

June 30, 2014

Dr. Burl Haar **Executive Secretary** Minnesota Public Utilities Commission 121 7<sup>th</sup> Place East, Suite 350 St. Paul, MN 55101-2147

Dear Dr. Haar:

In the Matter of Dairyland Power Cooperative's SUBJECT:

2014 Optional-IRP Compliance Report

Please find enclosed the Dairyland Power Cooperative 2014 Optional-IRP Compliance Report. A copy of this report has been filed electronically with the Public Utilities Commission docket system as an initial filing.

Please feel free to contact me at (608) 787-1322 or rjf@dairynet.com if you have any questions.

Sincerely,

Ronald J. Franz

Manager, Wholesale Services and Resource Planning

Enclosure

G:\StrAdmin\Letters\2014\rjf063014.docx

#### **AFFIDAVIT OF SERVICE**

I, Ronald Franz, being first duly sworn, deposes and says:

That on the 30<sup>th</sup> day of June 2014, he served the attached.

#### NOTICE OF OFFICIAL SERVICE LIST

MNPUC Docket Number RP-13-565

- **XX** By depositing in the United States Mail at the City of La Crosse, a true and correct copy thereof, properly enveloped with postage prepaid
- **XX** By Interoffice Mail Service
- XX By Electronic Service

To all persons at the addresses indicated below or on the attached list:

Subscribed and sworn to before me,

A notary public, this 30 day o

Notary Public

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# STATE OF MINNESOTA BEFORE THE MINNESOTA PUBLIC UTILITIES COMMISSION

Beverly Jones Heydinger Chair
Nancy Lange Commissioner
Dr. David C. Boyd Commissioner
Dan Lipschultz Commissioner
Betsy Wergin Commissioner

In the Matter of Dairyland Power Cooperative's 2014 Optional-Integrated Resource Plan

#### 2014 OPTIONAL-IRP COMPLIANCE REPORT OF DAIRYLAND POWER COOPERATIVE PURSUANT TO MINN. STAT. § 216B.2422, SUBD. 2b

Dairyland Power Cooperative ("Dairyland" or "DPC") files this O-IRP Compliance Report pursuant to Minn. Stat. § 216B.2422, subd. 2b. The statute provides in pertinent part:

#### Subd. 2b. Optional integrated resource plan compliance for certain cooperatives.

For the purposes of this subdivision, a "cooperative" means a generating and transmission cooperative electric association that has at least 80 percent of its member distribution cooperatives located outside of Minnesota and that provides less than four percent of the electricity annually sold at retail in the state of Minnesota. A cooperative may, in lieu of filing a resource plan under subdivision 2, elect to file a report to the commission under this subdivision. The report must include projected demand levels for the next 15 years and generation resources to meet any projected generation deficiencies.

To supply the information required in a report under this subdivision, a cooperative may use reports submitted under section 216C.17, subdivision 2, reports to regional reliability organizations, or similar reports submitted to other state utility commissions. A report must be submitted annually by July 1, but the commission may extend the time if it finds the extension in the public interest. Presentation of the annual report shall be done in accordance with procedures established by the commission. Data in a report under this subdivision may be aggregate data and need not be separately reported for individual distribution cooperative members of the cooperative. The commission may take whatever action in response to a report under this subdivision that it could take with respect to a report by a cooperative under subdivision 2.

## Dairyland Power Cooperative O-IRP Table of Contents

O-IRP Requirements	3
Order from Previous O-IRP	3
Load Trends	4
Figure 1: DPC Class A Energy Sales Composition 2013	5
Figure 2: DPC Energy Requirement Composition	6
Current Capacity	6
Alma #4 and #5	
Table 1: DPC Accredited Capacity	7
Capacity Purchases	
Future Capacity	7
Recent Emission Controls and Consent Decree	8
Figure 3: DPC Load and Capability	
Renewable Generation	9
Table 2: DPC Renewable Generation	10
Table 3: Forecasted Total DPC Renewable Energy Requirements	12
Table 4: DPC Forecasted Renewable Energy Requirement for Minnesota	13
Table 5: DPC Forecasted Renewable Energy Requirements in Other States	14
2014 Solar Project Additions	14
Community Solar Projects	
Distributed Generation	15
Figure 5: DPC Cumulative Installations of Distributed Generation	16
National Renewable Cooperative Organization	17
Midwest Renewable Energy Tracking System	
Consideration of Environmental Costs	
Conclusion	1.0
Exhibit A	

Dairyland is Eligible to File an O-IRP Report in Lieu of an Integrated Resource Plan

For a Generation and Transmission ("G&T") cooperative like Dairyland to be eligible to file an O-IRP report pursuant to Minn. Stat. § 216B.2422, Subd. 2b. in lieu of an Integrated Resource Plan ("IRP") pursuant to Minn. Stat. § 216B.2422, Subd. 2, (1) at least 80% of the G&T cooperative's member distribution cooperatives must be located outside of Minnesota, and (2) the G&T cooperative must provide less than four percent of the electricity annually sold at retail in the state of Minnesota. Dairyland's eligibility for submittal of an O-IRP report is undisputed.

