

PUBLIC SERVICE COMMISSION OF WISCONSIN

Memorandum

December 3, 2008

FOR COMMISSION AGENDA

TO: The Commission

FROM: Robert Norcross, Administrator
Deborah Erwin, Renewables Analyst
Paul Helgeson, Renewables Engineer
Gas and Energy Division

RE: Electric Provider Renewable Portfolio Standard Compliance 5-GF-173
for CY2007

Suggested Minute: The Commission (accepted/did not accept) the reports of Wisconsin Electric Providers and aggregators as to their compliance with the requirements of Wis. Stat. § 196.378(2)(a)2. The Commission directed the Gas and Energy Division to inform each Electric Provider of its compliance with the statute.

2007 Renewable Resource Credit Status Report

Wisconsin Statute § 196.378(2)(c) requires Wisconsin retail electric providers to report to the Commission on an annual basis their renewable energy sales and requires that the Commission inform each electric provider whether it is in compliance with Wis. Stat. § 196.378(2)(a)2, the renewable energy percentage requirements. For calendar year 2007, each electric provider was required to meet a baseline percentage equal to the average of the electric provider's renewable energy percentage for the years 2001 through 2003.

Attachment 1, the 2007 Renewable Resource Credits Status Report, summarizes data reported to the Midwest Renewable Energy Tracking System (M-RETS) and directly to the Commission for calendar year 2007. Data is reported for all Wisconsin electric utilities and electric cooperatives except for members and wholesale customers of Wisconsin Public Power,

Inc. and Dairyland Power Cooperative. Those data are aggregated and reported under the aggregator's name.

For each electric provider, the attached spreadsheet shows 2007 retail sales, baseline renewable percentage requirement (based on 2001-2003 average for that electric provider), 2007 renewable energy requirement in MWh, 2007 renewable sales, renewable resource credits (RRC) produced or used to meet 2007 requirements, and the 2007 renewable percentage. Column 4 shows the RPS requirement for 2007 (Column 3 times Column 10) and Column 5 shows actual 2007 renewable energy sold at retail. Three Wisconsin electric providers reported zero actual 2007 renewable energy sold at retail (village of Centuria, Oconto Electric Cooperative, and Superior Water, Light and Power). Column 6 is the difference between required and actual renewable retail sales. If the number is negative the electric provider's renewable energy production and purchases for 2007 were less than the RPS requirement for 2007 and the electric provider used Renewable Resource Credits (RRCs) to make up the difference. A positive number shows the number of new RRCs created for 2007. Fifteen of the electric providers reporting used purchased or banked RRCs to meet their requirements for 2007. Column 9 is the actual percentage of retail sales from renewables in 2007. Columns 10 to 12 show each utility's 2005 Wis. Act 141 (Act 141) requirements. Wisconsin electric providers sold a total of 2,746,725 MWh of renewable energy to retail customers, which is nearly four (3.96) percent of 2004 through 2006 average retail sales.

Renewable Resource Credit Status of Large Utilities

Wisconsin Electric Power Company (WEPCO)

WEPCO used 209,672 RRCs in 2007 to meet its requirements under Act 141. Its 2007 requirement was 578,569.7 MWh and it sold only 368,898 MWh of renewable energy at retail.

In 2008, WEPCO's 145 MW Blue Sky Green Field wind project will add approximately 400,000 MWh to the company's annual electric production from renewable sources. If the project had been online in 2007, it would have almost doubled WEPCO's renewable energy sales that year. The company projects that it will need an additional 751 MW of wind capacity to meet its 2015 requirement of 8.27 percent.

Madison Gas and Electric Company (MGE)

For 2007, MGE was 1,802 MWh short of its RPS requirement. MGE's renewable energy production comes from solar, wind, landfill gas and co-firing of solid biomass at its Blount power plant. MGE is adding 76.2 MW of additional wind capacity from the Top of Iowa II and III wind projects and the Forward Energy wind project, as well as an additional 50 MW of wind from the Endeavor II Wind Energy Center in Iowa to meet its requirements for 2010.

