



# **2016 NEBRASKA POWER ASSOCIATION LOAD AND CAPABILITY REPORT**

**July 2016**



## **2016 Nebraska Power Association Load and Capability Report**

### **Executive Summary**

In summary, based on existing and committed resources, the statewide deficit occurs after 2035 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% capacity margin of the Southwest Power Pool (SPP) Reserve Sharing Pool. The statewide deficit for the Minimum Obligation has moved out more than five years into the future as compared to last year’s 2015 report. This is mainly because of decreased demand along with a decreased amount of needed reserves. 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 (2016-2035).

#### 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 2016 through 2035, the average annual compounded peak demand

growth rate for the State is projected at 0.29% per year (individual utility ranges from -0.3%/yr. to 1.3%/yr.). This is a lower escalation rate than was shown in last year's report (0.75%) for 2015 through 2034.

#### Capacity 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. This year the SPP Capacity Margin Task Force (CMTF) recommended that the reserve margin be reduced from 13.6% to 12.0% (or from 12% to 10.6% in equivalent capacity margin terms). It was approved by the SPP Board to become effective for the 2017 summer. The 2016 NPA L&C Report will continue using the older accepted reserve and capacity margin percentages during this reporting process and will change to the new approved values for the 2017 NPA L&C Report.

This reserve capacity requirement is a significant resource capability over and above the Nebraska load requirement. This reserve capacity requirement equates to 816 MW in 2016 and 858 MW by 2035.

## **Resources**

#### Existing/Committed

The State has an "Existing" in-service summer accreditable generating resource capability of 7,730 MW. This is down from 7,866 MW shown in the previous report. In this year's report there were numerous changes in accredited ratings especially for wind farms due to using data based on actual performance. Also, a few older, smaller natural gas and natural gas/fuel oil fired units were removed from service. For the summer season of 2016 OPPD did not accredit generation at North Omaha 1 and 2. This resulted in a reduction of 148 MW of coal-fueled accredited generation to the 2016 statewide total. With the upcoming retirement of Ft. Calhoun, North Omaha 1 and 2 will be accredited in 2017, and for several years beyond, fueled on 100% natural gas. In the spring of 2016 North Omaha 3 transitioned from coal-fueled operation and is now accredited and operational on 100% natural gas.

There are 405 MW of "Committed" resources included in this report (the projects have Nebraska Power Review Board approval if required – PURPA qualifying projects do not need NPRB approval). This includes 400 MW nameplate of wind power from the Grande Prairie wind facility in 2017. There is also a 5 MW Cooper Nuclear Station turbine upgrade in the fall of 2016.

### 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 except for a couple small behind the meter community solar projects.

### 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 325 MW of “Studied” resources that include 0 MW of nameplate renewable (wind) resources, 50 MW of base load capacity, 25 MW of intermediate capacity, and 250 MW of peaking capacity by 2035.

### Committed/Planned/Studied Exhibits

Exhibit 3 shows the statewide load and capability chart considering 7,730 MW of Existing, 405 MW of Committed (nameplate), 0 MW Planned, and 325 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.

## **Renewable and Demand Side Resources**

The State is expected to have 1,143 MW of commercially operating renewable nameplate resources by the end of 2016. By 2018 this is expected to grow to 1,564 MW. This amount does not include any wind which may be installed by developers in Nebraska for export to load outside the state. Most of the existing wind farms have 20 year contracts which will expire in the early 2030’s. Many of these contracts have options for the utilities to purchase the wind farms from the developers after the 20<sup>th</sup> year. In order for those utilities to maintain their renewable goals these utilities will either have to exercise these options

or develop other renewable resources. Wind and solar generation 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, 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.

In other statewide action, the Nebraska legislature in its most recent 2016 session passed LB824, which allows for increasing opportunities to attract private renewable energy development. LB824 exempts privately developed renewable generation facilities from certain regulations, eliminates certain steps of the permitting process and removes current statutes covering the Nebraska Power Review Board process for renewable development.

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. Based on present assumptions, the 2020 goal is 325 MW. As of 2016, NPPD has a total of 311 MW of wind generation, the majority of which is via power purchase agreements. This positions NPPD within 14 MW of its 2020 goal of 325 MW. However, NPPD's wholesale customers are allowed to use renewable Qualifying Local Generation (QLG) to offset a portion of their purchase of production demand and energy from NPPD. It is expected that QLG will more than offset the 14 MW needed to meet their 2020 goal.

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 515 MW of demand reduction from NPPD's billable peak during the summer of 2015. Another 4 MW of demand reduction was realized from other sources.

In 2008, NPPD developed and implemented a series of energy efficiency and demand-side management initiatives under the EnergyWise<sup>SM</sup> 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 2015 are 174,800 MWh and demand reductions are 28 MW. NPPD's 2013 Integrated Resource Plan (IRP) analyzed resource plans with varying levels of energy efficiency and demand-side management investment. Future investment will be determined by NPPD's Board of Directors.

### 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 2015 OPPD met 16.4% of retail customer electrical energy requirements with wind energy and energy from landfill gas. OPPD's renewable portfolio at 2015 year-end consisted of 412.3 MW of wind by nameplate and 6.3 MW of landfill gas generation.

OPPD has a contract to bring on-line additional wind energy during 2017 in the amount of 400 MW from the Grande Prairie wind facility which will be located in northeast Holt County, Nebraska. With the expected 812 MW of wind in OPPD's portfolio, OPPD will be utilizing renewable energy at percentages in-line with the more aggressive mandated renewable standards found across the nation.

OPPD's demand side resource programs can achieve over 100 MW of peak load reduction ability as of the summer of 2016. Existing programs consist of a customer air conditioner management program, 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 while retiring the Ft Calhoun Station in late 2016. 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. MEAN's current renewable portfolio provides over 10% of the energy needs for its customers.

MEAN is currently looking into community solar garden type installations to satisfy community demands for localized green initiatives. 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. MEAN is currently in the process of talking with interested owners.

MEAN has utilized a variety of demand side management tools to help reduce load and energy requirements. Many of those programs have reached the point of diminishing returns and interest has waned due to various reasons within the communities. 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 projected demand growth is derived from LES' annual, long range load forecasts and will be off-set by sustainability projects implemented over the next five years. Specific projects for 2016-2020 include the Sustainable Energy Program, air conditioner load control, Nebraska Utility Corporation (NUCorp) related demand reduction projects and sustainable generation.



Based on the 2015 forecast, the five-year future projected demand growth through 2020 is 49 MW. All efforts combined, LES is projecting to have approximately 106 MW of accredited, sustainable generation and demand reduction resources in place by the end of 2020. LES' 4.8 MW landfill-gas-to energy project became commercial in January 2014. Recent sustainable generation additions include the 100 MW Buckeye Wind Energy Center, 73 MW Prairie Breeze II Wind Energy Center and the 100 MW Arbuckle Mountain Wind Farm through PPAs. Also, the LES Community Solar Project, of nearly 5 MW DC (4 MW AC), became commercial in the summer of 2016. With the additions of these wind farms and the solar project, LES' "nameplate" resource portfolio becomes 1/3 natural gas, 1/3 coal and 1/3 renewables. Renewable energy produced is projected to be equivalent to 49% of LES' retail energy needs in 2016.