- A. 88% of Dairyland's member distribution cooperatives are located outside of Minnesota. Dairyland is owned by and serves 25 distribution cooperatives in four states. Only three of those distribution cooperatives are located in Minnesota:
  - Freeborn-Mower Cooperative Services, headquartered in Albert Lea, Minnesota.
  - People's Energy Cooperative, headquartered in Oronoco, Minnesota; and
  - Tri-County Electric Cooperative, headquartered in Rushford, Minnesota. The remaining 22 Dairyland distribution cooperatives are located in Wisconsin, Iowa, and Illinois. Accordingly, 88% of Dairyland's member distribution cooperatives are located outside of Minnesota.
- B. In 2013, Dairyland provided 1.25 percent of the electricity annually sold at retail in Minnesota. On June 6, 2014, the Minnesota Department of Commerce, Division of Energy Resources ("DOC") filed with the Commission in Docket No. E999/PR-14-12 a letter and table summarizing each Minnesota utility's compliance with the Minnesota Renewable Energy Standard ("RES") for 2013. In that letter, the DOC stated:

"The Minnesota Department of Commerce, Division of Energy Resources (DOC) reviewed these filings and verified that utilities have complied with the 2013 RES requirement. In total, utilities retired RECs representing 14.8 percent of total Minnesota retail sales in 2013. Attached to this letter is a table summarizing each utility's compliance with the RES Statute."

According to the DOC compliance summary document, in 2013, Minnesota Retail Sales in MWhs totaled 65,697,008 MWhs. Of that statewide total, Dairyland's 2013 Minnesota retail sales were 819,506 MWhs. Thus, in 2013, Dairyland provided 1.25% of the electricity annually sold at retail in Minnesota. For convenience, a copy of the DOC's June 6, 2014, letter to the Commission in Docket No. E999/PR-14-12 is attached as Exhibit A.

#### **Order From Previous O-IRP**

Dairyland would like to address the Commission's request contained in its October 3, 2013, Order acknowledging receipt of Dairyland's 2013 O-IRP submittal in Docket No. RP-13-565. The Order states:

"3. The Commission requests that Dairyland include in future reports a link to resource planning information filed with other state Commissions, regional reliability organizations, or other similar entities. Dairyland should include a brief description of the document(s) linked to."

Resource planning information filed by Dairyland with other state Commissions is identified as:

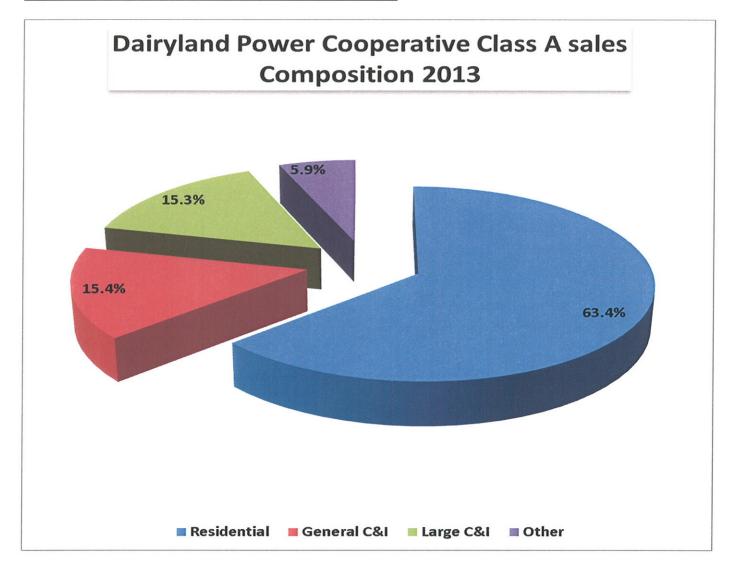
- 1. WI Strategic Energy Assessment Submitted to WI Public Service Commission (PSC) with the final report available at <a href="http://l.usa.gov/RU16u0">http://l.usa.gov/RU16u0</a>.
- 2. MISO Resource Adequacy Report Submitted confidentially to MN-PUC Staff Hwikwon Ham and Michelle Rebholz on 1/28/2014.
- 3. Electric Utility Annual Report for Minnesota Department of Commerce Email to Steve Loomis MN Department of Commerce on an annual basis.

#### **Load Trends**

Dairyland provides wholesale electric service to 25 member distribution cooperatives and classifies sales to member cooperatives as Class A. Dairyland's energy sales increased at an average of 1.0% annually over the last five years, while Dairyland's peak grew at an average of 3.4% over the same time period, due mainly to the growth of the Large Commercial and Industrial (C&I) class. Energy for the Large C&I class has grown from 12.9% (2008-2013) of Class A sales five years ago to 15.6% of Class A sales now. In addition to providing service to its member distribution cooperatives, Dairyland provides wholesale service to 17 municipal utilities and classifies the sales as Class D (2 of the 17 are served by Dairyland indirectly through Class A cooperatives). While the Large C&I class is growing at a higher rate, Dairyland's residential customers still account for 63.4% of Class A energy sales and 80.5% of customers.

Dairyland conducts load forecasting on a two-year cycle, with the last forecast finalized in the fall of 2012. Dairyland's energy and peak growth are forecast to grow at an annual rate of 1.0% over the next 20 years. Dairyland will finalize the 2014 forecast this fall and provide updated results in the 2015 O-IRP filing. Figure 1 provides Dairyland's energy sales composition by class as of 2011. Figure 2 provides a breakdown of Dairyland's forecasted energy requirements through 2031.

