Minnesota Public Utilities Commission: Docket No. E999/PR-18-12, Docket No. E-999/M-18-78 **Attachment 2**
Minnesota Department of Commerce: Docket No. E999/PR-02-1240 Reporting Period: **January 1, 2017 - December 31, 2017**

Total Retail Sales to Minnesota Customers and Renewable Energy Certificates Required to be Retired for RENEWABLE ENERGY STANDARD Compliance

Retail Sales Total	9,796,584
RES Percentage Obligation	17%
RECs Required to be Retired	1,665,420
Actual RECs Retired	1,665,420

Enter current reporting year data.

Utility ID #	Utility	Retail Sales Amount (MWh)	Notes
68	Minnesota Power Co.	9,796,584	MN Retail Sales by reporting utility

Minnesota Public Utilities Commission: Docket No. E999/PR-18-12, Docket No. E-999/M-18-78 **Attachment 3**
Minnesota Department of Commerce: Docket No. E999/PR-02-1240 Reporting Period: **January 1, 2017 - December 31, 2017**

GREEN PRICING Program Sales

TOTAL **GREEN PRICING** Sales (MWh)	1,213
RECS retired for **GREEN PRICING** programs	1,213

List the cumulative retail sales of green pricing electricity, including utility-managed community solar, and the number of customers as of December 31, 2017.

Utility ID # (on Worksheet 1)	Utility Name	Program Name	No. of Program Customers	Program Sales (MWh)	Retail Rate ($/kWh)	Notes
68	Minnesota Power Co	WindSense	446	1,213		MN Retail Sales by reporting utility

Minnesota Public Utilities Commission: Docket No. E999/PR-18-12, Docket No. E-999/M-18-78 **Attachment 4**
Minnesota Department of Commerce: Docket No. E999/PR-02-1240 Reporting Period: **January 1, 2017 - December 31, 2017**

Renewable Energy Certificate Retirements for Renewable Energy Standards and Green Pricing Programs

Renewable Energy Standard REC Retirement Account Name:	**2017 Minnesota Power MN REO/RES Compliance**
Green Pricing REC Retirement Account Name:	**2017 Minnesota Power Green Pricing**

Total RECs			1,665,420	1,213	1 REC = 1 MWh
MRETS ID	MRETS Generator Facility Name	Generator Fuel Type	RECS retired for **RENEWABLE ENERGY STANDARD** compliance	RECS retired for **GREEN PRICING** programs	NOTES
M226	Chandler Wind Farm - Moulton 290/Cha	Wind		1,213	
M641	Bison Wind - Bison Wind	Wind	961,613		
M648	Blanchard Hydro - Blanchard Hydro 123	Hydroelectric Water	78,417		
M378	Fond Du Lac Hydro - Fond Du Lac Hydro	Hydroelectric Water	18,054		
M428	Hibbard Energy Center - Hibbard 3	Biomass, Coal, Natural	244		
M518	Hibbard Energy Center - Hibbard 4	Biomass, Coal, Natural	3,878		
M407	Knife Falls Hydro - Knife Falls Hydro	Hydroelectric Water	6,881		
M302	Laurie River 1 - Laurie River 1	Hydroelectric Water	82		
M303	Laurie River 2 - Laurie River 2	Hydroelectric Water	89		
M409	Little Falls Hydro Station - Little Falls Hyd	Hydroelectric Water	30,140		
M305	McArthur Falls - McArthur Falls	Hydroelectric Water	785		
M541	Oliver Wind 12 - Oliver County Wind 12	Wind	321,556		
M410	Pillager Hydro Station - Pillager Hydro	Hydroelectric Water	9,399		
M304	Pine Falls - Pine Falls	Hydroelectric Water	1,487		
M307	Pointe du Bois - Pointe du Bois	Hydroelectric Water	747		
M412	Prairie River Hydro Station - Prairie River	Hydroelectric Water	1,677		
M429	Rapids Energy Center - Rapids Energy Ce	Coal, Natural Gas, Biom	23,451		
M422	Rapids Energy Center - Rapids Energy Ce	Coal, Natural Gas, Biom	45,945		
M414	Rapids Energy Center - Rapids Energy Ce	Hydroelectric Water	3,159		
M271	SAPPI Cloquet Turb Genr #5 - Cloquet En	Biomass, Natural Gas	23,399		
M418	Scanlon Hydro Station - Scanlon Hydro	Hydroelectric Water	4,967		
M306	Slave Falls - Slave Falls	Hydroelectric Water	1,047		
M419	Sylvan Hydro Station - Sylvan Hydro	Hydroelectric Water	10,358		
M480	Tac Ridge Wind - Taconite Ridge Wind	Wind	62,742		
M924	Thomson Hydro - Thomson Hydro	Hydroelectric Water	35,641		
M310	Wing River - Wing River	Wind	4,176		
M420	Winton Hydro Station - Winton Hydro	Hydroelectric Water	15,486		

