent features (Table 6).

Table 2

Commodity Instruments In Use

Issuer	Disclosures of commodity instruments
Consolidated Edison Inc.	Futures, forwards, basis swaps, options, transmission congestion contracts, financial transmission rights (FTR) contracts, electric congestion and gas basis swap
Xcel Energy Inc.	Commodity derivatives
Dominion Resources Inc.	Energy futures, swaps, forwards, options, and FTRs
Duke Energy Corp.	Swaps, futures, forwards, and options
NextEra Energy Inc.	Swaps, options, futures and forwards
Progress Energy Inc.	Natural gas and oil contracts, commodity derivative swaps
Wisconsin Energy Corp.	Futures, options
MidAmerican Energy Holdings Co.	Forwards, futures, options, and swaps
PG&E Corp.	Forward/futures contracts, swaps agreements, option contracts, and congestion revenue rights
PEPCO Holdings Inc.	Commodity futures, swaps, options, forward contracts, capacity contracts, exchange-traded and OTC options
DTE Energy Co.	Power, gas, oil and coal forwards, futures, options and swaps
Northeast Utilities	Energy forward contracts, options, FTRs, and bilateral basis swaps
American Electric Power Co.	Commodity contracts
IDACORP Inc.	Forward contracts and commodity swaps
CenterPoint Energy Inc.	Physical forward contracts, swaps, options, heating-degree day swaps
Entergy Corp.	Electricity futures, forwards and swaps, natural gas swaps
Avista Corp.	Commodity contracts
Pinnacle West Capital Corp.	Futures, forward and option contracts
Edison International	Electricity and natural gas options, swaps, forward and futures; fuel oil and coal forwards and futures; congestion revenue rights, tolling arrangements, capacity contracts
FirstEnergy Corp.	Electricity forwards, heating oil futures, natural gas futures
Allegheny Energy Inc.	Exchange traded futures contracts, commodity forwards contracts
Black Hills Corp.	Commodity contracts, over the counter swaps and options
Ameren Corp.	Forward contracts, futures contracts, option contracts, and financial swap contracts
NV Energy Inc.	Forwards, options, swaps
PNM Resources Inc.	Forwards contracts

Source: SEC filings

Table 3

Total Derivative Contracts

Company	Total asset positions of all derivative contracts (Mil. $)	Total assets (%)	Total liability positions of all derivative contracts (Mil. $)	Total liability (%)	Total assets (Mil. $)	Total liabilities (Mil. $)
Consolidated Edison Inc.	120.0	0.3	286.0	1.2	35,452.0	24,609.0
Xcel Energy Inc.	55.0	0.2	79.7	0.4	26,301.5	18,590.8
Dominion Resources Inc.	1,295.0	3.1	931.0	3.1	42,229.0	30,134.0
Duke Energy Corp.	70.0	0.1	116.0	0.3	57,857.0	35,708.0
NextEra Energy Inc.	1,408.0	2.7	1,267.0	3.3	52,734.0	38,583.0
Progress Energy Inc.	11.0	0.0	702.0	3.1	32,706.0	22,589.0
Wisconsin Energy Corp.	18.4	0.1	27.5	0.3	12,718.5	8,990.8

Table 3

Total Derivative Contracts (cont.)

MidAmerican Energy Holdings Co.	205.0	0.5	672.0	2.1	45,523.0	32,113.0
PG&E Corp.	141.0	0.3	583.0	1.7	45,253.0	33,978.0
PEPCO Holdings Inc.	45.0	0.3	112.0	1.1	14,211.0	10,002.0
DTE Energy Co.	285.0	1.2	321.0	1.8	24,266.0	17,577.0
Northeast Utilities	145.4	1.0	1,057.5	10.0	14,297.6	10,573.5
American Electric Power Co.	767.0	1.5	291.0	0.8	49,892.0	36,236.0
IDACORP Inc.	0.6	0.0	3.7	0.1	4,574.4	3,053.1
CenterPoint Energy Inc.	94.0	0.5	296.0	1.7	19,773.0	17,134.0
Entergy Corp.	385.0	1.0	22.0	0.1	38,668.2	29,842.5
Avista Corp.	8.8	0.2	113.0	4.3	3,752.6	2,603.6
Pinnacle West Capital Corp.	123.4	1.0	136.5	1.6	12,435.5	8,607.3
Edison International	440.0	1.0	1,561.0	4.6	45,566.0	34,020.0
FirstEnergy Corp.	299.0	0.9	1,087.0	4.2	34,707.0	26,016.0
Allegheny Energy Inc.	67.6	0.6	8.8	0.1	11,842.1	8,410.6
Black Hills Corp.	84.5	2.4	134.2	5.5	3,540.2	2,459.8
Ameren Corp.	204.0	0.9	312.0	2.0	23,631.0	15,722.0
NV Energy Inc.	3.4	0.0	58.0	0.7	12,069.0	8,700.4
PNM Resources Inc.	43.7	0.8	71.0	2.0	5,380.8	3,524.4