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 will be reduced as predetermined, total service area renewable-installation thresholds are met over time.

LES' Community Solar program allows customers to support solar even if they don't own an optimally positioned roof or they don't have the upfront funds to install their own system. It features the above mentioned central solar array, funded in part by voluntary customer contributions.

#### 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 is currently negotiating with a customer regarding a potential wind energy project.

#### 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. Grand Island Utilities recently signed a Power Purchase Agreement with Invenergy for the full output (35.8 MW) of Prairie Breeze III Wind Farm near Elgin, NE. Separate agreements with the City of Nebraska City and the City of Neligh have been signed for 7 MW and 2 MW shares respectively. In addition, Grand Island Utilities has a Request For Proposal out for up to an

additional fifty (50) MW of wind energy. This may take the form of local, behind the meter, generation or an agreement similar to Prairie Breeze III or a combination of the two.

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.

## **Distributed Generation**

Distributed generation is providing wholesale and retail power suppliers 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. Presently, there are 8.8 MW of wind generation in service under these types of arrangements with an additional 22.9 MW of wind energy contracted or in negotiations for 2016.

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 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 100 kW to 4.5 MW AC. Therefore, more private involvement with local utilities is providing additional opportunities to increase the utilization of renewable energy.

Attached in Appendix A and listed by utility, is the Nebraska Net Metering Report as required by Nebraska Revised Statute 70-2005. The report highlights the number of net meter installations, the estimated amount of rated generating capacity and energy produced by the customer-generator.

## 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, they have assumed CNS continues to operate through 2035. In June 2016, the OPPD board made the decision to cease operation of the Ft Calhoun Station by the end of 2016. The Ft Calhoun nuclear facility will begin decommissioning activities thereafter.

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's existing license has expired, however Loup River Public Power District, the owner of the Columbus Hydro, has applied for a new license with an expected operating renewal duration of 30 years. 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 7,730 MW of existing resources. 692 MW or 9% of that total are greater than 50 years old today. Another 2,195 MW or 28% are 41 to 50 years old today. Most of these units have no planned retirement date. By 2035 approximately 1500 MW will reach 60 years of age in this 20 year study.

Although Nebraska has sufficient generating resources until beyond 2035 as shown in Exhibits 1 & 2, utilities are facing increased environmental restrictions that could require the retirement of older fossil units. This could advance the statewide need date several years earlier.

Exhibit 8 shows a statewide deficit in the year 2023 if all fossil units are retired after 60 years in-service. For illustration purposes only, this 60 year in-service life was arbitrarily chosen as an example and is considered overly conservative since fossil units are capable of operating for more than 60 years. At this time, there are no plans to retire these older units unless stated in the report.

## **SPP Considerations**

The SPP 2017 10-Year Assessment (ITP10, ten years into the future) is in the middle of the process at this present time. The ITP 10 plan is expected to be finalized in January 2017. SPP alternates between developing the ITP10 and ITP20 studies, however they received a waiver to run another ITP10 to study the Clean Power Plan (Clean Air Act Section 111d).

The 2017 ITP10 is a value based planning approach that will analyze the 10 year Transmission System, and identify 100kV and above grid solutions to needs stemming from; (a) resolving criteria violations identified through reliability analysis; (b) meeting policy mandated, goals and targets; (c) mitigating transmission system congestion; (d) improving access to markets; (e) needs arising from instability of the transmission system and (f) the staging of transmission expansion. The assessment is not intended to review each consecutive year in the planning horizon, but only the horizon year.

Scenarios or futures include:

- Regional 111d Solution (SPP regional plan)
- State 111d Solution (each state would have its own compliance plan)
- No 111d Implementation

Results from this study could have a wide range of impacts for future transmission additions in the SPP region as well as Nebraska along with placement of future generation resources.

### SPP Capacity Margin Task Force (CMTF)

The Capacity Margin Task Force (CMTF) has spent its time developing series of structures and concepts, along with the recommendation for reserve margin adjustment, to allow for better management of planning reserves required to be held by SPP and its members. The SPP “Capacity Margin” in the past was set at 12.0%. This equated to a 13.6% “Reserve Margin”. The CMTF has brought forward a recommendation adjusting the “Reserve Margin” down to 12.0%, which equates to a 10.6% “Capacity Margin”. This was approved by the SPP Board in April to take effect in the summer of 2017.

Definitions of which entity is responsible for carrying reserves, how much reserves are required, a methodology to ensure accountability for those reserves, and a deliverability study for acquiring additional reserves were all developed throughout the past two years. With this package presented to the MOPC for approval, and the CMTF nearing the end of its charter, the future of the group has been discussed. The proposal is to allow this group’s charter to expire and merge with the Generation Working Group (GWG) to form a new Supply Adequacy Working Group (SAWG) which will take on responsibilities from each area moving forward. The details for this are still being worked out.

## SPP Transmission Projects

Listed below are some of the larger SPP Transmission Projects affecting Nebraska with Notice to Construct. These projects promoted by Nebraska utilities specifically help in reliability issues, power flows, and mitigate stability problems, while also helping to address economic and public policy needs in Nebraska and in the SPP region.

- 1) NPPD - Gentleman-Cherry County-Holt County 345 kV Transmission Project (r-Plan)
- 2) NPPD - Hoskins-Neligh 345 kV/115 kV Transmission Project
- 3) NPPD – Stegall-Scottsbluff 115 kV Transmission Project
- 4) NPPD – Muddy Creek-Ord 115 kV Transmission Project
- 5) Nebraska City Station-Sibley 345 kV Midwest Transmission Project

## **Environmental Considerations**

Nebraska utilities continue to monitor any Environmental Protection Agency (EPA) rule changes and updates specifically with:

- Cross State Air Pollution Rule (CSAPR)
  - Implemented in 2015, NOX, SO<sub>2</sub> limits for each utility
  - CSAPR II reallocated seasonal NO<sub>x</sub> allowances. Did not affect Nebraska utilities. A future CSAPR update may result in stricter allocations for Nebraska based on new ozone and particulate matter NAAQS.
- Regional Haze Rule (RHR)
  - Entering phase 2 of the RHR. Will require states to demonstrate they are meeting their reasonable progress goals.
- Mercury and Air Toxics Standards (MATS)
  - Compliance and deadline was April 16, 2015 with some utilities receiving an extension to April 16, 2016.
- Reciprocating Internal Combustion Engine (RICE) Rules
  - Became effective in 2013 and requires non-emergency engines to have emission controls.
- National Ambient Air Quality Standards (NAAQS)
  - Ozone NAAQS lowered to 70 parts per billion (ppb) in October 2015. Currently all areas in Nebraska are in compliance with new standard.
  - Sulfur Dioxide (SO<sub>2</sub>) NAAQS issued in 2010 with implementation starting in 2016. Some units can show compliance through modeling while others will need to install ground level monitors to show compliance.
- Coal Combustion Residuals Regulations
  - The rule became effective on October 19, 2015.
- 316(b) Cooling Water Intake Regulations
  - Requires controls by 2021 to limit the amount of fish impinged (pulled against screen) and entrained (pulled through the condenser) at the cooling water intake structure.