Northern States Power Company–Wisconsin (NSPW)

NSPW reported that 10.92 percent of its retail sales came from renewable sources. Xcel North (formerly "NSP") reports its renewable energy sales on a system-wide basis; NSPW constitutes 16 percent of the total electric and renewable energy sales in the entire Xcel North territory. NSPW is already meeting its 2010 RPS requirement of 7.93 percent and is well on its way to meeting its 2015 requirement of 11.93 percent. NSPW reports that wind energy is key to meeting the RPS, but NSPW also intends to upgrade its Dells hydropower plant and increase its use of biomass at two of its combustion plants.

NSPW Wholesale Customers

NSPW's municipal utility wholesale customers are also well on their way to meeting their 2010 requirements because they receive most, if not all, of their electricity from NSPW and benefit from the high proportion of NSPW's system mix coming from renewable resources. The

NSPW municipal utility wholesale customers are Bangor, Barron, Bloomer, Cadott, Cornell, Medford, Rice Lake, Spooner, and Trempealeau.

Wisconsin Power and Light Company (WP&L)

WP&L used RRCs to meet a portion of its 2007 RPS requirement. WP&L's renewable energy sales for 2007 were 32,256 MWh less than the 342,671 MWh required by the RPS for 2007. Its renewable energy came from old hydro (203,866 MWh), biomass (18,239 MWh), and wind power (87,891 MWh). WP&L anticipates meeting its 2010 requirement from additional wind and biomass capacity.

Wisconsin Public Service Corporation (WPSC)

WPSC exceeded its 2007 requirement of 3.74 percent, reporting that 4.75 percent of its retail sales came from renewables in 2007. WPSC plans to obtain future renewables primarily from the Forward wind project (57.5 MW) and the Crane Creek wind project in Howard County, Iowa. WPSC will also use banked RRCs to help meet its RPS requirement for 2010 and beyond.

Dairyland Power Cooperative (DPC)

In 2007, the DPC member cooperative and municipal utility customers reached and exceeded their 2010 aggregate percentage requirement of 4.44 percent (estimated to be approximately 146,828 MWh). DPC obtains renewable energy from hydro and landfill gas, and has added three on-farm anaerobic digesters and three wind farms (in Minnesota) since 2004. DPC's 2007 renewable generation of 209,823 MWh was nearly three times its requirement for the year. DPC plans to add landfill gas and wind capacity in 2008 and increase wind capacity purchases in 2009.

Wisconsin Public Power, Incorporated (WPPI)

Like DPC, WPPI aggregates renewable generation and sales for its member utilities. In 2007, WPPI's renewable sales exceeded its total 2007 RPS requirement of 4.24 percent (208,340 MWh), with 5.44 percent (267,280 MWh) of WPPI retail sales coming from renewable resources. This renewable production was from hydro, landfill gas, and some Minnesota wind power.

For 2010, the requirement of WPPI members is estimated at 322,000 MWh. With additional capacity from two recently operational wind projects and one more expected wind project, WPPI projects that its actual 2010 renewable energy will be 726,000 MWh.

Commission Staff Recommendation

Commission staff recommends that the Commission accept the 2007 annual report summary and direct Commission staff to inform Wisconsin electric providers and aggregators, pursuant to Wis. Stat. § 196.378(2)(c), that they are in compliance with Wis. Stat. § 196.378(2)(a)2.

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Attachment

2007 RRC STATUS REPORT

(Revised January 22, 2009)