Minnesota Public Utilities Commission: Docket No. E999/PR-18-12, Docket No. E-999/M-18-78 **Attachment 5**
Minnesota Department of Commerce: Docket No. E999/PR-02-1240 Reporting Period: **January 1, 2016 - December 31, 2017**

Biennial Compliance reporting

Please report the following items in compliance with the PUC May 28, 2013 Order in Docket No. E999/M-12-958

Ordering Point

4.A. & 5.H. The year through which the utility can maintain compliance with its current renewable portfolio*
*Include banked Renewable Energy Credits (RECs)

2053

4.B. & 5.I. **Projected compliance for the current plus three (3) upcoming years.** Include banked RECs.

Year	Actual/Projected MN retail sales (MWh)	RES Req.(%)	RES Req. (MWh)	Projected Resources (MWh)	Projected Surplus/ (Deficit) (MWh)
2017	9,796,584	17%	1,665,420	9,341,720	7,676,300
2018	9,860,022	17%	1,676,204	10,418,887	8,742,684
2019	9,751,404	17%	1,657,739	11,483,222	9,825,483
2020	10,358,299	20%	2,071,660	13,110,651	11,038,991

5.E.2 & 5.F. **Identify other State Renewable Standards or Objectives to which the utility is subject, and the percentage of renewable energy allocated to meet the renewable requirements.**

State	RES Req. (MWh)	RES Req. (%)	Percent of utility's total system renewable generation apportioned to this state (%)*

*apportionment of renewable energy should reflect each state's percentage of the utility's total system sales.

5.E.3 (i) **The status of the utility's renewable energy mix relative to the objective & standards.**