- Carbon Pollution Emission Guidelines for New Stationary Sources: Electricity Generating Units
  - Limits new coal fired units to 1,400 lbs CO<sub>2</sub>/MWh and new natural gas combined cycle units to 1,000 lbs CO<sub>2</sub>/MWh
- EPA's final Clean Power Plan
  - Refer to next section for discussion.

Each of these rules can affect each utility differently depending on the make-up of their generation resources. The full impact of these regulations on the viability of existing resources in the State of Nebraska will be site and unit specific. Nebraska utilities have taken these rules and regulations as currently known into account when determining future availability of their generation resources.

### **NPA Look at the Final EPA Clean Power Plan**

In August of 2015, the U.S. Environmental Protection Agency (EPA) issued their final rule for reducing carbon dioxide (CO<sub>2</sub>) emissions from existing power plants which burn fossil fuels under section 111(d) of the Clean Air Act. This Clean Power Plan rule outlines specific state target CO<sub>2</sub> emissions rates or equivalent mass limits, starting with interim targets covering the period of 2022-2029 and final targets to be reached in 2030 and beyond. In comparison to 2005 levels, the 2030 target is estimated by the EPA to reduce emissions nationally by 32%.

However, in February of 2016 the Supreme Court stayed the rule, pending review by the U.S. Court of Appeals for the D.C. Circuit. Although the timeline is unknown, it's possible a final decision may not be made until late 2017 or early 2018 if the circuit court's ruling is ultimately appealed and subsequently heard by the Supreme Court.

Although the fate of the rule is yet to be decided, Nebraska's utilities have announced numerous potential additions/revisions since 2012 that should improve the State's compliance position with respect to the Clean Power Plan, including:

#### Anticipated Fossil Fuel Resource Revisions

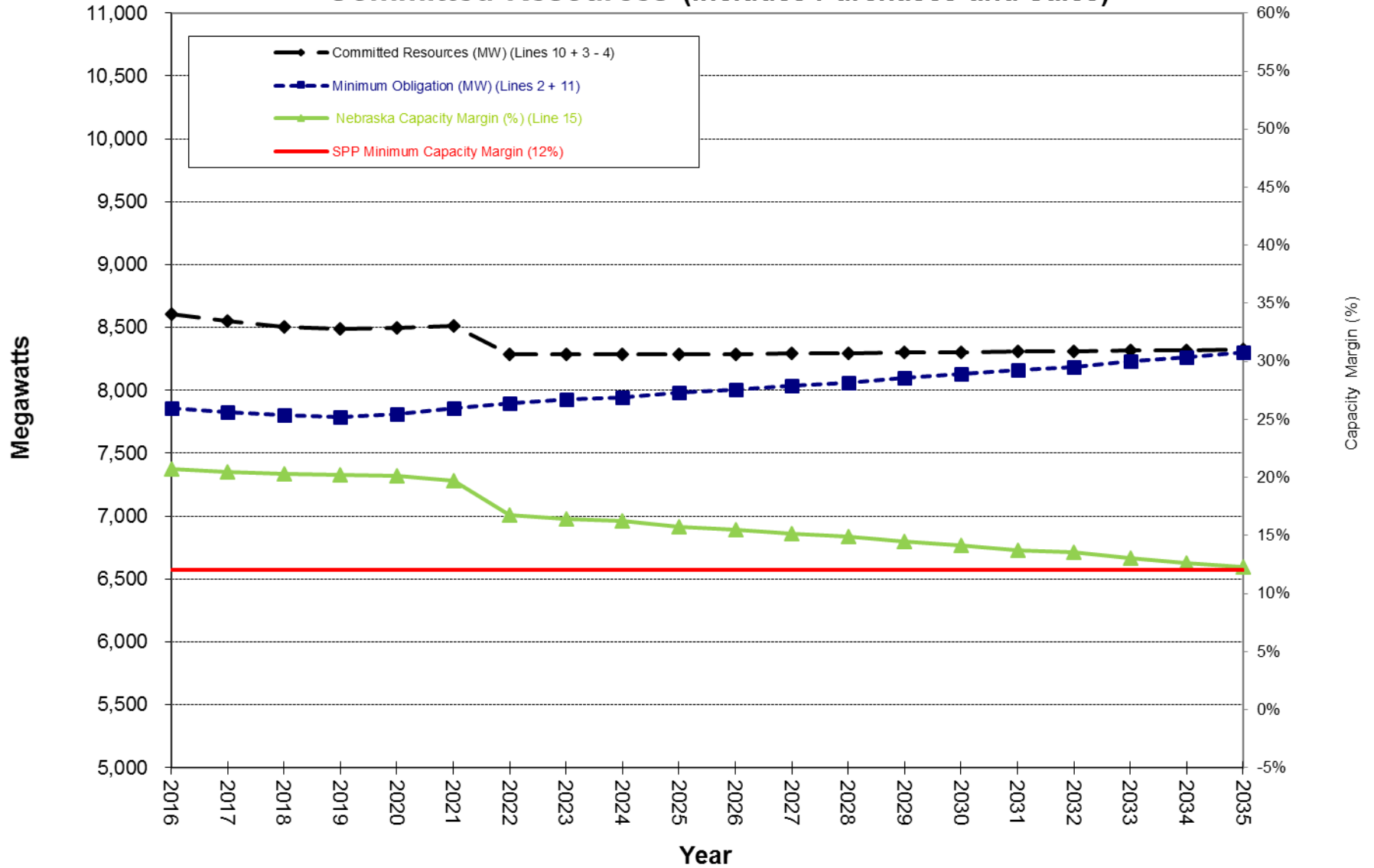
- Convert North Omaha Units 1-3 from coal to 100% natural gas as of March/April 2016
- Convert North Omaha Units 4-5 from coal to 100% natural gas by year 2023
- Convert Sheldon Station Unit 2 to hydrogen

#### Applicable Renewable Resource Revisions

- 2013 – Add Steele Flats Wind (74.8 MW)
- 2014 – Add Broken Bow II Wind (75 MW)
- 2014 – Add Prairie Breeze Wind (200 MW)
- 2015 – Add Arbuckle Mountain Wind (100 MW)
- 2015 – Add Buckeye Wind (100 MW)
- 2015 – Add Prairie Breeze II Wind (73.4 MW)
- 2016 – Add Lincoln Community Solar (5 MW<sub>DC</sub> / 4 MW<sub>AC</sub>)
- 2016 – Add Prairie Breeze III Wind (35.8 MW)
- End of 2016 – Add Grande Prairie Wind (400 MW)