Figure 1: DPC Class A Energy Sales Composition 2013



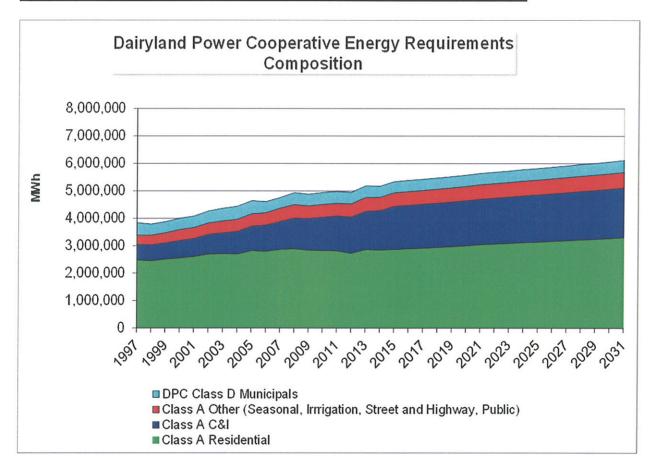


Figure 2: Dairyland Power Cooperative Energy Requirement Composition

#### **Current Capacity**

Dairyland currently owns or has under contract 1,000.7 MWs of accredited capacity in MISO; this value is based on the MISO Unforced Capacity (UCAP) definition for the rating of power plants and capacity purchases. The UCAP ratings of the plants take the last three years' forced outage rate into consideration for the rating of the plant. Table 1 shows the accredited capacity that is owned and purchased by Dairyland and the fuel type of each resource.

#### Alma #4 and #5

Dairyland regularly evaluates the future viability of its existing coal units. On October 21, 2013, Dairyland announced that it will indefinitely suspend operations at the coal-fired Alma Station (Units #4 and #5) by early 2015. The Alma Station is located in Alma, Wisconsin, and has a combined 2014 UCAP rating of 94.5 MWs. The capacity for Alma #4 and #5 was not claimed in the 2014 plan year as it was unclear if the capacity would be available for the entire 2014 MISO plan year.

Many factors were considered when making the important business decision regarding the continued operation of the Alma #4 & #5 generation facility. These include age of the facility, system capacity requirements, regulatory requirements, projected maintenance needs and costs, fuel supply, overall cost of power production and regional market prices for energy.

Table 1: 2014 Dairyland Accredited Capacity

Module E Accredited Capacity (UCAP Ratings	s)		
	2014 Accredited by		
	DPC (Module E		
	UCAP Capacity)		
DPC Generation Facility	MW	Owned or PPA	Fuel Type
John P Madgett	381.1	Owned	Coal
Genoa 3*	127.6	Owned	Coal
Alma 4	0	Owned	Coal
Alma 5	0	Owned	Coal
Weston 4**	154.3	Owned	Coal
Elk Mound	66.9	Owned	Natural Gas
Flambeau Hydro Station	4.5	Owned	Hydroelectric
Stoneman Biomass Station	36.4	PPA	Biomass
Wind Farms	4.8	PPA	Wind
Municipal and Behind the Meter Generation	125.1	PPA	Deisel/Other
Certified Capacity Purchase	100	PPA	Not Specified
Total Accredited Capacity	1,000.7		

<sup>\*</sup>DPC owns 100% of Genoa 3 but is entitled to 50% of its capacity and output. DPC's net UCAP share is shown above.

#### **Capacity Purchases**

Dairyland previously signed a 50 MW Capacity Purchase agreement for the years 2013-2015. Dairyland followed this purchase with a second capacity purchase for 50 MW for years 2014-2015 and for 100 MW for 2016-2018. In addition, Dairyland recently completed a third larger capacity purchase that starts at 50 MW in plan year 2018 and increases to 150 MW for plan years 2019, 2020, 2021 and 2022. This third purchase includes an energy option and is from an existing natural gas turbine plant. The capacity purchases described here are shown in gray in Figure 3: Dairyland Load and Capability.

#### **Future Capacity**

Figure 3 shows Dairyland's forecasted UCAP accredited capacity of its resources and forecasted Planning Reserve Margin Requirement (PRMR). Under the current forecast of demand and resources, Dairyland will be 4 MWs deficit in 2015, 12 MWs deficit in 2016 and 19 MWs deficit in 2017. Dairyland is currently evaluating a number of potential renewable energy project purchases which could be used to fill the small planning gaps. If Dairyland does not complete the renewable purchases, Dairyland plans on purchasing capacity from the MISO Capacity Auction for these years to cover any remaining small capacity deficit and comply with MISO's Resource Adequacy requirements.

<sup>\*\*</sup>DPC owns 30% of Weston 4. DPC's net UCAP share is shown above.

As stated above, Dairyland is in the process of evaluating a larger capacity purchase in the 2018-2022 timeframe. Dairyland is exploring the potential to participate in a highly efficient advanced class natural gas combined cycle project during 2021, 2022 or 2023 in an effort to diversify its portfolio and meet its capacity and energy hedge requirements. Discussions are underway with a variety of technology providers. Dairyland is evaluating different power purchase options and potential ownership structures. Dairyland is evaluating different natural gas technologies in an effort to determine what type of project is the most cost-effective for its members. Dairyland has narrowed its options to natural gas reciprocating engine technology and/or advanced class combined cycle technology. Either or both could provide the energy and capacity required by Dairyland in the 2021 timeframe. This unit addition assumption is also shown on Figure 3 indicated by the gray stripes.

#### **Recent Emission Controls and Consent Decree**

As explained in Dairyland's 2013 O-IRP submittal, Dairyland has installed pollution control equipment to reduce emissions at various Dairyland generating stations.