Renewable Project Development Status
Completed Projects:
Oliver 1 Wind
A 50.6 MW wind facility comprised of twenty-two 2.3 MW Siemens SWT-2.3-93 turbines located near Center, North Dakota. This facility was built by NextEra Energy Resources and began c
all energy, capacity and renewable attributes from Oliver 1 (Docket No. E015/M-05-975).
Oliver 2 Wind
A 48 MW expansion of the original Oliver 1 Wind facility comprised of thirty-two 1.5 MW GE SLE turbines with 77 meter rotors. The facility achieved commercial operation in December of
attributes from Oliver 2 (Docket No. E015/M-07-216).
Wing River C-BED Wind
A 2.5 MW wind project comprised of one 2.5 MW Nordex N90 turbine located near Hewitt, Minn. This project began operation in July 2007 achieving two firsts: 1) the first C-BED project ir
Minnesota Power has a 20-year PPA with Wing River LLC for all energy, capacity and renewable attributes from the Wing River C-BED Wind Project (Docket No. E015/M-07-537).
Taconite Ridge Wind
A 25 MW wind facility comprised of ten 2.5 MW Clipper C96 Liberty turbines located on the Laurentian Divide in Mountain Iron, Minn., on US Steel property. This wind facility was built by
renewable wind generation resource. Taconite Ridge Energy Center achieved commercial operation in June 2008 (Docket No. E015/M-07-1064).
Bison 1
An 81.8 MW wind development near Center, N.D., comprised of 16 Siemens SWT-2.3-101 turbines and 15 SWT-3.0-101 turbines. This wind facility was built by Minnesota Power and Minn
generation resource. The Bison 1 wind project achieved commercial operation in two phases, the first phase in December 2010, and the second in January 2012 (Docket No. E015/M-09-28
Manitoba Hydro
A non-firm energy supply PPA with Manitoba Hydro. The PPA assumed approximately **[TRADE SECRET DATA EXCISED]** to be counted as MN eligible renewable energy credits ("RECs") and
A firm 50 MW power supply PPA with Manitoba Hydro. The PPA assumed approximately **[TRADE SECRET DATA EXCISED]** to be counted as MN eligible renewable energy credits ("RECs") a
Bison 2
A 105 MW wind project near Center, N.D., is comprised of 35 Siemens SWT-3.0-101 turbines and interconnects to the electric grid at the Square Butte Substation, which allows the wind er
Alternating Current ("AC") system. The Bison 2 wind project achieved commercial operation in December 2012. Minnesota Power owns, operates, and maintains the facility for long-term u
Bison 3
A 105 MW wind project near Center, N.D., is comprised of 35 Siemens SWT-3.0-101 turbines and interconnects to the electric grid at the Square Butte Substation, which allows the wind er
commercial operation in December 2012. Minnesota Power owns, operates, and maintains the facility for long-term use as a rate-based renewable wind generation resource (Docket No. E

5.E.3(ii) Efforts taken to meet the objective and standards

and wholesale electric sales. With the addition of Nobles 2 Wind Project in 2020, the renewable portion of Minnesota Power's retail energy supply increases to over 35 percent of its proje
well positioned to comply with the standard for 2025 and beyond.
Following the passage of the 2013 SES, Minnesota Power has developed a robust solar strategy consisting of the three pillars previously mentioned – customer, community and utility – an
of solar to meet the SES, early action on the 10 MW Camp Ripley Project and a Community Solar Garden, that will be expanded to meet customer demand, combined with the 10 MW Blan
flexibility to meet this energy standard without the development of the entire 33 MW by 2020.

5.E.3(iii) Obstacles encountered or anticipated in meeting the objective or standards

Minnesota Power is committed to meeting Minnesota's RES and SES requirements. There are obstacles encountered with most plans, and the key is to search for potential solutions to the
Hydro
Minnesota Power knows of no new large hydro project sites in Minnesota. Even if sites existed, hydro development is realistically limited to expansions at existing impoundments due to a
of Manitoba, but current Minnesota law does not allow renewable generation from hydro units of 100 MW or larger to apply towards Minnesota's RES.
Minnesota Power continues to evaluate innovative hydro generation development options and determine feasibility for these projects.
Biomass

5.E.3(iv) Potential solutions to the obstacles

See Above: Obstacles encountered or anticipated in meeting the objective standard

5.G. List any renewable generation facilities expected to become operational during the upcoming year

Facility Name	Type	Capacity (MW)	Cap. Factor (%)	Expected Comm'l Operation Date

5.K. Identify efforts taken to adequately protect against undesirable economic impacts on ratepayers, including, but not limited to keeping customer's bills and the utility's rates as low as practicable, given regulatory and other constraints.

Minnesota Power has taken significant steps since 2005 to develop and implement a renewable plan that incorporates substantial cost effective wind energy into its supply mix and maxim
Current and planned projects, in additional to a sufficient bank of RECs, will enable Minnesota Power to meet the RES incremental percentage requirements, while being afforded the nece
and advancements in renewable energy technology. With a significant amount of wind energy in its energy mix, Minnesota Power is continually evaluating other renewable energy resourc
storage.