# EXHIBIT 1

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



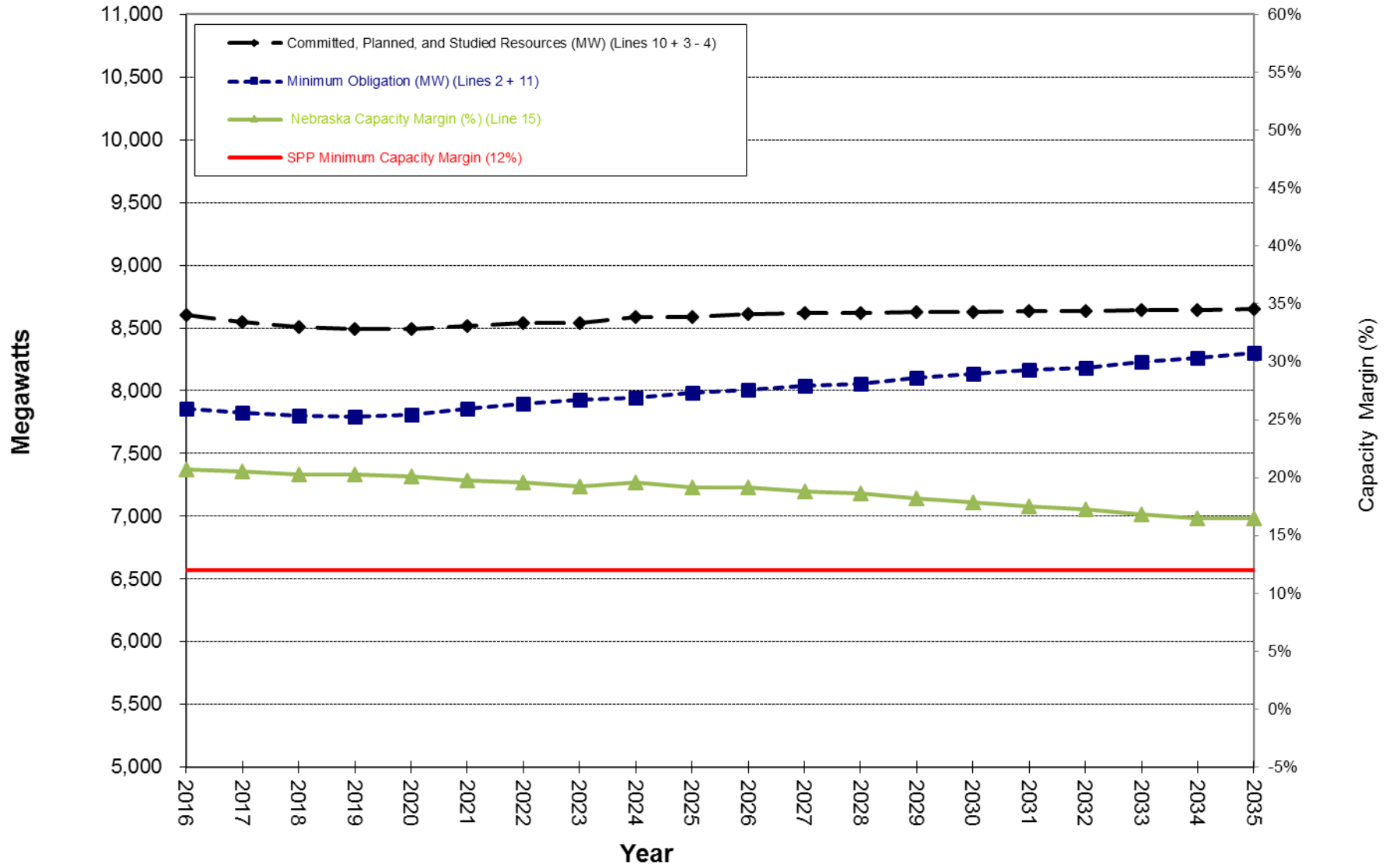
**EXHIBIT 2  
NEBRASKA STATEWIDE**

**Committed Load & Generating Capability in Megawatts  
Summer Conditions (June 1 to September 30)**

Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	
<b>1 Seasonal System Demand</b>	7,044	7,013	6,984	6,979	7,002	7,047	7,084	7,108	7,121	7,156	7,180	7,208	7,226	7,262	7,292	7,322	7,340	7,381	7,410	7,443	0.29%
<b>2 Annual System Demand</b>	7,044	7,013	6,984	6,979	7,002	7,047	7,084	7,108	7,121	7,156	7,180	7,208	7,226	7,262	7,292	7,322	7,340	7,381	7,410	7,443	
<b>3 Firm Purchases - Total</b>	1,137	1,177	1,150	1,183	1,188	1,193	1,199	1,202	1,204	1,207	1,211	1,214	1,218	1,221	1,225	1,229	1,232	1,236	1,239	1,243	
<b>4 Firm Sales - Total</b>	76	115	149	150	123	109	95	95	94	95	95	95	95	95	95	95	95	95	95	95	
<b>5 Seasonal Adjusted Net Demand (1-3+4)</b>	5,983	5,950	5,983	5,946	5,937	5,963	5,980	6,001	6,010	6,044	6,064	6,089	6,103	6,137	6,163	6,188	6,203	6,240	6,267	6,295	
<b>6 Annual Adjusted Net Demand (2-3+4)</b>	5,983	5,950	5,983	5,946	5,937	5,963	5,980	6,001	6,010	6,044	6,064	6,089	6,103	6,137	6,163	6,188	6,203	6,240	6,267	6,295	
<b>7 Net Generating Capability (owned)</b>	7,730	7,429	7,461	7,439	7,479	7,479	7,306	7,306	7,296	7,296	7,296	7,296	7,296	7,296	7,296	7,296	7,296	7,296	7,296	7,296	
<b>8 Participation Purchase -Total</b>	700	939	895	845	780	781	706	706	656	656	657	657	657	657	658	658	658	658	659	659	
<b>9 Participation Sales -Total</b>	886	883	849	829	829	829	829	829	779	779	779	779	779	779	779	779	779	779	779	778	
<b>10 Adjusted Net Capability (7+8-9)</b>	7,544	7,485	7,508	7,455	7,431	7,431	7,183	7,183	7,174	7,174	7,174	7,174	7,174	7,175	7,175	7,175	7,175	7,176	7,176	7,176	
<b>11 Net Reserve Capacity Obligation (6 x 0.136)</b>	816	811	816	811	810	813	815	818	820	824	827	830	832	837	840	844	846	851	855	858	
<b>12 Total Firm Capacity Obligation (5+11)</b>	6,799	6,761	6,799	6,757	6,747	6,776	6,795	6,819	6,830	6,868	6,891	6,919	6,935	6,974	7,003	7,032	7,049	7,091	7,122	7,153	
<b>13 Surplus or Deficit (-) Capacity @ Minimum Obligation (10-12)</b>	745	724	709	698	684	655	388	364	344	306	283	255	239	201	172	143	126	85	54	23	
<b>14 Reserve Margin ((10-6)/6)</b>	26.1%	25.8%	25.5%	25.4%	25.2%	24.6%	20.1%	19.7%	19.4%	18.7%	18.3%	17.8%	17.5%	16.9%	16.4%	16.0%	15.7%	15.0%	14.5%	#####	
<b>15 Capacity Margin ((10-6)/10)</b>	20.7%	20.5%	20.3%	20.2%	20.1%	19.8%	16.7%	16.5%	16.2%	15.8%	15.5%	15.1%	14.9%	14.5%	14.1%	13.8%	13.5%	13.0%	12.7%	#####	