Table 4

Commodity Derivative Contracts

	Designated as hedges				Not designated as hedges			
Company	**Assets (Mil. $)**	**Percentage of total assets (%)**	**Liabilities (Mi. $)**	**Percentage of total liabilities (%)**	**Assets (Mil. $)**	**Percentage of total assets (%)**	**Liabilities (Mi. $)**	**Percentage of total liabilities (%)**
Consolidated Edison Inc.	-	-	-	-	120.0	0.3	274.0	1.1
Xcel Energy Inc.	0.1	0.0	0.7	0.0	54.9	0.2	78.9	0.4
Dominion Resources Inc.	572.0	1.4	252.0	0.8	660.0	1.6	679.0	2.3
Duke Energy Corp.	1.0	0.0	-	-	56.0	0.1	86.0	0.2
NextEra Energy Inc.	-	-	-	-	1,419.0	2.7	1,154.0	3.0
Progress Energy Inc.	-	-	-	-	11.0	0.0	570.0	2.5
Wisconsin Energy Corp.	-	-	-	-	18.4	0.1	27.5	0.3
MidAmerican Energy Holdings Co.*	9.0	0.0	134.0	0.4	229.0	0.5	716.0	2.2
PG&E Corp.	-	-	-	-	141.0	0.3	583.0	1.7
PEPCO Holdings Inc.*	86.0	0.6	270.0	2.7	66.0	0.5	98.0	1.0
DTE Energy Co.*	1.0	0.0	-	-	4,085.0	16.8	4,154.0	23.6

Table 4

Commodity Derivative Contracts (cont.)

Northeast Utilities	-	-	-	-	130.2	0.9	1,057.5	10.0
American Electric Power Co.*	26.0	0.1	23.0	0.1	2,064.0	4.1	1,854.0	5.1
IDACORP Inc.	-	-	-	-	0.6	0.0	3.7	0.1
CenterPoint Energy Inc.	-	-	-	-	94.0	0.5	95.0	0.6
Entergy Corp.	385.0	1.0	1.0	0.0	-	-	21.0	0.1
Avista Corp.	-	-	-	-	8.8	0.2	109.3	4.2
Pinnacle West Capital Corp.*	(3.5)	(0.0)	209.4	2.4	95.9	0.8	173.9	2.0
Edison International*	-	-	-	-	759.0	1.7	1,915.0	5.6
FirstEnergy Corp.	150.0	0.4	158.0	0.6	148.0	0.4	928.0	3.6
Allegheny Energy Inc.	-	-	-	-	67.6	0.6	6.7	0.1
Black Hills Corp.	19.1	0.5	0.2	0.0	52.3	1.5	25.1	1.0
Ameren Corp.	19.0	0.1	-	-	185.0	0.8	312.0	2.0
NV Energy Inc.	-	-	-	-	-	-	58.0	0.7
PNM Resources Inc.	7.7	0.1	-	-	36.0	0.7	71.0	2.0

* Represents gross amounts since the breakdown of collateral/netting was unavailable in company's SEC filings. Therefore, the company's gross figures could exceed its net figures listed in Table 3.

Regulatory Mechanisms Reduce Use Of Commodity Derivatives

Fuel costs are an important input into regulated electric utilities' rates. The utilities usually defer for recovery, or accrue for future refund, the difference between the actual fuel costs and the level the regulators have authorized. As such, the volatility in the commodity prices, especially natural gas and coal, poses a potential challenge to these companies to manage their costs efficiently. The greater disclosures help us to better assess the extent of derivative risk exposure. All the utilities in our sample group have entered into derivative contracts for hedging their commodity price risk, but the extent to which these economic hedges cover their exposure varies widely. State regulators may authorize the use of derivatives to mitigate rate volatility due to changing fuel and purchased power prices, and thereby authorize recovery of hedging costs. Sample companies that have mostly regulated operations, such as Xcel Energy, Duke Energy, and Wisconsin Energy, have limited derivative use. These risks could be relatively low for electric utilities because of regulatory recovery through which the companies may pass all prudently incurred costs on to the ratepayers. In addition, in today's regulatory environment, most of the sample companies have some variation of a fuel adjustment clause (table 5).