On August 23, 2012, the U.S. District Court for the Western District of Wisconsin entered a Consent Decree negotiated and agreed to by Dairyland, the U.S. Environmental Protection Agency, and the Sierra Club, thereby concluding litigation regarding alleged violations by Dairyland of the New Source Review provisions of the Clean Air Act. Dairyland denies it violated the law, and the Consent Decree provides that nothing in the Decree shall constitute an admission of liability. Nevertheless, the Consent Decree formalized Dairyland's commitment to add air emission controls on its facilities that are compatible with Dairyland's existing plans.

On April 28, 2014, the U.S. District Court for the Western District of Wisconsin entered an Order Modifying the Consent Decree negotiated and agreed to by Dairyland, the U.S. Environmental Protection Agency, and the Sierra Club. The Consent Decree was modified to (1) reflect that Dairyland would cease coal generation at Alma #4 and #5 by no later than December 31, 2014, (2) reduce emission limitations to address Alma #4 and #5, (3) extend certain deadlines in the Consent Decree, and (4) remove obsolete provisions from the Consent Decree.

**Dairyland Power Cooperative Forecasted Load and Capability** MISO UCAP Capacity Ratings - MISO Load Construct 1200 1000 ///// Potential Natural Gas Plant ■ 50-150 MW Purchase ■ 50 - 100 MW Purchase Load and Capability MW 800 50 MW Purchase Genoa 3 600 Muni & BTMG Elk Mound 400 Renewable -Hydro, Biomass, Wind Weston 4 200 11PM DPC MISO Module F PRMR 2016 201> 2018 2020 2021 2022 2015 2019 2023 2024 2026 2025 Year

Figure 3: Dairyland Load and Capability

#### **Renewable Generation**

According to a report prepared for and accepted by the Public Service Commission of Wisconsin (PSCW), Dairyland Power has made the most progress among utilities in the state in meeting the Wisconsin Renewable Portfolio Standard (RPS). The PSCW's 2012 RPS Compliance Report tracks utility compliance and action towards Wisconsin's RPS. Each Wisconsin electric provider's RPS in 2015 is 6 percent above the average renewable percentage for the years 2001-2003. The RPS requires Dairyland to source 8.44 percent of its total member retail load from renewable forms of energy by 2015. In 2012, almost 12.5 percent of Dairyland's total Class A member sales came from renewable energy resources, which will help Dairyland meet current and potential future renewable requirements in all the states we serve. Dairyland owns or purchases a variety of renewable generation including hydroelectric, wind, landfill gas, biomass, animal waste and solar. Table 2 summarizes Dairyland's current renewable resources.

**Table 2: DPC Renewable Generation** 

			MW		PPA or	Contract
Facility	Technology	State	Сар	Year	Owned	Entity/Owner
Arguto Undroplostrio	Lludroplostrio	144	0.06	Pre	Owned	Municipal
Argyle Hydroelectric	Hydroelectric	WI	0.06	2004	Owned	Utility(S)
Bach Digester, LLC	Digester	WI	0.6	2009	PPA	DPC
Buffalo Wind	Wind	IA :	1.5	2011	PPA	DPC
Bush Brothers	Digester	WI	0.633	2012	PPA	DPC Municipal
Cashton 50 kW Wind	Wind	WI	0.05	2011	PPA	Utility(S)
Cashton Greens	Wind	WI	5	2012	PPA	Municipal Utility(S)
Central	Landfill Gas	IA	5	2006	PPA	DPC
Chandler Wind	Wind	MN	0.6	Pre 2004	PPA	DPC
* Clean energy Collective, LLC	Solar	WI	0.517	2014	PPA	DPC
Five Star	Digester	WI	0.775	2005	Owned	DPC
				Pre		
Flambeau	Hydroelectric	WI	22	2004	Owned	DPC
Galtere Wind	Wind	MN	0.18	2011	PPA	DPC
Gundersen Wind	Wind	MN	5	Dec-11	PPA	DPC
Johnson Wind	Wind	WI	0.068	2011	PPA	DPC
Lanesboro Hydroelectric	Hydroelectric	MN	0.25	Pre 2004	Owned	Municipal Utility(S)
Link Energy	Digester	IA	0.6	2012	PPA	DPC
McNeilus - Adams	Wind	MN	18	2004	PPA	DPC
Merrilan HydroElectric	Hydroelectric	WI	0.3	Pre 2004	Owned	Municipal Utility(S)
* Minnesota-Three, LLC	Solar	MN	0.517	2014	PPA	DPC
Norm-E-Lane	Digester	WI	0.6	2008	PPA	DPC
Norswiss	Digester	WI	0.848	2006	Owned	DPC
Osage Wind	Wind	IA	1.5	2009	Owned	Municipal Utility(S)
Peters Farm	Digester	WI	0.045	2012	PPA	DPC
Prairie Star Wind	Wind	MN	5	2008	PPA	DPC
Rugby Wind	Wind	ND	30	2012	PPA	Municipal Utility(S)
Seven Mile	Landfill Gas	WI	4.134	2004	Owned	DPC
Stoneman	Biomass	WI	40	2010	PPA	DPC
Timberline	Landfill Gas	WI	5	2006	PPA	DPC
Tjaden Wind	Wind	IA	0.45	2004	PPA	DPC
USFWS Solar	Solar	WI	0.046	2010	PPA	DPC
Wild Rose	Digester	WI	0.775	2005	Owned	DPC
Winnebago Wind	Wind	IA	20	2008	PPA	DPC

\* Per the Consent Decree described above, Dairyland is prohibited from using RECs generated by these solar facilities during the initial 10 years of the power purchase agreement(s) for compliance with any renewable portfolio standard.

