2018 NEBRASKA POWER ASSOCIATION

LOAD AND CAPABILITY REPORT

August 2018

2018 Nebraska Power Association Load and Capability Report

Executive Summary

In summary, based on existing and committed resources, the statewide deficit occurs after 2037 for the Minimum Obligation as shown in Exhibit 1. The “Minimum Obligation” line is the statewide obligation based on the 50/50 forecast (normal weather) and the minimum 12% reserve margin of the Southwest Power Pool (SPP) Reserve Sharing Pool. The statewide deficit for the Minimum Obligation in the 2017 report showed a State deficit occurring after 2036. Exhibit 2 is the corresponding load and capability data in tabular format.

Introduction

This report is the Nebraska Power Association (NPA) annual load and capability report, as per Item 3 in the statute below. It provides the sum of Nebraska’s utilities peak demand forecasts and resources over a 20-year period (2018-2037).

State Statute (70-1025) Requirement

70-1025. Power supply plan; contents; filing; annual report.(1) The representative organization shall file with the board a coordinated long-range power supply plan containing the following information:(a) The identification of all electric generation plants operating or authorized for construction within the state that have a rated capacity of at least twenty-five thousand kilowatts;(b) The identification of all transmission lines located or authorized for construction within the state that have a rated capacity of at least two hundred thirty kilovolts; and(c) The identification of all additional planned electric generation and transmission requirements needed to serve estimated power supply demands within the state for a period of twenty years.(2) Beginning in 1986, the representative organization shall file with the board the coordinated long-range power supply plan specified in subsection (1) of this section, and the board shall determine the date on which such report is to be filed, except that such report shall not be required to be filed more often than biennially.(3) An annual load and capability report shall be filed with the board by the representative organization. The report shall include statewide utility load forecasts and the resources available to satisfy the loads over a twenty-year period. The annual load and capability report shall be filed on dates specified by the board. Source Laws 1981, LB 302, § 3; Laws 1986, LB 948, § 1.

Demand and Capacity Expectations

Peak Demand Forecast

The current combined statewide forecast of non-coincident peak demand is derived by summing the demand forecasts for each individual utility. Each utility supplied a peak demand forecast and a load and capability table based on the loads having a 50/50 probability of being higher or lower. Over the twenty-year period of 2018 through 2037, the average annual compounded peak demand growth rate for the State is projected at 0.40% per year (individual utility ranges

from -0.1%/yr. to 1.7%/yr.). This is the same escalation rate that was shown in last year's report for 2017 through 2036.

Planning Reserve Margin Requirement/Reserve Sharing Pool

In addition to the load requirements of the State's customers, the state utilities must also maintain reserves above their peak demand forecast ("Minimum Obligation"). This is a reserve requirement of the SPP Reserve Sharing Pool. All SPP Reserve Sharing members must maintain the specified reserve requirement in order to assist each other in the case of emergencies such as unit outages. The reserve requirement of the pool is reduced by having a reserve sharing pool, instead of individual utilities carrying the entirety of their own reserves to protect them from the loss of their largest unit on their system. The 2018 NPA L&C Report utilizes the SPP planning reserve margin of 12% for the 20 year period.

The capacity required to meet the SPP planning reserve margin is a significant resource capability over and above the Nebraska load requirement. This amount of capacity equates to 711 MW in 2018 and 775 MW by 2037.

Resources

Existing/Committed

The State has an "Existing" in-service summer accreditable generating resource capability of 7,535 MW. This is up from 7,425 MW shown in the previous report. The additions are mostly accredited new wind in Grande Prairie of 60.8 MW, a number of plant uprate changes, along with retiring Grand Island's Burdick #3.

There are 240 MW of "Committed" nameplate resources included in this report (the projects have Nebraska Power Review Board approval if required – PURPA qualifying projects do not need NPRB approval). This consists of 30 MW coming from the Kimball Wind Farm in 2018 along with 50 MW from Grand Island's Prairie Hills Wind Farm in 2020 and 160 MW from OPPD's Sholes Wind Farm also in 2019. There is also a committed 318 MW Rattlesnake Creek project and it has been publicly announced that 210 MW of this project will be purchased by Facebook and Adobe Systems when it becomes commercial in 2019. Facebook is procuring energy from Rattlesnake Creek for their data facility in Sarpy County. By 2029 Facebook will be utilizing the entire output of the project. Also, OPPD has announced plans for a 5 MW behind the meter community solar project to be operational in 2019.

Planned

"Planned" resources are units that utilities have authorized expenditures for engineering analysis, an architect/engineer, or permitting, but do not have NPRB approval-if that approval is required. There are currently no planned resources scheduled.

Studied

Resources identified as "Studied" for this report provide a perspective of future resource requirements beyond existing, committed and planned resources. For any future years when existing, committed, and planned resources would not meet a utility's Minimum Obligation, each utility establishes studied resources in a quantity to meet this deficit gap. These Studied resources are identified based on renewable, base load, intermediate, and peaking resources considering current and future needs. The result is a listing of the preferable mix of renewable, base load, intermediate and peaking resources for each year. The summation of studied resources will provide the basis for the NPRB and the state utilities to understand the forecasted future need by year and by resource type. This can be used as a joint planning document and a tool for coordinated, long-range power supply planning.

There are 651 MW of "Studied" resources that include 266 MW of nameplate renewable (wind) resources, 25 MW of base load capacity, 50 MW of intermediate capacity, and 310 MW of peaking capacity by 2037.

Committed/Planned/Studied Exhibits

Exhibit 3 shows the statewide load and capability chart considering 7,535 MW of Existing, 450 MW of Committed (nameplate), 0 MW Planned, and 651 MW of Studied resources. Some existing wind renewables are currently shown at "zero" accredited capability due to the small accreditation values allowable under SPP's Criteria (explained in next section). Exhibit 4 is the corresponding load and capability table. As intended, these exhibits show how the Minimum Obligation can be met with the addition of the studied resources.

The Committed, Planned, and Studied accredited capability resources are summarized in Exhibit 5. Exhibit 6 summarizes the Existing, Committed, Planned, and Studied renewable resources.

Non-Carbon, Renewable and Demand Side Resources

The State has 1,656 MW of commercially operating renewable nameplate resources for the peak of 2018 of which 46 MW are behind the utility meter (not net metered) as shown in Exhibit 6. Another 2 MW of committed behind the meter renewable resources could be commercial by the end of 2018 along with 30 MW of utility scale wind scheduled to be commercial in the second half of 2018. These amounts do not include any wind which may be installed by developers in Nebraska for export to load outside the state. Wind with its intermittency is relied upon by Nebraska utilities for only a small percentage of its full nameplate rating to meet peak load conditions. Correspondingly, for wind and solar the SPP has criteria to determine this specific accreditable capacity percentage. The criteria are based on actual performance of solar and wind facilities and how successfully they produce energy during actual utility peak load hours. The rating as determined by following the criteria's methodology is used as the SPP accredited rating for the facility. The accredited rating based on actual performance requires a minimum of 3 year's

history. SPP criteria allows for a 5% accreditation rating for new wind installations with less than 3 years history and 10% for solar. Even with low accredited capacity ratings, in the case of wind, wind and solar generation resources are desirable for being emission-free and having a zero fuel cost. Nebraska utilities are adding renewables to take advantage of these attributes.

Demand side resources are loads that can be reduced, shifted, turned-off or taken off the grid with the goal of lowering the overall load utilities have to serve. Ideally this load is best reduced to correspond to utilities' peak load hours. The advantage for utilities is the demand reduction will reduce the need for adding accredited generation in current or future years.

Exhibit 6.1 shows the Statewide Renewable Generation by Nameplate. Exhibit 7.1 shows the Statewide Renewable and Greenhouse Gas Mitigating Resources.

Included below are summaries of the utilities in regards to their renewable and/or sustainable goals and demand side programs.

NPPD

NPPD's Board of Directors has set a goal of 10% new renewable energy by 2020. With the inclusion of NPPD's Wholesale Customers and Retail Qualifying Local Generation (QLG), it is expected that NPPD will reach approximately 11% new renewables by 2020.

NPPD's Demand Side Management program consists of Demand Response and Energy Efficiency. NPPD presently has a successful demand response program, called the Demand Waiver Program, to reduce summer billable peaks. The majority of savings in this program are due to irrigation load control by various wholesale customers, which accounted for approximately 641 MW of demand reduction from NPPD's billable peak during the summer of 2017. Another 68 MW of demand reduction was realized from other sources.

NPPD has recently implemented a new interruptible rate, Special Power Product #8, allowing qualified large end-use customers (served by wholesale or retail) to curtail demand during NPPD specified periods.

In 2008, NPPD developed and implemented a series of energy efficiency and demand-side management initiatives under the EnergyWise^{SM} name. Annually, these programs have sought to achieve a first year savings of more than 12,000 MWh and demand reductions greater than 2 MW. Accumulated first year energy savings through 2016 are 248,500 MWh and demand reductions are 42 MW.