Table 5

Recovery Mechanisms

Issuers	Rate recovery mechanism	Rate recovery of derivative costs
Consolidated Edison Inc.	Recoverable Energy Cost Clause	Generally recovers all prudently incurred fuel, purchased power and gas costs, including hedging gains and losses, in accordance with a state's rate provisions
Xcel Energy Inc.	Fuel Adjustment Clause; Electric Commodity Adjustment; Gas Cost Adjustment	Electric and natural gas derivative settlement gains and losses are shared with electric and gas customers respectively, through fuel and purchased energy cost-recovery mechanisms and purchased natural gas cost-recovery mechanisms, and reclassified out of income as regulatory assets or liabilities

Table 5

Recovery Mechanisms (cont.)		
Dominion Resources Inc.	Fuel Adjustment Charge; Gas Cost Recovery Clause	N.A.
Duke Energy Corp.	Fuel and Purchased Power Rider; Fuel Adjustment Clause; Gas Cost Adjustment Clause	N.A.
NextEra Energy Inc.	Fuel and Purchased Power Cost Recovery Clause	For utility, substantially all changes in the derivatives' fair value are deferred as a regulatory asset or liability until the contracts are settled, and, once settled, gains or losses are passed through rate mechanism
Progress Energy Inc.	Fuel Cost Recovery Factor	After settlement of the derivatives and consumption of the fuel, any realized gains or losses are passed through the recovery mechanism
Wisconsin Energy Corp.	Gas Cost Recovery Mechanism	N.A.
MidAmerican Energy Holdings Co.	Power Cost Adjustment Mechanism; Energy Cost Adjustment Mechanism	Almost all the company's commodity derivatives not designated as hedging contracts. The settled amount usually recovered through rates. For contracts not recoverable through rates, changes in fair value are recognized in earnings.
PG&E Corp.	Energy Resource Recovery Account	Utility costs related to commodity derivative instruments are recoverable in rates
PEPCO Holdings Inc.	Gas Cost Recovery Clause; Fuel Adjustment Clause	N.A.
DTE Energy Co.	Power Supply Cost Recovery Mechanism; Gas Cost Recovery Mechanism	Changes in the value of derivative contracts at Detroit Edison are recorded as derivative assets or liabilities with an offset to regulatory assets or liabilities as the settlement value of these contracts will be included in the rate recovery mechanism when realized
Northeast Utilities	Generation Service Charge; Energy Service Rate	For the utilities, regulatory assets or liabilities are recorded for the changes in fair values of derivatives, as these contracts are part of current regulated operating costs, or have a rate mechanism through which these costs may be recovered
American Electric Power Co.	Fuel Adjustment Mechanisms	N/A
IDACORP Inc.	Power Cost Adjustment Mechanism	Idaho Power records the changes in fair value of derivative instruments related to power supply as regulatory assets or liabilities because of the power cost adjustment mechanism
CenterPoint Energy Inc.	Purchased Gas Adjustment	For CenterPoint Energy's price stabilization activities of the natural gas distribution business, the settled costs of derivatives are ultimately recovered through purchased gas adjustments
Entergy Corp.	Fuel Factor Mechanism	N/A
Avista Corp.	Power Cost Adjustment; Energy Recovery Mechanism; Purchased Gas Adjustment Mechanism	Realized derivative gains and losses recoverable through various recovery mechanisms
Pinnacle West Capital Corp.	Power Supply Adjustor	Company defers for future rate recovery approximately 90% of unrealized gains and losses on certain derivatives pursuant to the power supply adjustor mechanism that would otherwise be recognized in income. Realized gains and losses on derivatives are deferred to the extent the amounts are above or below base fuel rate.
Edison International	Energy Resource Recovery Account	Electric utility recognizes realized gains and losses on derivative instruments as purchased-power expense and recovers these costs through rates
FirstEnergy Corp.	Fuel Cost Recovery Rider	N.A.
Allegheny Energy Inc.	Expanded Net Energy Cost	N.A.
Black Hills Corp.	Cost Adjustment Mechanisms	For gas hedges, gains and losses, as well as option premiums upon settlement are recorded as regulatory assets or regulatory liabilities
Ameren Corp.	Fuel & Purchased Power Cost Recovery Mechanisms; Purchased Gas Adjustment	In Missouri, gains and losses associated with fuel-related derivatives recoverable through rates and recorded as regulatory assets or regulatory liabilities
NV Energy Inc.	Deferred Energy Accounting Adjustment	N.A.
PNM Resources Inc.	Fuel & Purchased Power Adjustment Clause	N.A.

Table 5

Recovery Mechanisms (cont.)
Source: SEC filings. N.A. -- Information not available.