Dairyland intends to meet its renewable obligation in all the states where Dairyland provides wholesale service. For Minnesota, Dairyland files renewable compliance documents each year to demonstrate compliance with Minn. Stat. § 216B.1691. In addition Dairyland files biennial compliance documents in Minnesota detailing Dairyland's renewable compliance efforts. Each of these reports along with this O-IRP Report provides a good basis for evaluating Dairyland's renewable compliance position in Minnesota.

An estimate of Dairyland's system-wide renewable standard obligations is provided in Table 3. In addition to the renewable standards, Dairyland has a green energy program (Evergreen Program) that is completely separate from state requirements. An estimate of green program sales is provided in Table 3 in addition to the state renewable obligations. The sum of these three columns results in an estimate of Dairyland's annual system-wide renewable certificate requirements. The renewable generation column in Table 3 includes an annual estimate of the renewable generation currently in Dairyland's renewable generation portfolio (excluding the solar projects identified in Table 2 per the Consent Decree), together with a very conservative assumed 1 MW per year in total member-owned renewable additions, which is believed to be likely given historic member-owned project additions. (This anticipated 1 MW annual growth is not necessary for Dairyland to still exceed all requirements through the planning period).

The resulting renewable certificate surplus is presented in the last column of Table 3. Dairyland notes that each year in the planning period results in a renewable certificate surplus, including the step-up year in 2025, with the resources that Dairyland has in place now along with a conservative 1 MW annual estimated growth of new member-owned renewable projects (projects between 40 kW and 2 MW). As shown in Table 3, assuming all existing renewable projects and contracts continue to be in place and operate to provide renewable energy to the system, Dairyland currently has enough renewable resources in place to not only meet all of its obligations, but exceed them in each year of the planning period by a significant margin, resulting in a renewable certificate surplus.

Renewable investments made by Dairyland cooperative members and their respective boards of directors have created a diverse renewable portfolio including wind, biomass, landfill gas, digester biogas and solar photovoltaic capitalizing on the best resource mix available locally to Dairyland in geographical diverse areas of its service territory. Dairyland assumes in its analysis current renewable standard requirements in each state and that current renewable contracts and facilities will remain in place over the planning period.

Table 3: Forecasted Total DPC Renewable Energy Requirements

Forecasted Renewable Energy Requirements and Generation (MWhs)						
Year	Other States	MN	Evergreen Program	Total Renewable Requirements	Renewable Generation Forecast	Forecasted Renewable Surplus
2014	129,204	96,088	8,758	234,050	540,630	306,580
2015	249,624	97,132	8,845	355,601	547,630	192,029
2016	253,045	139,422	8,934	401,401	554,630	153,229
2017	255,680	140,740	9,023	405,443	561,630	156,187
2018	258,837	142,412	9,113	410,363	568,630	158,267
2019	262,056	144,113	9,204	415,373	575,630	160,256
2020	265,684	171,807	9,296	446,787	582,630	135,843
2021	270,311	174,516	9,389	454,216	589,630	135,414
2022	273,366	176,466	9,483	459,315	596,630	137,315
2023	276,434	178,460	9,578	464,473	603,630	139,157
2024	280,104	180,938	9,674	470,716	610,630	139,914
2025	282,777	228,310	9,771	520,857	617,630	96,773
2026	286,062	231,044	9,868	526,975	624,630	97,655
2027	289,292	233,724	9,967	532,983	631,630	98,647
2028	292,888	236,754	10,067	539,709	638,630	98,921

In order to identify Dairyland's compliance position relative to the various state renewable requirements, Table 4 provides a summary of the renewable energy obligations for Dairyland's Minnesota load. Listed in Table 4 are the Minnesota requirements, broken out from the other applicable state renewable requirements (from Table 5).

Table 4: DPC Forecasted Renewable Energy Requirement for Minnesota

	DPC Renewable Energy Requirements for Minnesota (MWhs)					
		MN RES	MN Renewable			
	MN Retail Sales	Requirement	Requirement			
2014	800,736	12%	96,088			
2015	809,434	12%	97,132			
2016	820,131	17%	139,422			
2017	827,885	17%	140,740			
2018	837,720	17%	142,412			
2019	847,724	17%	144,113			
2020	859,033	20%	171,807			
2021	872,580	20%	174,516			
2022	882,331	20%	176,466			
2023	892,302	20%	178,460			
2024	904,690	20%	180,938			
2025	913,238	25%	228,310			
2026	924,176	25%	231,044			
2027	934,896	25%	233,724			
2028	947,015	25%	236,754			

Table 5 provides an estimate of Dairyland's Renewable Portfolio Standard obligation in all the other states where Dairyland currently has a Renewable Portfolio Standard obligation through the planning period. As noted by Dairyland in its numerous RES biennial and annual compliance filings, Dairyland plans for renewable compliance on a system-wide basis. Wisconsin is the largest component in terms of renewable obligations for Dairyland.