### 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	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
<b>1 Seasonal System Demand</b>	7,044	7,013	6,984	6,979	7,002	7,047	7,084	7,108	7,121	7,156	7,180	7,208	7,226	7,262	7,292	7,322	7,340	7,381	7,410	7,443
<b>2 Annual System Demand</b>	7,044	7,013	6,984	6,979	7,002	7,047	7,084	7,108	7,121	7,156	7,180	7,208	7,226	7,262	7,292	7,322	7,340	7,381	7,410	7,443
<b>3 Firm Purchases - Total</b>	1,137	1,177	1,150	1,183	1,188	1,193	1,199	1,202	1,204	1,207	1,211	1,214	1,218	1,221	1,225	1,229	1,232	1,236	1,239	1,243
<b>4 Firm Sales - Total</b>	76	115	149	150	123	109	95	95	94	95	95	95	95	95	95	95	95	95	95	95
<b>5 Seasonal Adjusted Net Demand (1-3+4)</b>	5,983	5,950	5,983	5,946	5,937	5,963	5,980	6,001	6,010	6,044	6,064	6,089	6,103	6,137	6,163	6,188	6,203	6,240	6,267	6,295
<b>6 Annual Adjusted Net Demand (2-3+4)</b>	5,983	5,950	5,983	5,946	5,937	5,963	5,980	6,001	6,010	6,044	6,064	6,089	6,103	6,137	6,163	6,188	6,203	6,240	6,267	6,295
<b>7 Net Generating Capability (owned)</b>	7,730	7,429	7,461	7,439	7,479	7,479	7,556	7,556	7,596	7,596	7,621	7,621	7,621	7,621	7,621	7,621	7,621	7,621	7,621	7,621
<b>8 Participation Purchase -Total</b>	700	939	895	845	780	781	706	706	656	656	657	657	657	657	658	658	658	658	659	659
<b>9 Participation Sales -Total</b>	886	883	849	829	829	829	829	829	779	779	779	779	779	779	779	779	779	779	779	778
<b>10 Adjusted Net Capacity (7+8-9)</b>	7,544	7,485	7,508	7,455	7,431	7,431	7,433	7,433	7,474	7,474	7,499	7,499	7,499	7,500	7,500	7,500	7,500	7,501	7,501	7,501
<b>11 Net Reserve Capacity Obligation (6 x 0.136)</b>	816	811	816	811	810	813	815	818	820	824	827	830	832	837	840	844	846	851	855	858
<b>12 Total Firm Capacity Obligation (5+11)</b>	6,798	6,761	6,799	6,757	6,746	6,776	6,795	6,820	6,830	6,868	6,891	6,919	6,936	6,973	7,003	7,032	7,049	7,091	7,121	7,154
<b>13 Surplus or Deficit (-) Capacity @ Minimum Obligation (10-12)</b>	746	724	709	698	684	654	638	614	644	606	608	580	564	526	497	468	451	409	380	348
<b>14 Reserve Margin ((10-6)/6)</b>	26.1%	25.8%	25.5%	25.4%	25.2%	24.6%	24.3%	23.9%	24.4%	23.7%	23.7%	23.2%	22.9%	22.2%	21.7%	21.2%	20.9%	20.2%	19.7%	19.7%
<b>15 Capacity Margin ((10-6)/10)</b>	20.7%	20.5%	20.3%	20.2%	20.1%	19.8%	19.6%	19.3%	19.6%	19.1%	19.1%	18.8%	18.6%	18.2%	17.8%	17.5%	17.3%	16.8%	16.5%	16.5%