In addition to the renewables discussed above, NPPD owns or has agreements with these non-carbon resources:

- 555 MW of hydroelectric generation, including the Western Area Power Administration agreement.
- 770 MW of nuclear power at Cooper Nuclear Station. The output was increased by approximately 5 MW with the replacement of the high pressure turbine to a more efficient model.
- Monolith Materials has broken ground on Phase 1 of its Olive Creek Facility by Sheldon Station. This facility will produce carbon black. NPPD plans to convert the Unit 2 boiler to burn hydrogen rich tail gas after Monolith completes Phase 2 of its facility. The Monolith Materials load and the Unit 2 conversion will be included in the reporting after successful completion of Phase 1.

For 2017, non-carbon generation resources were approximately 65% of NPPD's Native Load Energy Sales from the resources discussed above. Most of the non-carbon generation is due to nuclear.

OPPD

OPPD values a diverse fuel mix for generating electricity as a means of promoting reliability and affordability of its product. OPPD recognizes renewables offer an option to maintain or expand its fuel diversity, help address environmental issues and meet customers' desire for sustainable energy.

At the close of 2017 OPPD met 33.5% of retail customer electrical energy requirements with wind energy, energy from landfill gas and hydro energy. OPPD's renewable portfolio at 2017 year-end consisted of 811.7 MW of wind by nameplate, 6.3 MW of landfill gas generation as well as purchased hydro power.

The Sholes wind facility located in Wayne County, Nebraska has an anticipated commercial operation date of July 2019. OPPD will be taking the full amount of energy from Sholes. With 971.7 MW of wind in OPPD's portfolio, OPPD will be utilizing renewable energy at levels to continue meeting OPPD's environmental stewardship strategic directive on renewable contributions towards retail sales.

OPPD's demand side resource programs can achieve over 100 MW of peak load reduction ability as of the summer of 2018. Existing programs consist of a customer air conditioner management program, thermostat control, lighting incentive programs, and various innovative energy efficiency projects. Additionally, OPPD can reduce its demand with assistance from a number of large customers who utilize OPPD's curtailable rate options. During summer peak days, any demand reductions from these customers are coordinated with OPPD in advance of the peak afternoon hours.

Demand side resource programs have enjoyed the support of OPPD stakeholders. OPPD will continue to grow its demand side programs in the next 10 years. Benefits of this increase in demand side programs include helping OPPD to maintain its SPP reserve requirements. To grow its demand side resource portfolio, OPPD will increase existing programs and promote additional program

types. OPPD will build its demand side resource portfolio in manners which are cost effective and take into account customer expectations.

OPPD makes available a net-metering rate to all consumers that have a qualified generator. The qualified generator must be interconnected behind the consumer's service meter located on their premises and may consist of one or more sources as long as the aggregate nameplate capacity of all generators is 25 kW or less. The qualified generator must use as its energy source methane, wind, solar, biomass, hydropower or geothermal.

MEAN

As a member driven and member owned utility, MEAN procures renewable energy assets at the behest of its owners. MEAN annually surveys its owners to determine individual goals for renewable energy requirements. Should there be significant changes in demand for renewable energy, MEAN would ask the Board to approve new renewable purchases. Currently, MEAN has enough renewable generation to satisfy owner demand, with additional energy to satisfy any future demand in the nearer term. As such, MEAN has exceeded self-established goals for renewable energy, where individual municipal utilities have renewable goals that can range from 0% to 100% of energy requirements. In serving the needs of its customers, MEAN's current resource portfolio includes 10% renewables and 32% WAPA hydro allocations.

In 2018, MEAN anticipates a further increase in its renewable energy portfolio. While MEAN's 10.5 MW wind project near Kimball, NE was decommissioned in 2017, a new 30 MW wind farm is currently being constructed at the same Kimball site. MEAN has entered into a PPA to purchase the entirety of the energy generation of the wind farm. The new wind farm was originally scheduled for commercial operation at the end of 2017, but will now come online in the second half of 2018.

MEAN is currently looking into community solar garden type installations to satisfy community demands for localized green initiatives. MEAN is currently in the process of talking with interested communities and is also initiating a project to consider and analyze feasible solar projects, including both utility owned or community owned.

MEAN recently established a committee to focus on the integration of renewable resources within member communities. The increasing presence of renewable distributed generation offers unique opportunities that can benefit both MEAN and local residents. In 2017, MEAN revised its Renewable Distributed Generation policy. The new policy limitations increased the size of allowable community owned and locally-sited renewable energy resources.

MEAN submitted its five-year Integrated Resource Plan (IRP) to WAPA in October 2017. The results of the IRP analysis and modeling favored a plan that would meet

future MEAN capacity and energy needs by incorporating additional renewable resources into the portfolio. Renewable resource portfolios offered comparatively low costs in several scenarios as well as the potential to create local benefits for MEAN communities.

MEAN has utilized a variety of demand side management tools to help reduce load and energy requirements. MEAN presently administers an ENERGYsmart commercial LED lighting program, which includes cash incentives paid directly to commercial customers to help cover the cost of lighting upgrades and replacements. This program is available to commercial businesses of MEAN long-term power participants. Incentives are allocated in the order that applications are received and approved and will be continued until the annual limit of $75,000 is exhausted. MEAN continues to look for new ways to incent energy efficiency for its member communities to help reduce power obligations from MEAN.

LES

The LES Administrative Board adopted a five-year sustainability target in late 2011, seeking to meet LES' projected demand growth with renewable generation and demand-side management programs. The five-year projected demand growth is derived from LES' annual long-range load forecasts.

Based on the 2017 forecast, the projected total demand growth through 2022 is 36 MW. LES has 102 MW of sustainable generation and demand reduction resources planned through the end of the current five-year target period. Future projects primarily consist of anticipated increases in the accredited capacity ratings of new wind facilities and the continuation of LES' demand-side management portfolio; the Sustainable Energy Program (SEP).

The SEP, originally started in 2009, was extended under an action item from LES' 2017 Integrated Resource Plan. Other decisions from the IRP included execution of a new 30-year agreement to continue LES' hydroelectric contract with the Western Area Power Administration, as well as the launch of a new summer demand response program in 2018. The demand response program will use residential customers' own smart thermostats to pre-cool spaces prior to the initiation of an LES controlled event, allowing for a reduction in peak demand while still maintaining residential comfort.

LES has two programs that support customers wishing to pursue their own renewable generation. Under LES' net-metering rate rider, customers can install a 25-kW or smaller renewable generator to serve their homes or small businesses. LES also has a renewable generation rate for customers interested in generating and selling all output to the utility rather than serving a home or small business. Systems greater than 25 kW up to 100 kW will qualify for this rate. In addition, customers under each rate will also receive a one-time capacity payment based on the value of the avoided generating capacity on system peak.

The energy payment amount for new installations is based on LES' existing retail rates and is scheduled to be reduced as predetermined, total service area renewable-installation thresholds are met over time. In early 2017, LES reached this first milestone, with applications exceeding 1 MW.

In August 2014, LES launched the SunShares program, allowing customers to voluntarily support a local community solar project through their monthly bill. This program led to LES contracting for a local, approximately 5-MWDC/4-MWAC solar facility, which began commercial operation in June 2016. The facility represents the first utility-scale solar project in Nebraska, and is one of the largest projects in the region. A dedication of the facility was held in September 2016 with site tours for LES customers and employees.

In conjunction with the dedication, LES formally announced a new virtual net metering program. As part of this program, in exchange for a one-time, upfront enrollment fee, customers receive a credit on their monthly bill based on their level of enrollment and the actual output of the facility. Enrollment began in December 2016, with the first credits appearing on bills in January 2017. The program will run for nearly 20 years, coinciding with the life of the solar project contract.

The new solar facility further enhances LES' already diverse and balanced portfolio. On a nameplate basis, approximately one-third of LES' resources are fueled by coal, one-third fueled from natural gas, and one-third are renewables (primarily wind and hydro). LES believes this diversity and balance in its resource portfolio are beneficial as they may provide a hedge against future environmental regulations and volatility in fuel prices. In 2018, energy production from renewable sources is expected to be equivalent to 47 percent of LES' retail sales.

Hastings Utilities

Hastings Utilities has no formal renewable energy goals but will monitor the economics and interest of renewable energy. Hastings Utilities will work with customers who are interested in pursuing renewable energy to find mutual benefit for a successful project. Hastings Utilities worked with our customer, Central Community College, to implement a 1.7 MW wind turbine on the Hastings CCC campus.

City of Grand Island Utilities

Grand Island does not have any formal renewable/sustainable goals. The Grand Island City Council has directed the Utilities Department to explore opportunities as they develop. Last year, Grand Island Utilities signed a Power Purchase Agreement with Sempra for the full output (50 MW) of Prairie Hills Wind Farm in Custer County, NE. This wind farm is currently expected to be online by the end of 2020.

Grand Island Utilities approved its first small scale residential solar installation in 2015. Changes were made to City Code to accommodate demand side resources with an expectation that more resources will follow. Since then, several more small scale residential solar generators have been installed.

Grand Island Utilities signed a Power Purchase Agreement for a 1 MW behind the meter solar installation with Sol Systems to be completed by the end of 2018.