Minnesota Public Utilities Commission: Docket No. E999/PR-18-12, Docket No. E-999/M-18-78 **Attachment 6**
Minnesota Department of Commerce: Docket No. E999/PR-02-1240 Reporting Period: **January 1, 2016 - December 31, 2017**

M-RETS RECs Bought and Sold

Ordering pt. 4C requires reporting REC sales & purchases for the 2 preceding calendar years

REC Purchases Total	0
REC Sales Total	0

Enter current reporting year data.

Wholesale REC Purchases	Wholesale REC Sales	PRICE	NOTES

Minnesota Public Utilities Commission
Docket No. E999/PR-18-12
Docket No. E-999/M-18-78

Minnesota Department of Commerce
Docket No. E999/PR-02-1240

Renewable Energy Certificate Retirement Report for Renewable Energy Standards and Green Pricing Programs
REC Retirement Compliance Reporting

Due: June 1st, 2018
For the Reporting Period:
January 1, 2017 - December 31, 2017*
*Exception for Worksheet A.6: Ordering pt. 4C requires reporting REC sales & purchases for the **2 preceding calendar years**.

Instructions

Note: items in red indicate changes in reporting from previous year
Complete the following worksheets and e-file in **Excel (XLS or XLSX)** format:

- Worksheet 1, Utility Info
- Worksheet 2, Renewable Energy Standard Retail Sales
- Worksheet 3, Green Pricing Program Retail Sales
- Worksheet 4, RES & Green Pricing REC Retirements
- Worksheet 5, Biennial Compliance Reporting
- Worksheet 6, RECs Bought and Sold During the Reporting Period

To e-file, login, or register, at: https://www.edockets.state.mn.us/EFiling/home.jsp
For directions on how to e-file, see: http://www.commerce.state.mn.us/eDocFile/eFilingHelp.html
For questions about Renewable Energy Certificate retirement or compliance with Renewable Energy Standards, contact Kelly Martone at 651-201-2245 or at kelly.martone@state.mn.us.
For questions about Green Pricing or about filling out this spreadsheet, send an email to: DG.Energy@state.mn.us.
For questions about e-filing, contact Karen Santori at 651-539-1530 or at karen.santori@state.mn.us .

Minnesota Public Utilities Commission: Docket No. E999/PR-18-12, Docket No. E-999/M-18-78 **Attachment 1**
Minnesota Department of Commerce: Docket No. E999/PR-02-1240 Reporting Period: January 1, 2017 - December 31, 2017

Renewable Energy Certificate Retirement Report for Renewable Energy Standards and Green Pricing Programs

Report Year	2017	Date Submitted	June 1, 2018

FILING UTILITY INFORMATION		CONTACT INFORMATION	
Company ID #	68	Contact Name	David Moeller
Company Name	Minnesota Power	Contact Title	Senior Attorney
Street Address Line 1	30 W Superior St	Contact Telephone	218-723-3963 Ext. 2
Street Address Line 2		Contact E-Mail	dmoeller@allete.com
City	Duluth	COMMENTS/NOTES	
State	Minnesota		
Zip Code	55802		

Filing for **RENEWABLE ENERGY STANDARDS** on behalf of:

Utility Name	Utility Name	Utility Name	Utility Name
Minnesota Power Co.			
Aitkin Public Utilities	Pierz Utilities		
Biwabik Public Utilities	Proctor Public Utilities		
Brainerd Public Utilities	City of Randall Electric		
Buhl Public Utilities	City of Two Harbors		
City of Ely - Ely Utilities Commission	Virginia Dept. of Public Utilities		
Gilbert Water & Light			
Grand Rapids Public Utilities Commission			
Hibbing Public Utilities Commission			
Keewatin Public Utilities			
Nashwauk Public Utilities			
Mountain Iron Water & Light Dept			

Filing for **GREEN PRICING PROGRAMS** on behalf of:

Utility Name	Utility Name	Utility Name	Utility Name
Minnesota Power Co.			