**EXHIBIT 5**

**Committed, Planned and Studied Resources, MW**

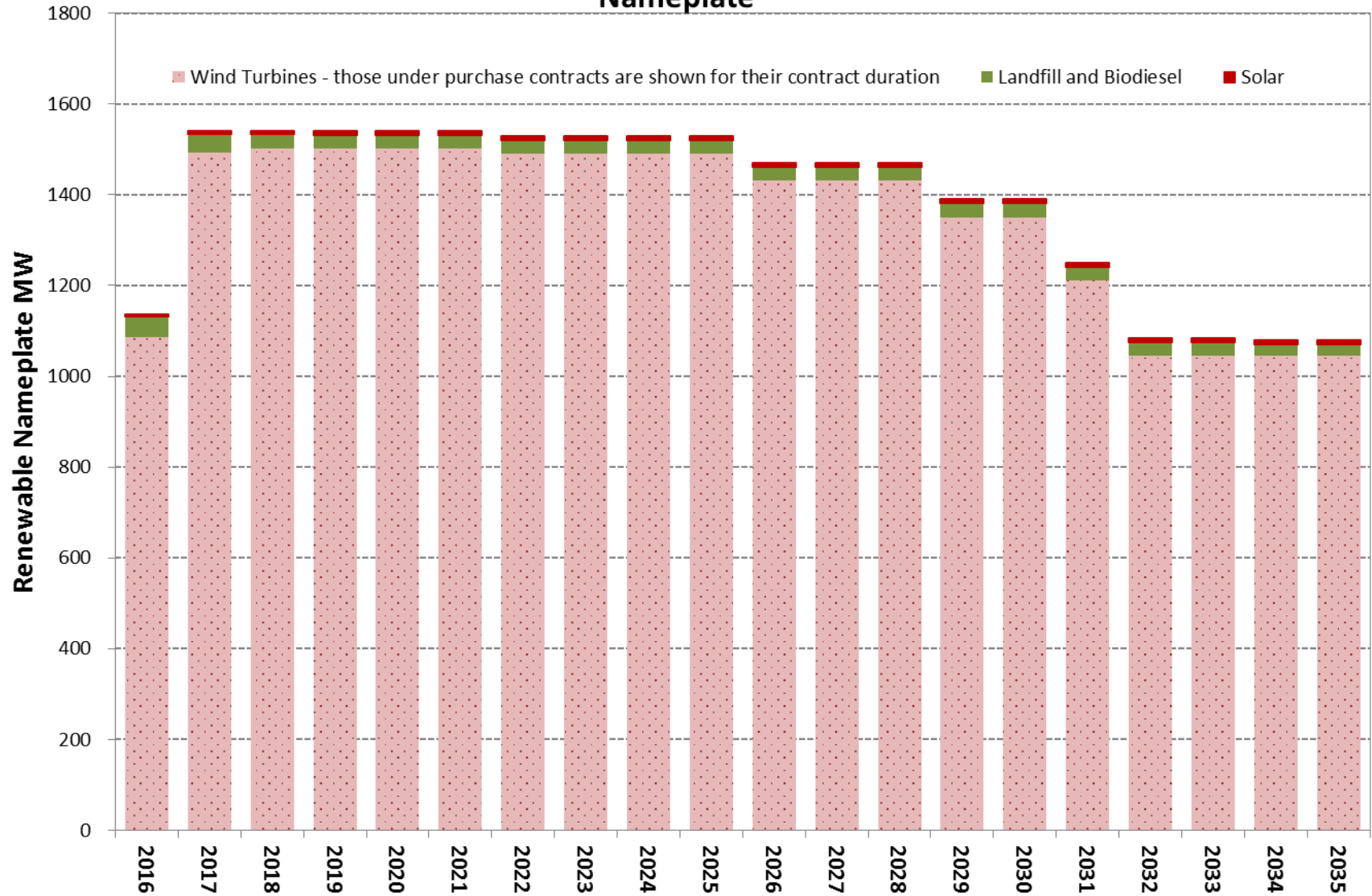
Utility	Unit Name	New Existing	Committed	Planned	Studied	Duty Cycle	Unit Type	Fuel Type	Behind Meter	Capacity, Thermal Units	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035										
Fremont	Future Intermediate				S	I	CC	NG		25.0	0	0	0	0	0	0	0	0	0	0	25	25	25	25	25	25	25	25	25	25										
<b>Fremont</b>	<b>Total</b>									25.0	0	0	0	0	0	0	0	0	0	0	25	25	25	25	25	25	25	25	25	25										
Grand Island	Prairie Breeze 3 Wind	E				R	R	W		0.0	36	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											
<b>Grand Island</b>	<b>Total</b>									0.0	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36										
LES	Future Base				S	B				0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
	Arbuckle Mountain Wind	E				R	R	W		0.0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100										
	Buckeye Wind	E				R	R	W		0.0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100										
	Prairie Breeze 2 Wind	E				R	R	W		0.0	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73										
	LES Community Solar	E				R	R	S	Y	0.0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4										
<b>LES</b>	<b>Total</b>									0.0	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277	277										
MEAN	Future Peak				S	P				0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
	Future Intermediate				S	I				0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
	Future Base				S	B				50.0	0	0	0	0	0	0	0	0	50	50	50	50	50	50	50	50	50	50	50	50										
<b>MEAN</b>	<b>Total</b>									50.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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										
NPPD	CNS HP Turbine Replacement		C			B	N	UR		5.0	0	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5											
	Loup Creston Ridge (#1)	E				R	R	W	Y	0.0	7	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										
	Loup Creston Ridge (#2)		C			R	R	W	Y	0.0	0	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										
	Southern NE RPPD Wind		C			R	R	W	Y	0.0	0	0.0	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3										
	Scottsbluff Community Solar			P		R	S	W	Y	0.0	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										
	Venango Community Solar			P		R	S	W	Y	0.0	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										
	Kearney Community Solar				S	R	S	W	Y	0.0	0	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5										
	Future Renewable				S	R	R	W		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	0.0											
	Future Peak				S	P				0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
	Future Intermediate				S	I				0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
	Future Base				S	B				0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
<b>NPPD</b>	<b>Total</b>									5.0	7	23	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33										
OPPD	Grande Prairie Wind		C			R	R	W		0.0	0	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400											
	Future Base				S	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				250.0	0	0	0	0	0	0	250	250	250	250	250	250	250	250	250	250	250	250	250	250										
	Future Intermediate				S	I				0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
<b>OPPD</b>	<b>Total</b>									250.0	0	400	400	400	400	400	650	650	650	650	650	650	650	650	650	650	650	650	650	650										
<b>Nebraska Grand Total</b>											330	320	736	746	746	746	746	996	996	1046	1046	1071	1071	1071	1071	1071	1071	1071	1071	1071	1071	1071	1071	1071	1071	1071	1071	1071	1071	#
<b>Unit Type</b>	<b>Fuel type</b>	No Behind Meter Resources Included									2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035										
H-Hydro	HS-Run of River										309	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309	309										
D-Diesel	NG-Natural Gas										0	405	405	405	405	405	405	405	405	405	405	405	405	405	405	405	405	405	405	405	405									
N-Nuclear	O-Oil										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
CT-Combustion Turbine	Coal-Coal										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
CC-Combined Cycle	HR-Reservoir										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
C-Pulverized Coal	UR-Uranium										0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0										
R-Renewable	Wind-Wind										0	0	0	0	0	0	250	250	250	250	250	250	250	250	250	250	250	250	250											
	L-Landfill Gas										0	0	0	0	0	0	0	0	0	0	0	25	25	25	25	25	25	25	25	25										
	S-Solar										0	0	0	0	0	0	0	0	50	50	50	50	50	50	50	50	50	50	50	50	50									
	<b>TOTAL</b>										309	714	714	714	714	714	964	964	1014	1014	1039	1039	1039	1039	1039	1039	1039	1039	1039	1039	1039	1039								

**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	Fuel Type	Nameplate, Yearly Values are Nameplate	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035
Grand Island	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	35.8
LES	Salt Valley Wind	E				R		Wind	1.3	1.32	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	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	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	100	100	
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	4.0	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
MEAN	Kimball Wind	E				R		Wind	10.5	10.5	11	11	11	11	11	0	0	0	0	0	0	0	0	0	0	0	0	0	
NPPD	Ainsworth Wind	E				R		Wind	59.4	59.4	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59	
NPPD	Elkhorn Ridge Wind	E				R		Wind	80.0	80	80	80	80	80	80	80	80	80	80	80	80	80	80	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	80	80	80	0	0	0	
NPPD	Springview Wind	E				R		Wind	3.0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	0	0	
NPPD	Broken Bow Wind	E				R		Wind	80.0	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	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	42	42	42	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		
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	
NPPD	Loup Creston Ridge (#2)		C			R	Y	Wind	6.9	0	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 NE RPPD Wind		C			R	Y	Wind	9.3	0	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	
NPPD	Scottsbluff Community Solar			P		R	Y	S	0.1	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		
NPPD	Venango Community Solar			P		R	Y	S	0.1	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		
NPPD	Kearney Community Solar				S	R	Y	S	4.5	0	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5		
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	Valley Wind Turbine	E				R		Wind	0.7	0.66	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0		
OPPD	Flat Water Wind	E				R		Wind	60.0	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	0	0		
OPPD	Petersburg Wind	E				R		Wind	40.5	40.5	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	41	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		
OPPD	Grande Prairie Wind		C			R		Wind	400	0	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400		
	<b>Nebraska Grand Total</b>								1564.8	1143	1555	1564	1563	1563	1552	1552	1552	1552	1492	1492	1492	1412	1412	1272	1107	1107	1102		
<b>Unit Type</b>	<b>Fuel type</b>																												
<b>R-Renewable</b>	<b>Wind-Wind</b>	No Behind Meter Resources Included								<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>2035</b>
	<b>L-Landfill Gas</b>							<b>Existing</b>	1133	1133	1133	1131	1131	1131	1120	1120	1120	1120	1061	1061	1061	981	981	841	675	675	670	670	
	<b>BD-Biodiesel</b>							<b>Committed</b>	0	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	
	<b>S-Solar</b>							<b>Planned</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
								<b>Studied</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
								<b>TOTAL</b>	1133	1533	1533	1531	1531	1531	1520	1520	1520	1520	1461	1461	1461	1381	1381	1241	1075	1075	1070	1070	