City of Fremont Utilities

In the fall of 2016, Fremont signed a Purchase Power Agreement with NextEra for 40.89 MW of wind energy from the Cottonwood Wind Farm in Webster County, NE. Fremont is offering residents two options on a solar project. Electric customers can either purchase their own solar panels or purchase solar shares from Fremont's first Community Solar Farm of approximately 1 MW in size. A second phase will be ~1 MW and completed in October 2018. Electric customers will once again be allowed to own the solar panels or purchase shares.

Distributed Generation

Distributed generation is providing wholesale and retail power suppliers numerous new opportunities to interface with customers. Power purchase agreements with smaller wind developers are available to retail power suppliers in the magnitude of 1.5 to 10 MW. This is occurring due to agreements between the wholesale power suppliers and the retail power suppliers. These agreements allow for a portion of the retail power supplier's energy requirements to come from private renewable energy developers that are located behind the wholesale power supplier's meter.

Next, with the decline in the cost of solar installations, the continuation of tax benefits and net metering rates, retail customers are installing small scale solar arrays. As these installations prove more cost effective and with the development of small energy storage more of these installations are being constructed. These installations are being installed in both rural and residential applications. Also, larger solar array installations that are not eligible for net metering rates are being considered and installed. Many of these arrays are community solar projects. Lincoln Electric System contracted with a developer to install a 5 MW DC (4 MW AC) array where individuals can purchase shares. NPPD has retail communities interested in developing community solar array installations in sizes from just less than 100 kW to 5.7 MW AC. OPPD has announced plans for a community solar facility sized at 5 MW which will become operational by June 30, 2019. Therefore, more private involvement with local utilities is providing additional opportunities to increase the utilization of renewable energy.

Exhibit 6 lists all of the Nebraska renewable resources, with two columns identifying whether the resource is "Behind the Meter – Utility" or "Behind the Meter – Non Utility". Behind the Meter – Utility resources are those who have a signed Power Purchase

contract or are owned by the utility. Exhibit 6A shows just Behind the Meter renewable resources, again classified between utility and non-utility.

Resource Life Considerations

The Nuclear Regulatory Commission (NRC) determined in August 2014 that a new rule making was not required and confirmed that existing license renewals, where granted, provided a robust framework for second license renewals beyond the initial 20-year renewal term. In addition, no changes are needed to environmental regulations to allow for future license renewal activities.

Cooper Nuclear Station's (CNS) operating license is set to expire January 18, 2034. Although NPPD has not fully studied a second operating license renewal, for purposes of this report, it is assumed CNS will continue to operate through 2037.

NPPD's listed North Platte and Columbus hydro facilities operate under a Federal Energy Regulatory Commission license. The North Platte facility is presently operating under a 40 year license, with the license requiring renewal in 2038. The Columbus Hydro facility received a new 30 year operating license, with the license requiring renewal in 2047. Given the focus on carbon free generation resources NPPD and Loup are assuming these facilities will continue to be maintained and licensed and will remain an essential part of NPPD's generation mix for an extended period of time.

The wind farms included in this report are shown at the life listed in the various power purchase agreements (PPA), usually 20 or 25 years. Most agreements have an option for life extension. Utilities will decide whether to exercise those options when the PPAs near their end. In order for those utilities to maintain their renewable goals these utilities will have to either exercise those options or develop other renewable resources.

Nebraska's existing generator capability resources are listed by unit in Exhibit 7. Nebraska has 7,535 MW of existing resources. 1130 MW or 15% of that total are greater than 50 years old today. Another 1,395 MW or 18% are 41 to 50 years old today. Most of these units have no planned retirement date. By 2037 approximately 2526 MW will reach 60 years of age in this 20 year study.

Although Nebraska has sufficient generating resources until beyond 2037 as shown in Exhibits 1 & 2, utilities may face increased environmental restrictions that could require the retirement of older fossil units. This could advance the statewide need date several years earlier.

For illustration purposes only, if a 60 year in-service life for fossil units is arbitrarily chosen the state would show a deficit in 2023, while a 70 year life of plant would show a state deficit in 2031.This example is considered overly conservative since fossil units are

capable of operating for more than 60 - 70 years. Each utility will make their own determination on the life of their generating plants taking into account many factors, including economic. At this time, there are no plans to retire these older units unless stated in the report.

EXHIBIT 1
Statewide Capability vs. Obligation
Committed Resources (Includes Purchases and Sales)

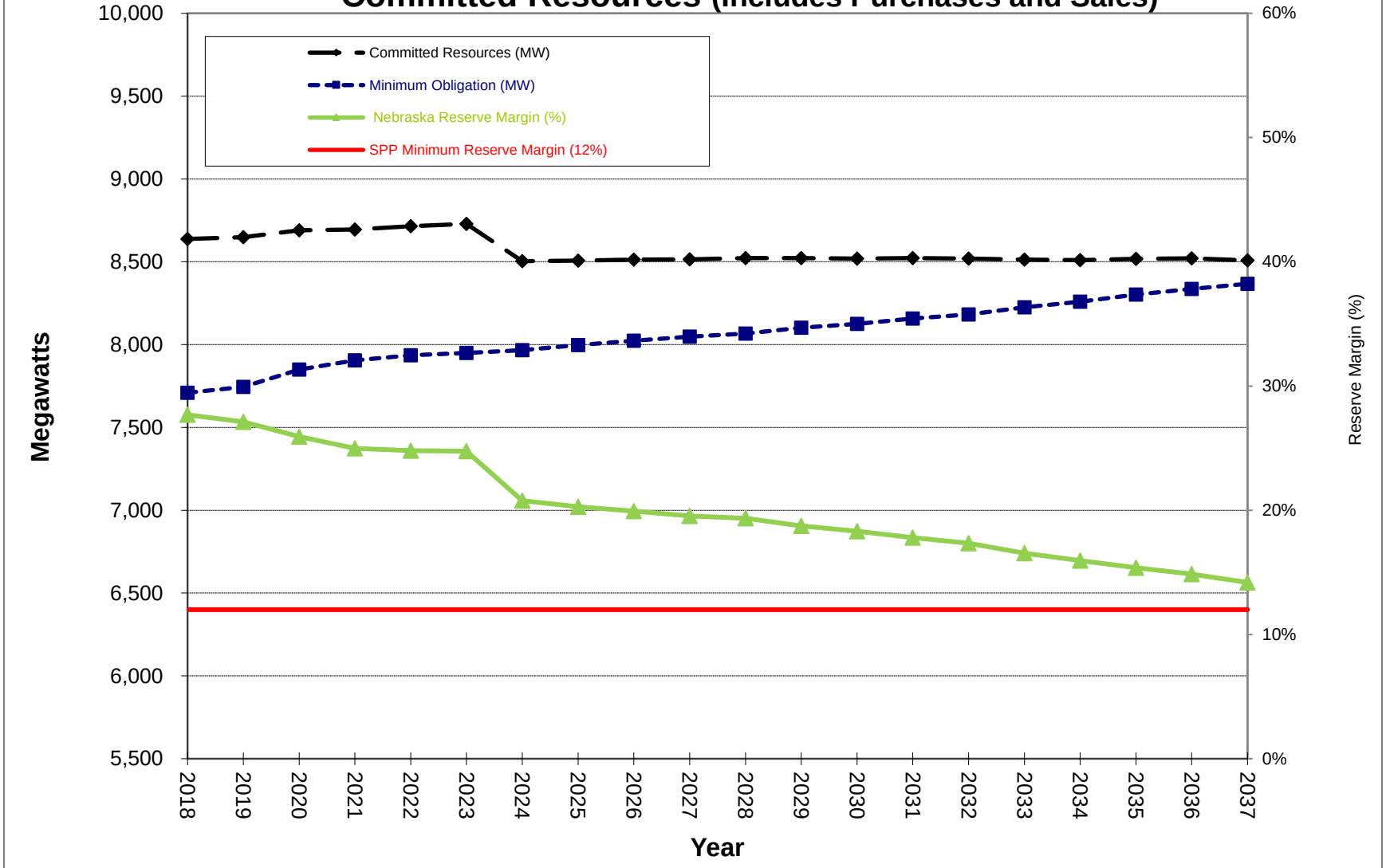

EXHIBIT 2

NEBRASKA STATEWIDE

Committed Load & Generating Capability in Megawatts

Summer Conditions (June 1 to September 30)

Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	
1 Annual System Demand	6,998	7,028	7,123	7,176	7,205	7,217	7,232	7,260	7,283	7,305	7,322	7,354	7,375	7,404	7,426	7,465	7,495	7,534	7,565	7,593	0.4%
2 Firm Power Purchases - Total	1,217	1,206	1,188	1,196	1,193	1,187	1,189	1,191	1,193	1,195	1,197	1,199	1,201	1,203	1,205	1,207	1,209	1,210	1,212	1,214	
3 Firm Power Sales - Total	148	152	110	95	77	77	77	77	77	77	77	77	78	78	78	78	78	78	78	78	
4 Annual Net Peak Demand (1-2+3)	5,928	5,974	6,045	6,076	6,089	6,107	6,120	6,146	6,167	6,187	6,202	6,232	6,251	6,279	6,299	6,336	6,364	6,401	6,430	6,456	
5 Net Generating Capability (owned)	7,535	7,538	7,589	7,588	7,614	7,614	7,292	7,292	7,291	7,290	7,290	7,290	7,286	7,286	7,275	7,266	7,260	7,260	7,260	7,245	
6 Firm Capacity Purchases -Total	884	888	897	925	899	913	950	840	844	844	850	848	843	844	849	850	845	851	852	853	
7 Firm Capacity Sales -Total	850	832	874	918	914	907	850	739	739	738	738	738	733	733	732	732	726	726	726	725	
8 Adjusted Net Capability (5+6-7)	7,569	7,594	7,612	7,594	7,599	7,619	7,391	7,392	7,396	7,396	7,402	7,400	7,396	7,397	7,392	7,384	7,379	7,385	7,386	7,372	
9 Net Reserve Capacity Obligation (4 x 0.12)	711	717	725	729	731	733	734	738	740	742	744	748	750	753	756	760	764	768	772	775	
10 Total Firm Capacity Obligation (4+9)	6,639	6,691	6,770	6,805	6,820	6,840	6,854	6,884	6,907	6,929	6,946	6,980	7,001	7,032	7,055	7,096	7,128	7,169	7,202	7,231	
11 Surplus or Deficit (-) Capacity @ Minimum Obligation (8-10)	930	903	842	789	779	779	537	508	489	467	456	420	395	365	337	288	251	216	184	141	
12 Nebraska Reserve Margin ((8-4)/4)	27.7%	27.1%	25.9%	25.0%	24.8%	24.8%	20.8%	20.3%	19.9%	19.5%	19.3%	18.7%	18.3%	17.8%	17.4%	16.5%	15.9%	15.4%	14.9%	14.2%	
13 Nebraska Capacity Margin ((8-4)/8)	21.7%	21.3%	20.6%	20.0%	19.9%	19.8%	17.2%	16.9%	16.6%	16.3%	16.2%	15.8%	15.5%	15.1%	14.8%	14.2%	13.8%	13.3%	12.9%	12.4%	
Committed Resources (MW) (8+2-3)	8,638	8,649	8,690	8,695	8,715	8,729	8,504	8,506	8,512	8,514	8,523	8,523	8,519	8,522	8,519	8,513	8,509	8,517	8,520	8,509	
Minimum Obligation (MW) (1+9)	7,709	7,745	7,849	7,905	7,936	7,950	7,967	7,998	8,023	8,048	8,066	8,102	8,125	8,158	8,182	8,225	8,258	8,302	8,336	8,367	

EXHIBIT 3
Statewide Capability vs. Obligation
Committed, Planned & Studied Resources (Includes Purchases and Sales)

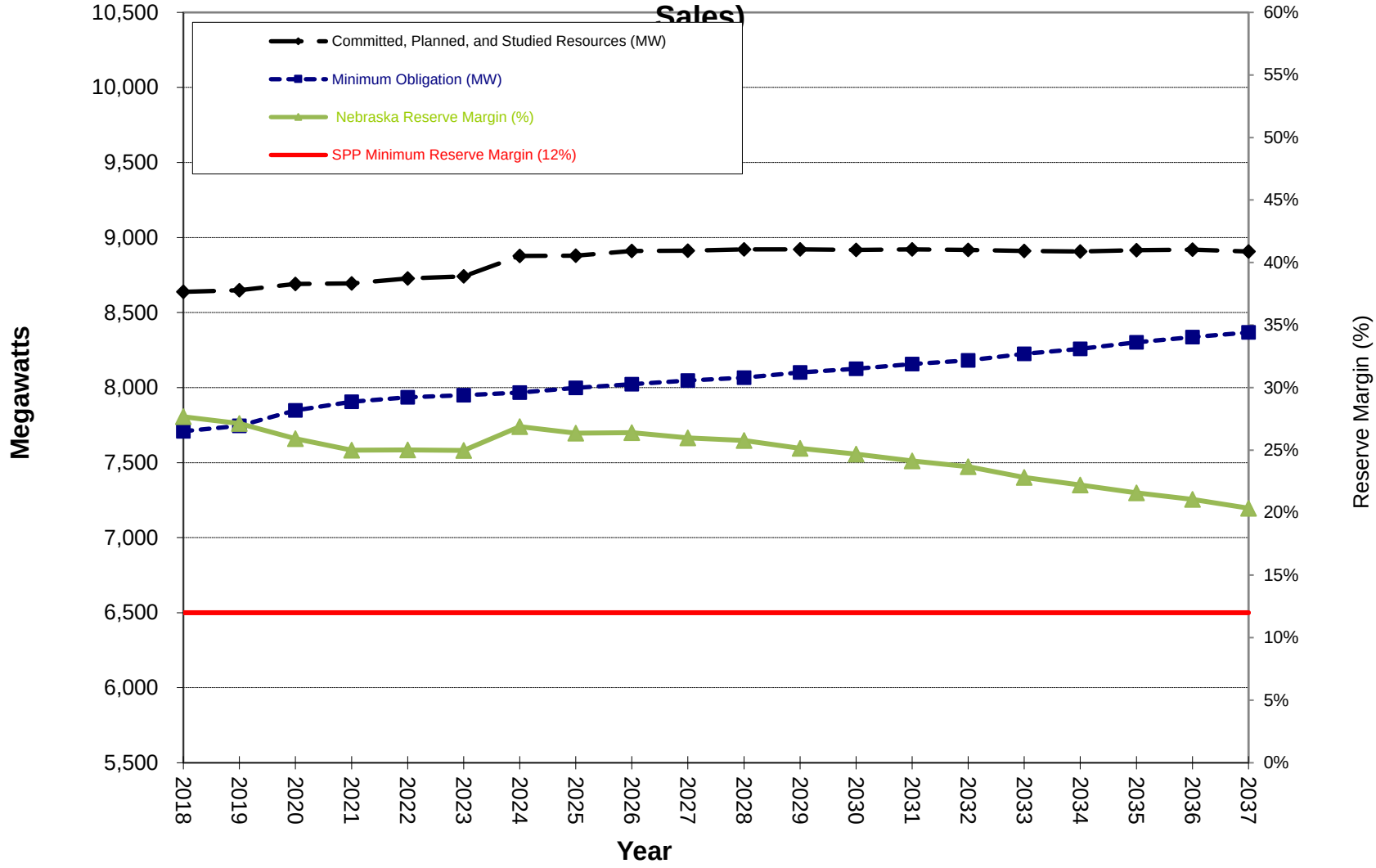

EXHIBIT 4

NEBRASKA STATEWIDE

Committed, Planned & Studied Load & Generating Capability in Megawatts

Summer Conditions (June 1 to September 30)

Year	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
1 Annual System Demand	6,998	7,028	7,123	7,176	7,205	7,217	7,232	7,260	7,283	7,305	7,322	7,354	7,375	7,404	7,426	7,465	7,495	7,534	7,565	7,593
2 Firm Power Purchases - Total	1,217	1,206	1,188	1,196	1,193	1,187	1,189	1,191	1,193	1,195	1,197	1,199	1,201	1,203	1,205	1,207	1,209	1,210	1,212	1,214
3 Firm Power Sales - Total	148	152	110	95	77	77	77	77	77	77	77	77	78	78	78	78	78	78	78	78
4 Annual Net Peak Demand (1-2+3)	5,928	5,974	6,045	6,076	6,089	6,107	6,120	6,146	6,167	6,187	6,202	6,232	6,251	6,279	6,299	6,336	6,364	6,401	6,430	6,456
5 Net Generating Capability (owned)	7,535	7,538	7,589	7,588	7,627	7,627	7,665	7,665	7,690	7,688	7,688	7,688	7,684	7,684	7,673	7,664	7,658	7,658	7,658	7,643
6 Firm Capacity Purchases -Total	884	888	897	925	899	913	950	840	844	844	850	848	843	844	849	850	845	851	852	853
7 Firm Capacity Sales -Total	850	832	874	918	914	907	850	739	739	738	738	738	733	733	732	732	726	726	726	725
8 Adjusted Net Capability (5+6-7)	7,569	7,594	7,612	7,594	7,612	7,632	7,765	7,766	7,795	7,794	7,801	7,799	7,794	7,795	7,790	7,782	7,777	7,783	7,784	7,771
9 Net Reserve Capacity Obligation (4 x 0.12)	711	717	725	729	731	733	734	738	740	742	744	748	750	753	756	760	764	768	772	775
10 Total Firm Capacity Obligation (4+9)	6,640	6,691	6,771	6,805	6,820	6,840	6,854	6,884	6,907	6,930	6,946	6,979	7,001	7,032	7,055	7,096	7,128	7,169	7,202	7,231
11 Surplus or Deficit (-) Capacity @ Minimum Obligation (8-10)	929	903	842	790	792	792	910	882	888	865	854	819	793	763	736	686	649	614	582	540
12 Nebraska Reserve Margin ((8-4)/4)	27.7%	27.1%	25.9%	25.0%	25.0%	25.0%	26.9%	26.4%	26.4%	26.0%	25.8%	25.2%	24.7%	24.1%	23.7%	22.8%	22.2%	21.6%	21.1%	20.4%
13 Nebraska Capacity Margin ((8-4)/8)	21.7%	21.3%	20.6%	20.0%	20.0%	20.0%	21.2%	20.9%	20.9%	20.6%	20.5%	20.1%	19.8%	19.4%	19.1%	18.6%	18.2%	17.8%	17.4%	16.9%
Committed, Planned and Studied Resources (MW) (8+2-3)	8,638	8,649	8,690	8,695	8,728	8,742	8,877	8,880	8,911	8,913	8,921	8,921	8,917	8,920	8,917	8,911	8,908	8,916	8,919	8,907
Minimum Obligation (MW) (1+9)	7,709	7,745	7,849	7,905	7,936	7,950	7,967	7,998	8,023	8,048	8,066	8,102	8,125	8,158	8,182	8,225	8,258	8,302	8,336	8,367