1	2	3	4	5	6	7	8	9	10	11	12
Electric Provider or EP Aggregator*	2007 Retail Sales (MWh)	2004-2006 Average Retail Sales (MWh)	2007 RPS Requirement (MWh)	Actual 2007 Total Renewables (MWh)	RRCs Created or Used (-) in 2007	Actual 2007 Renewables as portion of Requirement	Over or Under	Actual 2007 Renewables as a percentage of Average Sales (%)	Baseline 2001-2003 RPS Requirement (%)	2010 RPS Requirement (%)	2015 RPS Requirement (%)
Adams-Columbia Electric Coop	487,371.00	443,968.33	12,963.88	14,365.00	1,401.12	1.108	+	3.24	2.92	4.92	8.92
Bangor Municipal	30,527.00	32,109.00	2,112.77	3,038.00	925.23	1.438	+	9.46	6.58	8.58	12.58
Barron Light and Water Department	82,140.00	81,018.00	5,525.43	7,987.00	2,461.57	1.445	+	9.86	6.82	8.82	12.82
Belmont Mun Water and Electric Util	16,526.00	13,771.67	380.10	500.00	119.90	1.315	+	3.63	2.76	4.76	8.76
Benton Village of	5,518.00	5,282.00	151.07	162.00	10.93	1.072	+	3.07	2.86	4.86	8.86
Black Earth Village of	17,002.00	16,498.00	532.89	495.00	-37.89	0.929	-	3.00	3.23	5.23	9.23
Bloomer Electric Company	50,421.00	48,771.00	3,135.98	4,869.00	1,733.02	1.553	+	9.98	6.43	8.43	12.43
Cadott Light and Water Municipal Utility	13,895.00	16,652.00	1,112.35	1,353.00	240.65	1.216	+	8.13	6.68	8.68	12.68
Central Wisconsin Elec Coop	92,331.00	92,460.01	2,718.32	3,033.00	314.68	1.116	+	3.28	2.94	4.94	8.94
Centuria Village of	5,407.00	5,229.27	646.86	0	-646.86	0.000	-	0.00	12.37	14.37	18.37
Clintonville Water & Electric	90,387.00	94,127.07	1,355.43	1238.00	-117.43	0.913	-	1.32	1.44	3.44	7.44
Consolidated Water Power Co	1,403,108.00	1,418,767.33	233,670.98	233,705.00	34.02	1.000	+	16.47	16.47	18.47	22.47
Cornell Electric Utility	12,985.00	12,600.00	832.86	1301.00	468.14	1.562	+	10.33	6.61	8.61	12.61
Dahlberg Light & Power Co	104,260.00	99,271.18	1,360.02	1,126.00	-234.02	0.828	-	1.13	1.37	3.37	7.37
Dairyland Power Cooperative*	3,063,631.00	2,898,915.00	70,733.53	209,832.00	139,098.47	2.967	+	7.24	2.44	4.44	8.44
East Central Energy (formerly Head of Lakes)	48,213.49	45,206.96	289.32	309.00	19.68	1.068	+	0.68	0.64	2.64	6.64
Elkhorn Light & Water	116,187.00	114,637.38	3,932.06	3,365.00	-567.06	0.856	-	2.94	3.43	5.43	9.43
Gresham Mun Light and Power Util	19,516.00	18,855.00	458.18	499.00	40.82	1.089	+	2.65	2.43	4.43	8.43
Hazel Green Village of	7,968.00	8,045.20	230.90	236.00	5.10	1.022	-	2.93	2.87	4.87	8.87
Kiel City of	81,096.00	80,850.49	2,482.11	2,367.00	-115.11	0.954	-	2.93	3.07	5.07	9.07