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



## EXHIBIT 7

### 2016 Statewide Existing Generating Capability Data

<u>Utility</u>	<u>Unit Name</u>	<u>Duty Cycle</u>	<u>Unit Type</u>	<u>Fuel Type</u>	<u>Commercial Operation Date</u>	<u>Summer Accredited Capacity</u>	<u>Summer Utility Capacity</u>
Falls City	Falls City #7	P	IC	NG/DFO	1972	5.90	
	Falls City #8	P	IC	NG/DFO	1981	6.00	
<b>Falls City</b>	<b>Total</b>						<b>11.9</b>
Fremont	<b>Fremont #6</b>	<b>B</b>	<b>ST</b>	<b>SUB/NG</b>	<b>1958</b>	<b>15.50</b>	
	<b>Fremont #7</b>	<b>B</b>	<b>ST</b>	<b>SUB/NG</b>	<b>1963</b>	<b>21.00</b>	
	<b>Fremont #8</b>	<b>B</b>	<b>ST</b>	<b>SUB/NG</b>	<b>1976</b>	<b>82.00</b>	
	CT	P	GT	NG/DFO	2003	36.00	
<b>Fremont</b>	<b>Total</b>						<b>154.5</b>
Grand Island	Burdick #3	P	ST	NG	1972	54.00	
	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	
	<b>Platte Generating Station</b>	<b>B</b>	<b>ST</b>	<b>SUB</b>	<b>1982</b>	<b>100.00</b>	
	<b>Prairie Breeze 3 Wind</b>	<b>I</b>	<b>WT</b>	<b>WND</b>	<b>2016</b>	<b>0.00</b>	
<b>Grand Island</b>	<b>Total</b>						<b>235.0</b>
Hastings	<b>Whelan Energy Center #1</b>	<b>B</b>	<b>ST</b>	<b>SUB</b>	<b>1981</b>	<b>76.00</b>	
	<b>Whelan Energy Center #2</b>	<b>B</b>	<b>ST</b>	<b>SUB</b>	<b>2011</b>	<b>220.00</b>	
	Hastings-NDS#4	P	ST	NG/DFO	1957	16.00	
	Hastings-NDS#5	P	ST	NG/DFO	1967	24.00	
	DHPC-#1	P	GT	NG/DFO	1972	18.00	
<b>Hastings</b>	<b>Total</b>						<b>354.0</b>
LES	<b>Arbuckle Mtn. Wind</b>	<b>I</b>	<b>WT</b>	<b>WND</b>	<b>2016</b>	<b>5.00</b>	
	<b>Buckeye Wind</b>	<b>I</b>	<b>WT</b>	<b>WND</b>	<b>2016</b>	<b>5.01</b>	
	J St	P	GT	NG/DFO	1972	29.00	
	<b>Landfill Gas</b>	<b>B</b>	<b>IC</b>	<b>LFG</b>	<b>2014</b>	<b>4.80</b>	
	<b>Laramie River #1</b>	<b>B</b>	<b>ST</b>	<b>SUB</b>	<b>1982</b>	<b>188.69</b>	
	<b>LES Community Solar</b>	<b>B</b>	<b>PV</b>	<b>SUN</b>	<b>2016</b>	<b>0.00</b>	
	<b>Prairie Breeze 2 Wind</b>	<b>I</b>	<b>WT</b>	<b>WND</b>	<b>2016</b>	<b>3.67</b>	
	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	
	<b>Salt Valley Wind</b>	<b>I</b>	<b>WT</b>	<b>WND</b>	<b>1999</b>	<b>0.00</b>	
	Terry Bundy	P	CS	NG/DFO	2003	120.50	
	Terry Bundy	P	GT	NG/DFO	2003	47.10	
	<b>Walter Scott #4</b>	<b>B</b>	<b>ST</b>	<b>SUB</b>	<b>2007</b>	<b>103.40</b>	
<b>LES</b>	<b>Total</b>						<b>762.2</b>
MEAN	Alliance #1	P	IC	DFO	2002	1.848	
	Alliance #2	P	IC	DFO	2002	1.849	
	Alliance #3	P	IC	DFO	2002	1.849	
	Ansley #2	P	IC	NG/DFO	1972	0.80	
	Ansley #3	P	IC	NG/DFO	1968	0.40	
	Benkelman #1	P	IC	NG/DFO	1968	0.75	
	Broken Bow #2	P	IC	NG/DFO	1971	3.50	
	Broken Bow #4	P	IC	NG/DFO	1949	0.80	
	Broken Bow #5	P	IC	NG/DFO	1959	1.00	
	Broken Bow #6	P	IC	NG/DFO	1961	2.12	
	Burwell#1	P	IC	NG/DFO	1962	1.20	
	Burwell#2	P	IC	NG/DFO	1967	1.00	
	Burwell#3	P	IC	NG/DFO	1972	0.80	
	Callaway #1	P	IC	DFO	1936	0.18	
	Callaway #2	P	IC	DFO	1948	0.18	
	Callaway #3	P	IC	DFO	1958	0.47	
	Chappell #3	P	IC	DFO	1982	1.10	
	Crete #7	P	IC	NG/DFO	1972	6.00	
	Curtis #2	P	IC	NG/DFO	1975	0.80	
	Curtis #3	P	IC	NG/DFO	1969	1.00	
	Curtis #4	P	IC	NG/DFO	1955	1.20	