EXHIBIT 5

Committed, Planned and Studied Resources, MW

Utility	Unit Name	New Existing	Committed	Planned	Studied	Duty Cycle	Unit Type	Fuel Type	Behind Meter	Capacity, Thermal Units	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Fremont	Future Base				S	B		NG		25.0	0	0	0	0	0	0	0	0	25	25	25	25	25	25	25	25	25	25	25	25
	Future Use										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fremont	**Total**									25.0	0	0	0	0	0	0	0	0	25	25	25	25	25	25	25	25	25	25	25	25
Grand Island	Prairie Hills Wind Farm		C			R	R	W			0	0.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
Grand Island	**Total**									0.0	0	0	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
Hastings	Future Use										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hastings	**Total**										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LES	Future Peak					P				0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LES	**Total**									0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Towns and Districts	S. Sioux City Green Start Gasifier		C			R		OBG	Y	3.0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	Superior Solar		C			R		S	Y	1.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Future Use										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Towns and Districts	**Total**									4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
MEAN	Falls City #9	E				P				9.3	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
	Future Intermediate				S	I				50.0	0	0	0	0	0	0	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	Future Base					B				0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Kimball Wind LLC		C			R		W		0.0	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
MEAN	**Total**									59.3	39.3	39.3	39.3	39.3	39.3	39.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3
NPPD	Southern NE RPPD Wind		C			R	R	W	Y		0	0	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
	Fairmont Area Wind Farm	E				R	R	W	Y		6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
	Future Renewable					R	R	W			0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Future Peak					P				0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Future Intermediate					I				0.0	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Future Base					B					0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NPPD	**Total**									0.0	7	7	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
OPPD	Sholes Wind		C			R	R	W			0	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160
	OPPD Community Solar		C			R	R	S	Y	5.0	0	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	Future Base					B				0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Future Peak				S	P				310.0	0	0	0	0	0	0	310	310	310	310	310	310	310	310	310	310	310	310	310	310
	Future Intermediate					I				0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Future Renewable				S	R	R	W			0	0	0	0	266	266	266	266	266	266	266	266	266	266	266	266	266	266	266	266
OPPD	**Total**									315.0	0	165	165	165	431	431	741	741	741	741	741	741	741	741	741	741	741	741	741	741
	Nebraska Grand Total									399	46	211	270	270	536	536	896	896	921	921	921	921	921	921	921	921	921	921	921	921

Unit Type	Fuel type
H-Hydro	HS-Run of River
D-Diesel	NG-Natural Gas
N-Nuclear	O-Oil
CT-Combustion Turbine	Coal-Coal
CC-Combined Cycle	HR-Reservoir
C-Pulverized Coal	UR-Uranium
R-Renewable	Wind-Wind
	L-Landfill Gas
	S-Solar
	OBG-Other Biomass Gas

No Behind Meter Resources Included

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
New Existing	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
Committed	30	190	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240
Planned	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Planned Renewable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Future Renewable	0	0	0	0	266	266	266	266	266	266	266	266	266	266	266	266	266	266	266	266
Future Peak	0	0	0	0	0	0	310	310	310	310	310	310	310	310	310	310	310	310	310	310
Future Intermediate	0	0	0	0	0	0	50	50	50	50	50	50	50	50	50	50	50	50	50	50
Future Base	0	0	0	0	0	0	0	0	25	25	25	25	25	25	25	25	25	25	25	25
TOTAL	39	199	249	249	515	515	875	875.3	900	900.3	900.3	900	900.3	900.3	900.3	900.3	900.3	900.3	900.3	900

EXHIBIT 6

Renewable Resources

NPA Members : Enter Accredited % of Nameplate for Current Study Year in Box to the Right.

Utility	Unit Name	Existing	Committed	Planned	Studied	Unit Type	Behind Meter-Utility	Behind Meter-Non Utility	Fuel Type	Nameplate, Yearly Values are Nameplate	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Beatrice	Cottonwood Wind Farm Bea	E				R			Wind	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1
Fremont	Cottonwood Wind Farm	E				R			Wind	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9	40.9
Fremont	Fremont Solar	E				R	Y		S	1.4	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36
Grand Is	Prairie Breeze 3 Wind	E				R			Wind	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8	35.8
Grand Is	*Prairie Hills Wind Farm		C			R			Wind	50.0	0	0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0	50.0
Grand Is	Grand Island Solar		C			R	Y		S	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Hastings	CCC Hastings Wind	E				R	Y		Wind	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
LES	LES Wind Turbines	E				R	Y		Wind	1.3	1.32	1.3	1.3	1.3	1.3	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LES	Landfill Gas	E				R			L	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8
LES	Arbuckle Mtn. Wind	E				R			Wind	100.0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0
LES	Buckeye Wind	E				R			Wind	100.2	100.2	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
LES	Prairie Breeze 2 Wind	E				R			Wind	73.4	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73
LES	LES Community Solar	E				R	Y		S	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
MEAN	*Kimball Wind		C			R			Wind	30.0	30.0	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
NNPPD	Cottonwood Wind NNPPD	E				R			Wind	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5
NPPD	Ainsworth Wind	E				R			Wind	59.4	59.4	59	59	59	59	59	59	59	0	0	0	0	0	0	0	0	0	0	0
NPPD	Elkhorn Ridge Wind	E				R			Wind	80.0	80	80	80	80	80	80	80	80	80	80	80	0	0	0	0	0	0	0	0
NPPD	Laredo Ridge Wind	E				R			Wind	80.0	80	80	80	80	80	80	80	80	80	80	80	80	80	0	0	0	0	0	0
NPPD	Springview Wind	E				R			Wind	3.0	3	3	3	3	3	3	3	3	3	3	3	3	3	0	0	0	0	0	0
NPPD	Broken Bow Wind	E				R			Wind	80.0	80	80	80	80	80	80	80	80	80	80	80	80	80	0	0	0	0	0	0
NPPD	Broken Bow II Wind	E				R			Wind	73.1	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73
NPPD	Crofton Bluffs Wind	E				R			Wind	42.0	42	42	42	42	42	42	42	42	42	42	42	42	42	0	0	0	0	0	0
NPPD	Steele Flats Wind	E				R			Wind	75.0	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75
NPPD	Future Renewable				S	R			Wind	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NPPD	Loup Creston Ridge (#1)	E				R	Y		Wind	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
NPPD	Loup Creston Ridge (#2)	E				R	Y		Wind	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
NPPD	Southern PPD Wind		C			R	Y		Wind	9.2	0	0	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
NPPD	Scottsbluff Community Solar	E				R	Y		S	0.1	0.128	0.128	0.128	0.128	0.128	0.128	0.128	0.128	0.128	0.128	0.128	0.128	0.128	0.128	0.128	0.128	0.128	0.128	0.128
NPPD	Venango Community Solar	E				R	Y		S	0.1	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096
NPPD	Kearney Community Solar	E				R	Y		S	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
NPPD	City of Central City Solar Park	E				R	Y		S	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
NPPD	City of Central City Solar Park (2)	E				R	Y		S	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
NPPD	City of Gothenburg Solar	E				R	Y		S	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NPPD	City of Holdrege Housing Proj Solar	E				R	Y		S	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NPPD	City of Lexington Solar	E				R	Y		S	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
NPPD	City of Seward Wind	E				R	Y		Wind	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
NPPD	Custer PPD - Sterner Solar	E				R	Y		S	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NPPD	Custer PPD - Sunny Delight Solar	E				R	Y		S	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
NPPD	Custer PPD - Blowers Solar	E				R	Y		S	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
NPPD	Custer PPD - JDRM LLC Solar	E				R	Y		S	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
NPPD	Custer PPD - B&R LLC Solar	E				R	Y		S	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
NPPD	Custer PPD - Pandorf Solar	E				R	Y		S	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
NPPD	Dawson PPD - Willow Island Solar	E				R	Y		S	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
NPPD	Aurora Water Treatment Solar	E				R	Y		S	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NPPD	Fairmont Area Wind Farm	E				R	Y		Wind	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
NELIGH	Neligh	E				R			BD	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
OPPD	Elk City Landfill	E				R			L	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3
OPPD	Flat Water Wind	E				R			Wind	60.0	60	60	60	60	60	60	60	60	60	60	60	60	60	0	0	0	0	0	0	0
OPPD	Petersburg Wind	E				R			Wind	40.5	40.5	41	41	41	41	41	41	41	41	41	41	41	41	0	0	0	0	0	0	0
OPPD	Prairie Breeze Wind	E				R			Wind	200.6	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201
OPPD	Grande Prairie Wind	E				R			Wind	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	0
OPPD	Sholes Wind		C			R			Wind	160	0	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160
OPPD	*Rattlesnake Creek Wind		C			R			Wind	210	0	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210
OPPD	OPPD Community Solar		C			R	Y		S	5	0	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
OPPD	Future Renewable				S	R			Wind	264	0	0	0	0	266	266	266	266	266	266	266	266	266	266	266	266	266	266	266	266
SSC	Cottonwood Wind SSC	E				R			Wind	16	15.6	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
SSC	Green Star Gasifier		C			R		Y	OBG	3	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
SSC	South Sioux City Solar	E				R	Y		S	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0
Superior	Superior Solar		C			R	Y		S	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
	Nebraska Grand Total									2389.9	1688	2066	2126	2126	2392	2392	2392	2390	2331	2331	2331	2251	2251	2111	1945	1945	1945	1945	1845	1442