Table 5: DPC Forecasted Renewable Energy Requirements in Other States

DPC Renewable Energy Requirements for Other States (MWhs)					
		Other States RE	Other States Renewable		
Year	Load	Requirements	Requirements		
2014	2,936,463	4.4%	129,204		
2015	2,971,714	8.4%	249,624		
2016	3,012,443	8.4%	253,045		
2017	3,043,806	8.4%	255,680		
2018	3,081,393	8.4%	258,837		
2019	3,119,715	8.4%	262,056		
2020	3,162,905	8.4%	265,684		
2021	3,217,987	8.4%	270,311		
2022	3,254,357	8.4%	273,366		
2023	3,290,886	8.4%	276,434		
2024	3,334,573	8.4%	280,104		
2025	3,366,395	8.4%	282,777		
2026	3,405,505	8.4%	286,062		
2027	3,443,957	8.4%	289,292		
2028	3,486,766	8.4%	292,888		

In addition to the Renewable Certificate Surplus shown in Table 3, Dairyland currently has a renewable certificate account balance of over 1,000,000 certificates that range in vintage from 2010 through 2014. As evidenced by both this account balance and the certificate accounting estimate provided in Table 3, Dairyland is far ahead of any renewable standards requirements on a system-wide basis and is currently evaluating options available to draw down this surplus balance through certificate sales. Dairyland's Board and rate paying members made very significant investments and put plans in place to comply with state goals even before the REO was turned to an RES.

#### 2014 Solar Project Additions

Dairyland has signed an agreement with Minnesota-Three, LLC, to purchase the renewable energy produced by a large solar facility, located along U.S. Highway 52 north of Rochester, Minnesota. The new solar installation has a capacity of 517 kilowatts (kW), and could produce enough energy to power nearly 60 homes. The facility is located in the Oronoco Crossings business park and interconnected to People's Energy Cooperative's power delivery system. Construction of the solar facility is complete and commercial operation started in June 2014. Dragonfly Solar of Lakeville, Minnesota, is responsible for engineering, procurement and construction for the project which will utilize U.S. manufactured solar components.

Dairyland expanded its renewable energy resources with the addition of a second commercial solar project. The new solar installation is 517 kilowatts (kW), and could produce enough energy to power nearly 60 homes. The project is located adjacent to Vernon Electric Cooperative's headquarters along U.S. Highway 27 in Westby, Wisconsin. Dairyland has signed an agreement with Clean Energy Collective to purchase the renewable energy produced by this large solar facility, which was developed by and is owned and managed by Clean Energy

Collective of Boulder, Colorado. The solar facility began commercial operation on May 22, 2014.

Dairyland's member cooperatives are also adding Community Solar projects to their distribution systems. Currently five distribution cooperatives are adding community solar projects where members can purchase solar panels and receive a credit on their bill. The five projects are at various stages of development and some have already sold out of their panels available for purchase. A number of other member distribution cooperatives are exploring future community solar projects.

#### **Community Solar Projects**

•	Tri-County Electric Cooperative - Rushford, Minnesota	74 kW
•	Hawkeye Rural Electric Cooperative - Cresco, Iowa	25 kW
•	St. Croix Electric Cooperative - Hammond, Wisconsin	102 kW
•	Vernon Electric Cooperative - Westby, Wisconsin	305 kW
•	Eau Claire Energy Cooperative - Eau Claire, Wisconsin	1 MW

#### **Distributed Generation (DG)**

In addition to the larger member-owned projects (40 kW to 2 MW) discussed above, Dairyland has implemented a small renewable tariff (net metering for projects under 40 kW) that is available to retail members of Dairyland's Minnesota member distribution cooperatives. In the entire Dairyland system there are 462 member-owned solar and wind projects having a nameplate capacity size of less than 40 kilowatts each. Through 2013, retail members of Dairyland's member distribution cooperatives installed 2,460 kW of distributed solar projects and 1,786 kW of wind distributed projects of various sizes.

As displayed in Figure 5, the number of member-owned DG installations (<40 kW) continues to increase on the Dairyland system with solar representing nearly 75% of all DG installations at the end of 2013. Solar installations have been increasing at a rate of 55 to 60 new installations annually, resulting in a tenfold increase since 2007.

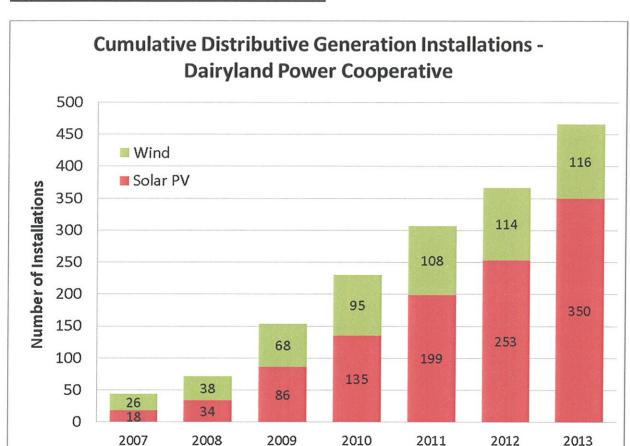


Figure 5: DPC Cumulative Installations of DG

Dairyland's member-owned distributed renewable generation has not yet been registered in the Midwest Renewable Energy Tracking System (M-RETS) due to the logistical challenge and cost of tracking the large number of small generators. Therefore, small member-owned facilities (under 40 kilowatts) are not currently counted or used by Dairyland for renewable portfolio standard compliance in any state which Dairyland provides wholesale service. Dairyland and its member-owned distribution cooperatives will continue to evaluate the benefits and costs of using member-owned distributed renewable generation for renewable portfolio standard compliance purposes.