The sample companies that have higher derivative use include those with unregulated operations such as Black Hills and Edison International. Diversified energy companies' unregulated generation may be subject to changing electricity prices because they do not have regulatory mechanisms for cost recovery. To mitigate the variability, output is hedged and inputs are hedged with forward and futures contracts. These companies try to mitigate this risk by entering into economic hedges for selling electricity typically covering a two- to three-year period with revenues in the immediate year almost fully hedged. The use of the accounting standard results in greater disclosure about derivative use for the unregulated operations.

Benefits Of Disclosures On Credit Risk-Related Contingencies

Disclosures about credit contingencies, in our opinion, are important and provide a view of the potential calls on a utility's liquidity. Disclosures are required if there are contingent features related to credit risk in an entity's derivatives that permits the counterparty to terminate an open derivative contract or require the posting of additional collateral if a negative credit event occurs. Required disclosures include the fair value of derivatives with such contingencies that are in a net liability position at the end of the reporting period, information about collateral requirements, and the aggregate fair value of assets required to settle the derivatives if the contingent features were triggered at the end of the reporting period. Out of the 25 companies, almost all provided details on credit-risk contingent features. Also, all but a handful of these companies provided additional disclosures relating to the posted collateral, and the remaining companies disclosed the fair value of derivative contracts that were in a net liability position. Companies that provided the additional disclosures and have the largest amount of posted collateral include Consolidated Edison, NextEra Energy, and Pinnacle West Capital (table 6). The sample companies that would need to post the greatest amount of collateral in case of a negative credit event are PG&E Corp., NextEra, and MidAmerican Energy Holdings.

Table 6

Credit Risk-Related Contingencies

Company	Fair value of liabilities subject to credit risk contingent features	Posted collateral (cash/LOCs)	Collateral to be posted in case of a credit event (cash/LOCs)
(Mil. $)			
Consolidated Edison Inc.	443.0	240.0	53.0
Xcel Energy Inc.	7.7	-	7.7
Dominion Resources Inc.	196.0	52.0	90.0
Duke Energy Corp.	192.0	29.0	15.0
NextEra Energy Inc.	2,200.0	236.0	464.0
Progress Energy Inc.	511.0	223.0	288.0
Wisconsin Energy Corp.	N.A.	N.A.	N.A.
MidAmerican Energy Holdings Co.	741.0	174.0	304.0
PG&E Corp.	652.0	74.0	577.0
PEPCO Holdings Inc.	232.0	5.0	213.0
DTE Energy Co.	297.0	-	297.0

Table 6

Credit Risk-Related Contingencies (cont.)			
Northeast Utilities	43.8	33.3	17.3
American Electric Power Co.	23.0	-	55.0
IDACORP Inc.	7.0	4.0	0.6
CenterPoint Energy Inc.	149.0	61.0	87.0
Entergy Corp.	1.0	-	1.0
Avista Corp.	84.7	N.A.	60.0
Pinnacle West Capital Corp.	430.0	247.0	111.0
Edison International	240.0	-	16.0
FirstEnergy Corp.	158.0	192.0	22.5
Allegheny Energy Inc.	7.6	-	6.7
Black Hills Corp.	N.A.	N.A.	N.A.
Ameren Corp.	499.0	109.0	282.0
NV Energy Inc.	N.A.	N.A.	N.A.
PNM Resources Inc.	18.8	0.3	11.5

Source: SEC filings. N.A. -- Information not available

Limited Use Of Foreign Currency And Interest Rate Hedging

Most electric utilities in our sample group operate domestically and do not have foreign currency hedging needs. Some companies do have international operations, such as Duke Energy Corp.'s merchant generation or MidAmerican Energy Holdings Co.'s regulated utility operations. In some cases, the companies' disclosures on international operations and foreign currency risks were limited. Companies with exposure to foreign currency risk enter into currency forward or option contracts or currency swap contracts to hedge their position. For example, Black Hills, Avista, and DTE Energy used currency forwards, Dominion Resources used forward and option contracts, and NextEra Energy used swaps. All the companies in our sample group disclose whether they enter into derivative positions to hedge their interest-rate risk from time to time with about 40% of the sample companies currently using active interest-rate swap agreements. In addition, some companies such as CenterPoint Energy Inc. used interest-rate hedges—such as forward starting swaps--to lock in rates for future debt issues.

Matthew O'Neill from S&P in New York, Safina Ali, Shubhajit Dhar, and Pallavi Nagia of Crisil Ltd., an S&P affiliate in Mumbai, contributed research for this article.

Notes

1. Statement of Financial Accounting Standards No. 161 is now included in the FASB Accounting Standards Codification as part of ASC 815.