Unit Type	Fuel type
R-Renewable	Wind-Wind
	L-Landfill Gas
	BD-Biodiesel
	S-Solar
	OBG-Other Biomass Gas

E, C, P & S totals do not include BTM

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Existing	1610	1610	1610	1610	1610	1610	1610	1610	1551	1551	1551	1471	1471	1331	1165	1165	1165	1165	1065	665
Committed	30	400	450	450	450	450	450	450	450	450	450	450	450	450	450	450	450	450	450	450
Planned	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Studied	0	0	0	0	266	266	266	266	266	266	266	266	266	266	266	266	266	266	266	266
TOTAL	1640	2010	2060	2060	2326	2326	2326	2326	2267	2267	2267	2187	2187	2047	1881	1881	1881	1881	1781	1381

* See report for additional information

EXHIBIT 6A

Behind Meter Resources

Utility	Unit Name	Existing	Committed	Planned	Studied	Unit Type	Behind Meter - Utility	Behind Meter - Non Utility	Fuel Type	Nameplate, Yearly Values are Nameplate	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Fremont	Fremont Solar	E				R	Y		S	1.4	1.36	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Grand Island	Grand Island Solar		C			R	Y		S	1.0	1.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hastings	Hastings CCC Wind	E				R	Y		Wind	1.7	1.7	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
LES	LES Wind Turbines	E				R	Y		Wind	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LES	LES Community Solar	E				R	Y		S	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
LES	LES Service Center Solar	E				R		Y	S	0.05	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LES	University Nebraska Lincoln	E				R		Y	S	0.036	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
LES	Novartis	E				R		Y	S	0.002	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LES	Sandhills Publishing	E				R		Y	S	0.003	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LES	Lincoln Police Station	E				R		Y	S	0.010	0.010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LES	EZ Go, 1	E				R		Y	Wind	0.0004	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LES	EZ Go, 2	E				R		Y	Wind	0.0004	0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LES	1900 Saltillo Road	E				R		Y	S	0.100	0.100	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LES	Data Security Inc.	E				R		Y	S	0.099	0.099	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LES	Empyrean Brewing Co	E				R		Y	S	0.099	0.099	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LES	Lazlo Inc.	E				R		Y	S	0.094	0.094	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
LES	Theresa Street Digester	E				R		Y	OBG	0.900	0.900	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
LES	Capitol Beach Comm Solar	E				R		Y	S	0.050	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NPPD	Creston Ridge Wind	E				R	Y		Wind	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
NPPD	Loup Creston Ridge (#2)	E				R	Y		Wind	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
NPPD	Southern PPD Wind		C			R	Y		Wind	9.2	0	0	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
NPPD	Scottsbluff Community Solar	E				R	Y		S	0.1	0.128	0.128	0.128	0.128	0.128	0.128	0.128	0.128	0.128	0.128	0.128	0.128	0.128	0.128	0.128	0.128	0.128	0.128	0.128	0.128
NPPD	Venango Community Solar	E				R	Y		S	0.1	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096
NPPD	Kearney Community Solar	E				R	Y		S	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
NPPD	City of Central City Solar Park	E				R	Y		S	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
NPPD	City of Central City Solar Park (2)	E				R	Y		S	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
NPPD	City of Gothenburg Solar	E				R	Y		S	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NPPD	City of Holdrege Housing Proj Solar	E				R	Y		S	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NPPD	City of Lexington Solar	E				R	Y		S	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
NPPD	City of Seward Wind	E				R	Y		Wind	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
NPPD	Custer PPD - Sterner Solar	E				R	Y		S	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NPPD	Custer PPD - Sunny Delight Solar	E				R	Y		S	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
NPPD	Custer PPD - Blowers Solar	E				R	Y		S	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
NPPD	Custer PPD - JDRM LLC Solar	E				R	Y		S	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
NPPD	Custer PPD - B&R LLC Solar	E				R	Y		S	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
NPPD	Custer PPD - Pandorf Solar	E				R	Y		S	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
NPPD	Dawson PPD - Willow Island Solar	E				R	Y		S	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
NPPD	Aurora Water Treatment Solar		C			R	Y		S	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
NPPD	Fairmont Area Wind Farm	E				R	Y		Wind	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
OPPD	OPPD Community Solar		C			R	Y		S	5.0	0	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
SSC	Green Star Gasifier		C			R		Y	OBG	3.0	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
SSC	South Sioux City Solar	E				R	Y		S	2.0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Superior	Superior Solar		C			R	Y		S	1.0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	BTM Nebraska Grand Total									66.7	49	58	67	67	67	67	67	65	65	65	65	65	65	65	65	65	65	65	65	65

Unit Type	Fuel type
R-Renewable	Wind-Wind
	L-Landfill Gas
	BD-Biodiesel
	S-Solar
	OBG - Other Biomass Gas, including digester

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Existing	47	47	47	47	47	47	47	46	46	46	46	46	46	46	46	46	46	46	46	46
Committed	3	11	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Planned	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Studied	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	49	58	67	67	67	67	67	65	65	65	65	65	65	65	65	65	65	65	65	65

EXHIBIT 6.1
Statewide Renewable (Wind, Landfill, Solar and Biofuels) Generation by Nameplate