Dairyland has been very aggressive in securing a diverse portfolio of renewable generation and purchases. Dairyland has a diversified renewable portfolio consisting of both intermittent and base load renewable resources. Dairyland's renewable portfolio is also diversified with respect to technology, which includes wind, hydroelectric, landfill biogas, farm digester biogas, wood waste biomass and solar photovoltaic. A diverse resource mix helps maintain Dairyland's excellent reliability and provides a significant source of renewable energy.

Dairyland also has a diverse structure of ownership with respect to its renewable portfolio, including projects owned by independent power producers, projects owned by other electric providers, projects owned by municipal utilities, projects owned by Dairyland, projects owned

by cooperative members through Dairyland's small renewable tariff, as well as projects that are a combination of ownership by Dairyland and cooperative members along with third party operators.

#### National Renewable Cooperative Organization

Dairyland is a charter member of the National Renewable Cooperative Organization (NRCO). The NRCO was organized to help cooperatives nationally procure renewable resources through the pooling of relatively small interests into larger projects. The organization has further formed a technical committee that shares details of individual cooperative efforts to procure renewable resources. Through its membership in the NRCO, Dairyland gains expertise and economies of scale to increase its own system renewable penetration, while sharing its renewable expertise with other cooperatives to increase the national renewable penetration.

#### Midwest Renewable Energy Tracking System (M-RETS)

Dairyland has played an active part in creating and optimizing the tracking of renewable certificates for the Midwest states with its participation in M-RETS. Dairyland has provided M-RETS with significant resources by participating and staffing M-RETS work groups charged with improving renewable tracking efficiency and integrity. Dairyland staff currently holds an elected position on the M-RETS Board of Directors representing cooperatives on renewable tracking issues in M-RETS. Along with regular Board duties, staff is currently the acting Finance Chair of the Financial Committee. Dairyland's Board and Management understand the goals of each of its states in relation to renewable energy, and continues to provide leadership and resources in support of these goals.

As part of Dairyland's resource planning efforts, Dairyland is continually evaluating and assessing new renewable resources and technologies. Dairyland continues to evaluate the reliability impacts of adding new intermittent renewable resources in its system and the corresponding cost as seen through the hourly locational marginal prices (LMPs) at each existing renewable facility's commercial pricing node. Dairyland models potential new resource dispatch scenarios (renewable and conventional) against hourly LMP forecasts in an effort to assess the full costs and benefits of acquiring new renewable generation. Dairyland will continue to consider self-build projects and work with cooperative members, independent power producers, and others to expand and maintain its robust and diversified renewable generation portfolio in a cost-efficient manner. Dairyland's efforts have been detailed in numerous annual and biennial docket submittals since the REO and RES became law.

#### **Consideration of Environmental Costs**

A cooperative filing an O-IRP report is not required to use the environmental cost values in its O-IRP report. Minn. Stat. § 216B.2422, subd. 3, requires the Commission to establish a range of environmental costs, and further states: "A utility shall use the values established by the commission in conjunction with other external factors, including socioeconomic costs, when evaluating and selecting resource options in all proceedings before the commission, including resource plan and certificate of need proceedings." (Emphasis added.) Accordingly, Minn. Stat. §216B.2422, subd. 3, requires the consideration of the environmental values established by the Commission only in "proceedings," including resource plan and certificate of need proceedings.

The Commission has defined what constitutes a "proceeding" in Minn. Rule §7829.0100, subp. 18, which provides: "Proceeding' means a formal or informal undertaking of the commission, in which it seeks to resolve a question or issue taken up on its own motion or presented to it in a complaint, petition, or notice of a proposed change in a rate, service, or term or condition of service."

Under this definition, an O-IRP report does not trigger the commencement of a "proceeding." It is not something taken up by the Commission's own motion, or presented to the Commission in a complaint or petition. Nor does Dairyland's O-IRP report propose any changes in a rate, service, or term or condition of service.

In particular, an O-IRP report is not a "resource plan proceeding" covered by the requirement in Minn. Stat. § 216B.2422, subd. 3, that the environmental values be used in resource plan proceedings. Rather, an O-IRP report is intended to provide the Commission with an annual update of whether a qualifying G&T cooperative will have adequate generation resources to meet its projected load. A report will provide the Commission with notice of planned infrastructure projects such as new power plants that may be undertaken by a qualifying G&T cooperative, with an O-IRP report being filed on an annual basis to assure that the information will not become stale or otherwise outdated.

Per Minn. Stat. § 216B.2422, Subd. 2b, an O-IRP report is "in lieu of filing a resource plan under subdivision 2." (Emphasis added.) An O-IRP report is not intended to be a full blown annual IRP under the guise of another name. An O-IRP filing is a "report to" the Commission, not a "resource plan [filed] with the Commission." For these reasons, since the Commission's receipt of an O-IRP report is not a "proceeding," Dairyland believes consideration of environmental values established pursuant to Minn. Stat. § 216B.2422, subd. 3, is not required for O-IRP reports.

As explained above, Dairyland's share of total Minnesota retail sales is small, constituting only 1.25% of total Minnesota retail sales in 2013. With the exception of a relatively small amount of Minnesota renewable generation purchased by Dairyland, all of Dairyland's owned or purchased generation is located outside of Minnesota. At this time, Dairyland is not planning to build any generation that would require a Minnesota Certificate of Need; therefore, there are no Minnesota resource options for which an evaluation of environmental values would be merited. If Dairyland's plans change regarding new Minnesota resources, it will inform the Commission of the change by no later than the next O-IRP report submittal date.