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Madison Gas & Electric Co	3,350,021.00	3,223,488.00	55,766.34	53,964.60	-1,801.74	0.968	-	1.67	1.73	3.73	7.73
Manitowoc Public Utilities	545,749.00	532,042.09	16,972.14	10,839.00	-6,133.14	0.639	-	2.04	3.19	5.19	9.19
Marshfield Electric & Water Department	380,966.00	368,773.15	10,731.30	14,974.00	4,242.70	1.395	+	4.06	2.91	4.91	8.91
Mazomanie Village of	32,107.00	32,674.67	800.53	899.00	98.47	1.123	+	2.75	2.45	4.45	8.45
Medford Electric Utility	137,357.00	137,456.00	8,755.95	13,211.00	4,455.05	1.509	+	9.61	6.37	8.37	12.37
North Central Power Co Inc	30,924.00	31,214.67	10,334.56	8,040.00	-2,294.56	0.778	-	25.76	33.11	35.11	39.11
Northern States Power Wisconsin (16% of system)	6,366,174.00	5,939,623.00	352,219.64	648,577.00	296,357.36	1.841	+	10.92	5.93	7.93	11.93
Northwestern Wisconsin Elec Co	172,525.00	173,457.00	21,647.43	8,222.00	-13,425.43	0.380	-	4.74	12.48	14.48	18.48
Oconto Electric Coop	105,650.90	103,795.56	4,888.77	0.00	-4,888.77	0.000	-	0.00	4.71	6.71	10.71
Pioneer Power & Light Co	17,386.00	16,878.00	457.39	530.00	72.61	1.159	+	3.14	2.71	4.71	8.71
Princeton Light & Water Department	11346.00	12,524.50	276.79	360.00	83.21	1.301	+	2.87	2.21	4.21	8.21
Rice Lake Utilities	165,504.00	165,413.00	10,751.85	15,993.00	5,241.16	1.487	-	9.67	6.5	8.5	12.5
Rock County Electric Coop Assn	92,756.00	86,240.67	2,526.85	2,627.00	100.15	1.040	+	3.05	2.93	4.93	8.93
Sauk City Village of	33,980.00	35,158.70	991.48	997.00	5.52	1.006	+	2.84	2.82	4.82	8.82
Shawano Municipal Utilities	277,025.00	266,793.30	3,575.03	3244.00	-331.03	0.907	-	1.22	1.34	3.34	7.34
Sheboygan Falls City of	186,292.00	188,169.67	5,212.30	5,335.00	122.70	1.024	+	2.84	2.77	4.77	8.77
Shullsburg Electric Utility	10,655.00	10,587.33	298.56	306.00	7.44	1.025	+	2.89	2.82	4.82	8.82
Spooner Municipal Utilities	33,152.00	32,694.00	2,131.65	3,234.00	1,102.35	1.517	+	9.89	6.52	8.52	12.52
Stratford Village of	17,290.00	15,294.08	506.23	742	235.77	1.466	+	4.85	3.31	5.31	9.31
Superior Water Light & Power Co	653,488.00	604,905.62	15,304.11	0.00	-15,304.11	0.000	-	0.00	2.53	4.53	8.53
Trempealeau Municipal Utility	13,831.00	13,218.00	890.89	1,374.00	483.11	1.542	+	10.39	6.74	8.74	12.74
Washington Island EI Coop Inc	9,074.00	9,047.30	303.08	382.00	78.92	1.260	+	4.22	3.35	5.35	9.35

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Westfield Electric Company	13,438.00	13,774.00	387.05	409.00	21.95	1.057	+	2.97	2.81	4.81	8.81
Wisconsin Dells Electric Util	64,651.00	63,883.00	1,846.22	1,887.00	40.78	1.022	+	2.95	2.89	4.89	8.89
Wisconsin Electric Power Co d/b/a We Energies	25,954,656.00	25,487,652.00	578,569.70	368,898.00	-209,671.70	0.638	-	1.45	2.27	4.27	8.27
Wisconsin Power & Light (WPL/Alliant)	10,843,808.00	10,447,273.00	342,670.55	310,415.00	-32,255.55	0.906	-	2.97	3.28	5.28	9.28
Wisconsin Public Power Inc.*	5,160,984.00	4,913,668.00	208,339.52	267,280.00	58,940.48	1.283	+	5.44	4.24	6.24	10.24
Wisconsin Public Service Corp	10,812,255.00	10,655,491.00	398,515.36	506,799.00	108,283.64	1.272	+	4.76	3.74	5.74	9.74
Wisconsin Rapids W W & L Comm	248,731.00	251,287.00	6,860.14	7,252.00	391.86	1.057	+	2.89	2.73	4.73	8.73
Wonewoc Electric & Water Util	5,155.00	4,969.01	133.67	154.00	20.33	1.152	+	3.10	2.69	4.69	8.69
TOTAL Renewable Energy	71,495,420.39	69,384,480.21	2,407,290.12	2,746,724.60	339,434.48	1.141	17 under	3.96	3.52	5.52	9.52

COLUMN NOTES

2. As reported
3. As metered
4. Baseline percentage times average retail sales for previous 3 years(Col. 3 times Col. 10)
5. As reported
6. Credits used (-)or credits created (Col.5 - Col. 4)
7. (Col.5/Col.4)
9. 2007 renewable sales as a percentage of average retail sales for previous 3 years. (Col. 5 divided by Col.3)
10. Mean percentage renewables, 2001-2003
11. Per Wis. Stat. §196.378(2)(a)2 (2005)
12. Per Wis. Stat. §196.378(2)(a)2 (2005)

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