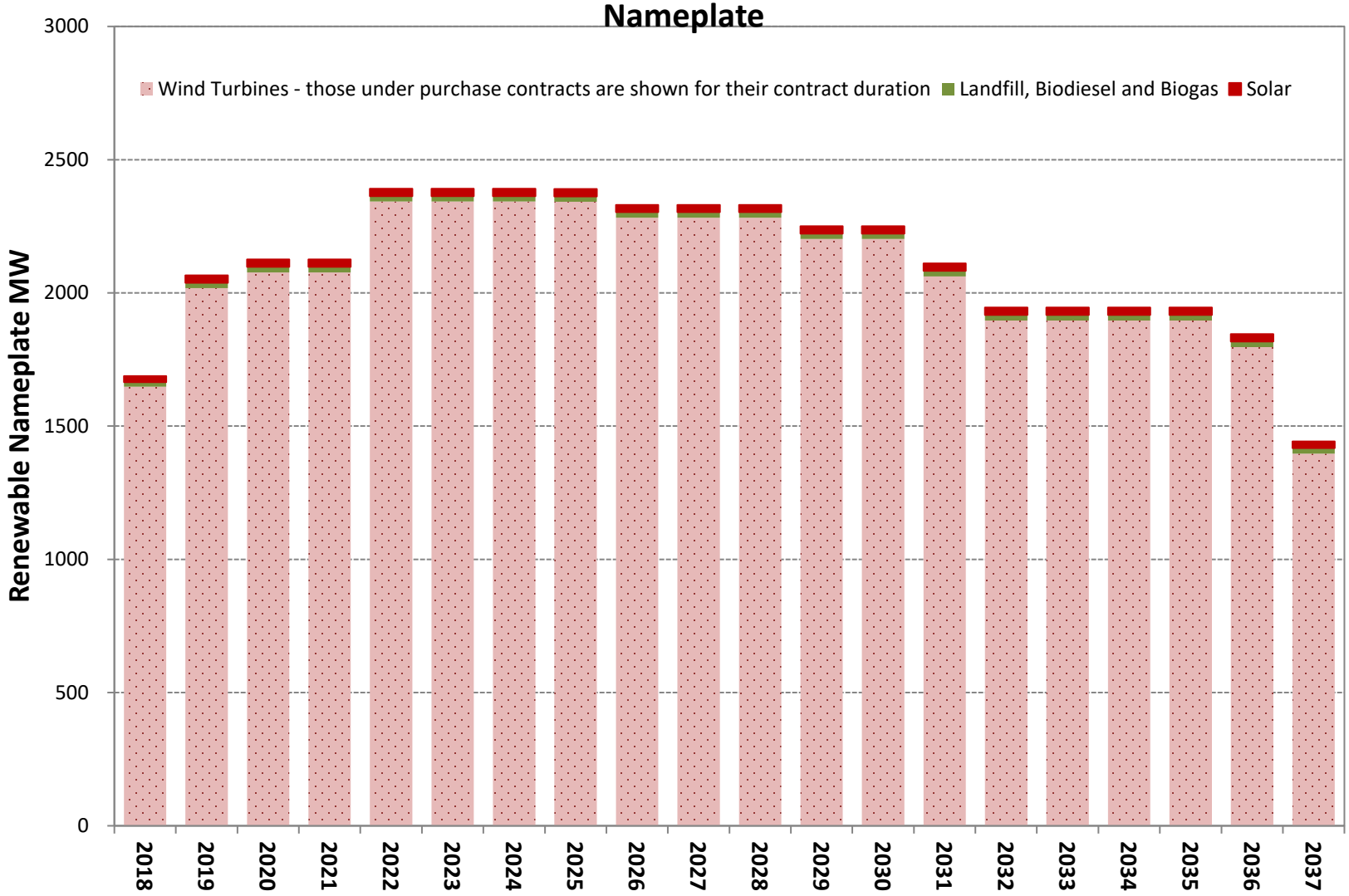

EXHIBIT 7

2018 Statewide Existing Generating Capability Data

Utility	Unit Name	Duty Cycle	Unit Type	Fuel Type	Commercial Operation Date	Summer Accredited Capacity	Summer Utility Capacity
Towns and	Cottonwood Wind NNPPD	I	WT	WND	2018	4.00	
	Cottonwood Wind SSC	I	WT	WND	2018	0.78	
Towns and							**4.8**
Falls City	Falls City #7	P	IC	NG/DFO	1972	5.00	
	Falls City #8	P	IC	NG/DFO	1981	5.00	
	Falls City	P	IC	NG/DFO	2018	9.30	
Falls City	**Total**						**19.3**
Fremont	Fremont #6	B	ST	SUB/NG	1958	15.50	
	Fremont #7	B	ST	SUB/NG	1963	21.00	
	Fremont #8	B	ST	SUB/NG	1976	82.00	
	CT	P	GT	NG/DFO	2003	36.00	
	Cottonwood Wind Farm	I	WT	WND	2018	2.03	
Fremont	**Total**						**156.5**
Grand Island	Burdick #3	P	ST	NG	1972	0.00	
	Burdick GT1	P	GT	NG/DFO	1968	13.00	
	Burdick GT2	P	GT	NG/DFO	2003	34.00	
	Burdick GT3	P	GT	NG/DFO	2003	34.00	
	Platte Generating Station	B	ST	SUB	1982	100.00	
	Prairie Breeze 3 Wind	I	WT	WND	2016	0.00	
Grand Island	**Total**						**181.0**
Hastings	CCC Hastings Wind	I	WT	WND	2016	0.00	
	DHPC-#1	P	GT	NG/DFO	1972	18.00	
	Hastings-NDS#4	P	ST	NG/DFO	1957	16.00	
	Hastings-NDS#5	P	ST	NG/DFO	1967	24.00	
	Whelan Energy Center #1	B	ST	SUB	1981	76.00	
	Whelan Energy Center #2	B	ST	SUB	2011	220.00	
Hastings	**Total**						**354.0**
LES	Arbuckle Mtn. Wind	I	WT	WND	2016	5.00	
	Buckeye Wind	I	WT	WND	2016	5.01	
	J St	P	GT	NG/DFO	1972	29.00	
	Landfill Gas	B	IC	LFG	2014	4.80	
	Laramie River #1	B	ST	SUB	1982	199.53	
	LES Community Solar	B	PV	SUN	2016	0.00	
	Prairie Breeze 2 Wind	I	WT	WND	2016	3.70	
	Rokeby 1	P	GT	NG/DFO	1975	72.00	
	Rokeby 2	P	GT	NG/DFO	1997	89.00	
	Rokeby 3	P	GT	NG/DFO	2001	94.00	
	Salt Valley Wind	I	WT	WND	1999	0.00	
	Terry Bundy	P	CS	NG/DFO	2003	120.50	
	Terry Bundy	P	GT	NG/DFO	2003	47.10	
	Walter Scott #4	B	ST	SUB	2007	103.20	
LES	**Total**						**772.8**
MEAN	Alliance #1	P	IC	DFO	2002	1.8480	
	Alliance #2	P	IC	DFO	2002	1.8490	
	Alliance #3	P	IC	DFO	2002	1.8490	
	Ansley #2	P	IC	NG/DFO	1972	0.8500	
	Ansley #3	P	IC	NG/DFO	1968	0.5000	
	Benkelman #1	P	IC	NG/DFO	1968	0.7850	
	Broken Bow #2	P	IC	NG/DFO	1971	3.5000	
	Broken Bow #4	P	IC	NG/DFO	1949	0.8010	
	Broken Bow #5	P	IC	NG/DFO	1959	1.0010	
	Broken Bow #6	P	IC	NG/DFO	1961	2.1210	
	Burwell#2	P	IC	NG/DFO	1962	0.8030	
	Burwell#3	P	IC	NG/DFO	1967	1.0040	
	Burwell#4	P	IC	NG/DFO	1972	1.2110	

EXHIBIT 7

2018 Statewide Existing Generating Capability Data

Utility	Unit Name	Duty Cycle	Unit Type	Fuel Type	Commercial Operation Date	Summer Accredited Capacity	Summer Utility Capacity
MEAN (contd)	Callaway #3	P	IC	DFO	1958	0.4910	
	Callaway #4	P	IC	DFO	2004	0.3840	
	Chappell #5	P	IC	DFO	1982	1.1000	
	Crete #7	P	IC	NG/DFO	1972	6.0850	
	Curtis #1	P	IC	NG/DFO	1975	1.2030	
	Curtis #2	P	IC	NG/DFO	1969	1.0030	
	Curtis #4	P	IC	NG/DFO	1955	0.8020	
	Kimball #1	P	IC	NG/DFO	1955	1.00	
	Kimball #2	P	IC	NG/DFO	1956	1.00	
	Kimball #3	P	IC	NG/DFO	1959	0.90	
	Kimball #4	P	IC	NG/DFO	1960	0.90	
	Kimball #5	P	IC	NG/DFO	1951	0.70	
	Kimball #6	P	IC	NG/DFO	1975	3.50	
	Oxford #2	P	IC	NG/DFO	1952	0.65	
	Oxford #3	P	IC	NG/DFO	1956	0.90	
	Oxford #4	P	IC	NG/DFO	1956	0.68	
	Oxford #5	P	IC	DFO	1972	1.21	
	Pender #1	P	IC	DFO	1967	1.263	
	Pender #2	P	IC	NG/DFO	1973	1.925	
	Pender #3	P	IC	DFO	1953	0.491	
	Pender #4	P	IC	DFO	1961	0.821	
	Red Cloud #2	P	IC	NG/DFO	1953	0.696	
	Red Cloud #3	P	IC	NG/DFO	1960	1.001	
	Red Cloud #4	P	IC	NG/DFO	1968	1.001	
	Red Cloud #5	P	IC	NG/DFO	1974	1.502	
	Stuart #1	P	IC	NG/DFO	1965	0.721	
	Stuart #4	P	IC	NG/DFO	1996	0.822	
	West Point #2	P	IC	NG/DFO	1947	2.148	
	West Point #3	P	IC	NG/DFO	1959	1.171	
	West Point #4	P	IC	NG/DFO	1965	0.761	
MEAN	**Total**						**55.0**
NPPD	ADM	B	ST	SUB	2009	52.62	
	Ainsworth Wind	**I**	**WT**	**WND**	**2005**	**8.74**	
	Auburn #1	P	IC	NG/DFO	1982	2.10	
	Auburn #2	P	IC	NG/DFO	1949	0.00	
	Auburn #4	P	IC	NG/DFO	1993	3.60	
	Auburn #5	P	IC	NG/DFO	1973	3.30	
	Auburn #6	P	IC	NG/DFO	1967	2.50	
	Auburn #7	P	IC	NG/DFO	1987	4.80	
	Beatrice Power Station	I	CS	NG	2005	220.00	
	Belleville 4	P	IC	NG/DFO	1955	0.00	
	Belleville 5	P	IC	NG/DFO	1961	1.40	
	Belleville 6	P	IC	NG/DFO	1966	2.50	
	Belleville 7	P	IC	NG/DFO	1971	3.30	
	Belleville 8	P	IC	NG/DFO	2006	2.80	
	Broken Bow Wind	**I**	**WT**	**WND**	**2013**	**12.22**	
	Broken Bow II Wind	**I**	**WT**	**WND**	**2014**	**8.87**	
	Cambridge	P	IC	DFO	1972	3.00	
	Canaday	P	ST	NG	1958	99.30	
	Columbus 1	**B**	**HY**	**WAT**	**1936**	**15.00**	
	Columbus 2	**B**	**HY**	**WAT**	**1936**	**15.00**	
	Columbus 3	**B**	**HY**	**WAT**	**1936**	**15.00**	
	Cooper	**B**	**ST**	**NUC**	**1974**	**770.00**	