#### Conclusion

Dairyland's load is growing and Dairyland is using a balanced and pragmatic approach to add natural gas generation and renewable generation to meet the future load obligations. Dairyland intends to use short-term capacity contracts to fulfill any short-term capacity deficits while it continues to evaluate its existing plants and new generation. Dairyland is currently meeting its planning reserve margin requirements and all of its renewable energy obligations and plans to do so in the future.

Dairyland requests that the Commission find and conclude that:

- 1. Dairyland is eligible to submit an O-IRP report because it is a Generation and Transmission ("G&T") cooperative that has at least 80 percent of its member distribution cooperatives located outside of Minnesota and provides less than four percent of the electricity annually sold at retail in the State of Minnesota.
- 2. Dairyland's O-IRP report includes projected demand levels for the next 15 years and generation resources to meet any projected generation deficiencies.

Dairyland also requests that the Commission acknowledge receipt of its O-IRP report, find the report complete, and close this matter.

Dairyland appreciates the opportunity to submit an O-IRP report and hopes the Commission will find that the annual O-IRP report provides an informative overview of the Dairyland system and a timely update on changes in Dairyland's load and capability and associated infrastructure changes.

### Exhibit A





June 6, 2014

Burl W. Haar Executive Secretary Minnesota Public Utilities Commission 121 Seventh Place East, Suite 350 St. Paul, Minnesota 55101

RE: Docket No. E999/PR-14-12

Dear Dr. Haar:

On April 17, 2014 the Minnesota Public Utilities Commission (Commission) issued a Notice of Renewable Energy Certificate (REC) Retirement Process, Biennial Report Obligations, and Green Pricing Program Retirement. The Notice required entities subject to Minn. Stat. §216B.1691 (RES Statute) to file by June 1, 2014 a report detailing their compliance with the RES Statute for the year 2013.

Minn. Stat. §216B.1691, subd. 2 requires utilities other than Xcel Energy to obtain at least 12 percent of their Minnesota retail sales from renewable energy sources by the end of 2012. Minn. Stat. §216B.1691, Subd. 2 (b) requires Xcel Energy to obtain 18 percent of its retail sales from renewable energy sources by the end of 2012.

The following utilities have filed their 2013 compliance reports:

- Basin Electric Cooperative (Basin);
- Central Minnesota Municipal Power Agency (CMMPA);
- Dairyland Power Cooperative;
- East River Electric Power Cooperative (East River);
- Great River Energy (GRE);
- Heartland Consumers Power District;
- Interstate Power and Light (IPL);
- L&O Power Cooperative;
- Minnesota Municipal Power Agency (MMPA);
- Minnesota Power (MP);
- Minnkota Power Cooperative;
- Missouri River Energy Services;
- Northern States Power. d/b/a Xcel Energy (Xcel);
- Northwestern Wisconsin Electric Company;
- Otter Tail Power Company (OTP); and
- Southern Minnesota Municipal Power Agency (SMMPA).

Burl W. Haar June 6, 2014 Page 2

The Minnesota Department of Commerce, Division of Energy Resources (DOC) reviewed these filings and verified that utilities have complied with the 2013 RES requirement. In total, utilities retired RECs representing 14.8 percent of total Minnesota retail sales in 2013. Attached to this letter is a table summarizing each utility's compliance with the RES Statute.

The DOC is available to answer any questions the Commission may have.

Sincerely,

/s/ SUSAN L. PEIRCE Rate Analyst

SLP/lt Attachment

#### Summary of 2013 Minnesota RES Compliance through Retirement of Renewable Energy Credits (RECs)

	2013 MN Retail Sales (MWhs)*	RES Requirement (%)	RES Req. (MWhs)	RECs Retired (MWhs)
Basin Electric	677,283	12%	81,274	81,274
СММРА	317,296	12%	38,079	38,079
Dairyland Power	819,506	12%	98,341	98,343
East River Electric	412,148	12%	49,458	49,567
GRE	11,267,383	12%	1,352,086	1,352,086
Heartland	643,180	12%	77,182	77,183
Interstate Power	857,965	12%	102,956	102,956
L&O Power	156,501	12%	18,780	18,781
Minnesota Power	10,097,896	12%	1,211,748	1,211,748
Minnkota	1,618,100	12%	194,172	192,172
MMPA	1,426,534	12%	171,184	171,523
Missouri River Energy Services	1,355,896	12%	162,708	162,708
NW Wisconsin **	556	12%	67	See below
Otter Tail Power	2,164,446	12%	259,734	259,734
SMMPA	2,928,597	12%	351,432	351,432
Xcel Energy	30,954,277	12%	5,571,770	5,571,770
Total	65,697,008		9,740,964	9,741,353

<sup>\*</sup>Minnesota retail sales include wholesale sales to Minnesota distribution cooperatives or municipal utilities.

<sup>\*</sup>The Commission's November 12, 2008 Order in Docket No. E999/Cl-03-869 allows Northwest Wisconsin to submit a copy of its Wisconsin compliance report to demonstrate its compliance with the Minnesota RES. For 2013, Northwest Wisconsin submitted its Wisconsin Renewable Portfolio Standard (RPS) compliance information indicating that it retired 24,367 RECs or 14.48 percent of its Wisconsin sales.