EXHIBIT 7

2018 Statewide Existing Generating Capability Data

Utility	Unit Name	Duty Cycle	Unit Type	Fuel Type	Commercial Operation Date	Summer Accredited Capacity	Summer Utility Capacity
NPPD (contd)	Crofton Bluffs Wind	I	WT	WND	2013	7.42	
	David City 1	P	IC	NG/DFO	1960	1.30	
	David City 2	P	IC	DFO	1949	0.80	
	David City 3	P	IC	NG/DFO	1955	0.90	
	David City 4	P	IC	NG/DFO	1966	1.80	
	David City 5	P	IC	DFO	1996	1.33	
	David City 6	P	IC	DFO	1996	1.33	
	David City 7	P	IC	DFO	1996	1.34	
	Elkhorn Ridge Wind	I	WT	WND	2009	9.53	
	Emerson #2	P	IC	NG/DFO	1968	1.24	
	Emerson #3	P	IC	NG/DFO	1948	0.00	
	Emerson #4	P	IC	NG/DFO	1958	0.20	
	Franklin 1	P	IC	NG/DFO	1963	0.65	
	Franklin 2	P	IC	NG/DFO	1974	1.35	
	Franklin 3	P	IC	NG/DFO	1968	1.05	
	Franklin 4	P	IC	NG/DFO	1955	0.70	
	Gentleman 1	B	ST	SUB	1979	665.00	
	Gentleman 2	B	ST	SUB	1982	700.00	
	Hallam (Black Start)	P	GT	DFO	1973	42.50	
	Hebron	P	GT	NG	1973	41.50	
	Jeffrey 1 (CNPPID)	B	HY	WAT	1940	0.00	
	Jeffrey 2 (CNPPID)	B	HY	WAT	1940	0.00	
	Johnson I 1 (CNPPID)	B	HY	WAT	1940	0.00	
	Johnson I 2 (CNPPID)	B	HY	WAT	1940	0.00	
	Johnson II (CNPPID)	B	HY	WAT	1940	0.00	
	Kearney	B	HY	WAT	1921	0.00	
	Kingsley(Blk St) (CNPPID)	B	HY	WAT	1985	37.50	
	Laredo Ridge Wind	I	WT	WND	2011	19.42	
	Madison 1	P	IC	NG/DFO	1969	1.70	
	Madison 2	P	IC	NG/DFO	1959	0.95	
	Madison 3	P	IC	NG/DFO	1953	0.85	
	Madison 4	P	IC	DFO	1946	0.50	
	McCook(Black Start)	P	GT	DFO	1973	42.70	
	Monroe	B	HY	WAT	1936	3.00	
	North Platte 1(Black Start)	B	HY	WAT	1935	12.00	
	North Platte 2(Black Start)	B	HY	WAT	1935	12.00	
	Ord 1	P	IC	NG/DFO	1973	5.00	
	Ord 2	P	IC	NG/DFO	1966	1.00	
	Ord 3	P	IC	NG/DFO	1963	2.00	
	Ord 4	P	IC	DFO	1997	1.40	
	Ord 5	P	IC	DFO	1997	1.40	
	Sheldon 1	B	ST	SUB	1961	104.00	
	Sheldon 2	B	ST	SUB	1965	115.00	
	Spencer 1	B	HY	WAT	1927	0.64	
	Spencer 2	B	HY	WAT	1952	0.64	
	Springview Wind	I	WT	WND	2012	0.41	
	Steele Flats Wind	I	WT	WND	2013	22.20	
	Wahoo #1	P	IC	NG/DFO	1960	1.70	
	Wahoo #3	P	IC	NG/DFO	1973	3.60	
	Wahoo #5	P	IC	NG/DFO	1952	1.80	
	Wahoo #6	P	IC	NG/DFO	1969	2.90	
	Wakefield 2	P	IC	NG/DFO	1955	0.54	
	Wakefield 4	P	IC	NG/DFO	1961	0.69	
	Wakefield 5	P	IC	NG/DFO	1966	1.08	
	Wakefield 6	P	IC	NG/DFO	1971	1.13	

EXHIBIT 7

2018 Statewide Existing Generating Capability Data

Utility	Unit Name	Duty Cycle	Unit Type	Fuel Type	Commercial Operation Date	Summer Accredited Capacity	Summer Utility Capacity
NPPD (contd)	Wayne 1	P	IC	DFO	1951	0.75	
	Wayne 3	P	IC	DFO	1956	1.75	
	Wayne 4	P	IC	DFO	1960	1.85	
	Wayne 5	P	IC	DFO	1966	3.25	
	Wayne 6	P	IC	DFO	1968	4.90	
	Wayne 7	P	IC	DFO	1998	3.25	
	Wayne 8	P	IC	DFO	1998	3.25	
	Western Sugar	B	ST	SUB	2014	4.55	
	Wilber 4	P	IC	DFO	1949	0.78	
	Wilber 5	P	IC	DFO	1958	0.59	
	Wilber 6	P	IC	DFO	1997	1.57	
NPPD	**Total**						**3,150.2**
Nebraska City	Nebraska City #5 Black start	P	IC	NG/DFO	1964	1.60	
	Nebraska City #6	P	IC	NG/DFO	1967	1.50	
	Nebraska City #7	P	IC	NG/DFO	1969	1.50	
	Nebraska City #8	P	IC	NG/DFO	1970	3.50	
	Nebraska City #9	P	IC	NG/DFO	1974	5.60	
	Nebraska City #10	P	IC	NG/DFO	1979	5.80	
	Nebraska City #11	P	IC	NG/DFO	1998	4.00	
	Nebraska City #12	P	IC	NG/DFO	1998	4.00	
Nebraska City	**Total**						**27.5**
NELIGH	**Neligh**	**P**	**IC**	**OBL**	**2012**	**1.80**	
	Neligh	**P**	**IC**	**OBL**	**2012**	**1.78**	
	Neligh	**P**	**IC**	**OBL**	**2012**	**1.77**	
	Neligh	**P**	**IC**	**OBL**	**2012**	**0.38**	
Neligh	**Total**						**5.7**
OPPD	Cass County #1	P	GT	NG	2003	161.70	
	Cass County #2	P	GT	NG	2003	161.10	
	Elk City Station #1-4	**B**	**IC**	**LFG**	**2002**	**3.17**	
	Elk City Station #5-8	**B**	**IC**	**LFG**	**2006**	**3.11**	
	Flat Water Wind	**I**	**WT**	**WND**	**2011**	**11.10**	
	Grande Prairie Wind	**I**	**WT**	**WND**	**2016**	**60.80**	
	Jones St. #1	P	GT	DFO	1973	61.30	
	Jones St. #2	P	GT	DFO	1973	61.30	
	Nebraska City #1	**B**	**ST**	**SUB**	**1979**	**654.30**	
	Nebraska City #2	**B**	**ST**	**SUB**	**2009**	**691.00**	
	North Omaha #1	B	ST	NG	1954	64.80	
	North Omaha #2	B	ST	NG	1957	90.80	
	North Omaha #3	B	ST	NG	1959	86.00	
	North Omaha #4	**B**	**ST**	**SUB/NG**	**1963**	**120.10**	
	North Omaha #5	**B**	**ST**	**SUB/NG**	**1968**	**216.20**	
	Petersburg Wind	**I**	**WT**	**WND**	**2012**	**6.20**	
	Prairie Breeze Wind	**I**	**WT**	**WND**	**2014**	**31.69**	
	Sarpy County #1	P	GT	NG/DFO	1972	55.30	
	Sarpy County #2	P	GT	NG/DFO	1972	56.40	
	Sarpy County #3	P	GT	NG/DFO	1996	107.70	
	Sarpy County #4	P	GT	NG/DFO	2000	49.00	
	Sarpy County #5	P	GT	NG/DFO	2000	48.10	
	Tecumseh #1	P	IC	DFO	1949	0.60	
	Tecumseh #2	P	IC	DFO	1968	1.40	
	Tecumseh #3	P	IC	DFO	1952	1.00	
	Tecumseh #4	P	IC	DFO	1960	1.20	
	Tecumseh #5	P	IC	DFO	1993	2.30	
OPPD	**Total**						**2,807.7**

EXHIBIT 7

2018 Statewide Existing Generating Capability Data

Utility	Unit Name	Duty Cycle	Unit Type	Fuel Type	Commercial Operation Date	Summer Accredited Capacity	Summer Utility Capacity
Nebraska Grand Total						**TOTAL**	7,534.5

Duty Cycle
B-Base
I-Intermediate
P-Peaking

Fuel Type*
NUC-Uranium
NG-Natural Gas
DFO-Distillate Fuel Oil
SUB-Subbituminous Coal
OBL-Biodiesel
WAT-Hydro
LFG-Landfill Gas
WND-Wind

Unit Type*
IC-Internal Combustion, Reciprocating
ST-Steam Turbine, does not include combined cycle
GT-Combustion Turbine, including aeroderivatives
CS-Combined Cycle, single shaft (combustion turbine and steam turbine share si
CA-Combined Cycle, Steam part
CT-Combined Cycle, Combustion Turbine part
HY-Hydro
PV-Photovoltaic
WT-Wind Turbine
FC-Fuel Cell
WH-Waste Heat, used for combined cycle ST without supplemental firing

EXHIBIT 7.1
Statewide Renewable and Greenhouse Gas Mitigating Resources, MW