## EXHIBIT 7

### 2016 Statewide Existing Generating Capability Data

<u>Utility</u>	<u>Unit Name</u>	<u>Duty Cycle</u>	<u>Unit Type</u>	<u>Fuel Type</u>	<u>Commercial Operation Date</u>	<u>Summer Accredited Capacity</u>	<u>Summer Utility Capacity</u>
	Fairbury #1	P	ST	NG/DFO	1948	4.30	
	Fairbury #4	P	ST	NG/DFO	1966	11.00	
	Kimball #1	P	IC	NG/DFO	1955	1.00	
	Kimball #2	P	IC	NG/DFO	1956	0.90	
	Kimball #3	P	IC	NG/DFO	1959	1.00	
	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	
	<b>Kimball Wind</b>	<b>I</b>	<b>WT</b>	<b>WND</b>	<b>2002</b>	<b>0.00</b>	
	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	1.07	
	Pender #1	P	IC	DFO	1967	1.06	
	Pender #2	P	IC	NG/DFO	1973	1.72	
	Pender #3	P	IC	DFO	1953	0.44	
	Pender #4	P	IC	DFO	1961	0.74	
	Red Cloud #2	P	IC	NG/DFO	1953	0.50	
	Red Cloud #3	P	IC	NG/DFO	1960	1.00	
	Red Cloud #4	P	IC	NG/DFO	1968	1.00	
	Red Cloud #5	P	IC	NG/DFO	1974	1.50	
	Sargent #1	P	IC	NG/DFO	1963	1.00	
	Sargent #3	P	IC	NG/DFO	1964	0.75	
	Sargent #4	P	IC	NG/DFO	1966	0.25	
	Stuart #1	P	IC	NG/DFO	1965	0.72	
	Stuart #5	P	IC	NG/DFO	1996	0.82	
	West Point #1	P	IC	NG/DFO	1965	2.10	
	West Point #2	P	IC	NG/DFO	1959	1.10	
	West Point #3	P	IC	NG/DFO	1947	0.71	
<b>MEAN</b>	<b>Total</b>						<b>70.8</b>
<b>NPPD</b>	ADM	B	ST	SUB	2009	53.31	
	<b>Ainsworth Wind</b>	<b>I</b>	<b>WT</b>	<b>WND</b>	<b>2005</b>	<b>11.23</b>	
	Auburn #1	P	IC	NG/DFO	1982	2.00	
	Auburn #2	P	IC	NG/DFO	1949	0.00	
	Auburn #4	P	IC	NG/DFO	1993	3.30	
	Auburn #5	P	IC	NG/DFO	1973	3.00	
	Auburn #6	P	IC	NG/DFO	1967	2.00	
	Auburn #7	P	IC	NG/DFO	1987	4.00	
	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	
	<b>Broken Bow Wind</b>	<b>I</b>	<b>WT</b>	<b>WND</b>	<b>2013</b>	<b>14.07</b>	
	<b>Broken Bow II Wind</b>	<b>I</b>	<b>WT</b>	<b>WND</b>	<b>2014</b>	<b>3.70</b>	
	Cambridge	P	IC	DFO	1972	3.00	
	Canaday	P	ST	NG	1958	94.00	
	<b>Columbus 1</b>	<b>B</b>	<b>HY</b>	<b>WAT</b>	<b>1936</b>	<b>15.00</b>	
	<b>Columbus 2</b>	<b>B</b>	<b>HY</b>	<b>WAT</b>	<b>1936</b>	<b>15.00</b>	
	<b>Columbus 3</b>	<b>B</b>	<b>HY</b>	<b>WAT</b>	<b>1936</b>	<b>15.00</b>	
	<b>Cooper</b>	<b>B</b>	<b>ST</b>	<b>NUC</b>	<b>1974</b>	<b>765.00</b>	
	<b>Crofton Bluffs Wind</b>	<b>I</b>	<b>WT</b>	<b>WND</b>	<b>2013</b>	<b>4.38</b>	
	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	

## EXHIBIT 7

### 2016 Statewide Existing Generating Capability Data

<u>Utility</u>	<u>Unit Name</u>	<u>Duty Cycle</u>	<u>Unit Type</u>	<u>Fuel Type</u>	<u>Commercial Operation Date</u>	<u>Summer Accredited Capacity</u>	<u>Summer Utility Capacity</u>
NPPD (contd)	David City 6	P	IC	DFO	1996	1.33	
	David City 7	P	IC	DFO	1996	1.34	
	<b>Elkhorn Ridge Wind</b>	<b>I</b>	<b>WT</b>	<b>WND</b>	<b>2009</b>	<b>8.38</b>	
	Emerson #2	P	IC	NG/DFO	1968	1.03	
	Emerson #3	P	IC	NG/DFO	1948	0.00	
	Emerson #4	P	IC	NG/DFO	1958	0.40	
	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	
	<b>Gentleman 1</b>	<b>B</b>	<b>ST</b>	<b>SUB</b>	<b>1979</b>	<b>665.00</b>	
	<b>Gentleman 2</b>	<b>B</b>	<b>ST</b>	<b>SUB</b>	<b>1982</b>	<b>700.00</b>	
	Hallam (Black Start)	P	GT	DFO	1973	42.90	
	Hebron	P	GT	NG	1973	41.50	
	<b>Jeffrey 1 (CNPPID)</b>	<b>B</b>	<b>HY</b>	<b>WAT</b>	<b>1940</b>	<b>0.00</b>	
	<b>Jeffrey 2 (CNPPID)</b>	<b>B</b>	<b>HY</b>	<b>WAT</b>	<b>1940</b>	<b>0.00</b>	
	<b>Johnson I 1 (CNPPID)</b>	<b>B</b>	<b>HY</b>	<b>WAT</b>	<b>1940</b>	<b>0.00</b>	
	<b>Johnson I 2 (CNPPID)</b>	<b>B</b>	<b>HY</b>	<b>WAT</b>	<b>1940</b>	<b>0.00</b>	
	<b>Johnson II (CNPPID)</b>	<b>B</b>	<b>HY</b>	<b>WAT</b>	<b>1940</b>	<b>0.00</b>	
	<b>Kearney</b>	<b>B</b>	<b>HY</b>	<b>WAT</b>	<b>1921</b>	<b>0.00</b>	
	<b>Kingsley(Bik St) (CNPPID)</b>	<b>B</b>	<b>HY</b>	<b>WAT</b>	<b>1985</b>	<b>37.50</b>	
	<b>Laredo Ridge Wind</b>	<b>I</b>	<b>WT</b>	<b>WND</b>	<b>2011</b>	<b>15.67</b>	
	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	40.90	
	<b>Monroe</b>	<b>B</b>	<b>HY</b>	<b>WAT</b>	<b>1936</b>	<b>3.00</b>	
	<b>North Platte 1(Black Start)</b>	<b>B</b>	<b>HY</b>	<b>WAT</b>	<b>1935</b>	<b>12.00</b>	
	<b>North Platte 2(Black Start)</b>	<b>B</b>	<b>HY</b>	<b>WAT</b>	<b>1935</b>	<b>12.00</b>	
	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	
	<b>Sheldon 1</b>	<b>B</b>	<b>ST</b>	<b>SUB</b>	<b>1961</b>	<b>100.00</b>	
	<b>Sheldon 2</b>	<b>B</b>	<b>ST</b>	<b>SUB</b>	<b>1965</b>	<b>115.00</b>	
	<b>Spencer 1</b>	<b>B</b>	<b>HY</b>	<b>WAT</b>	<b>1927</b>	<b>0.80</b>	
	<b>Spencer 2</b>	<b>B</b>	<b>HY</b>	<b>WAT</b>	<b>1952</b>	<b>0.44</b>	
	<b>Springview Wind</b>	<b>I</b>	<b>WT</b>	<b>WND</b>	<b>2012</b>	<b>0.42</b>	
	<b>Steele Flats Wind</b>	<b>I</b>	<b>WT</b>	<b>WND</b>	<b>2013</b>	<b>3.75</b>	
	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	
	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	
<b>NPPD</b>	<b>Total</b>						<b>3,105.9</b>



## EXHIBIT 7

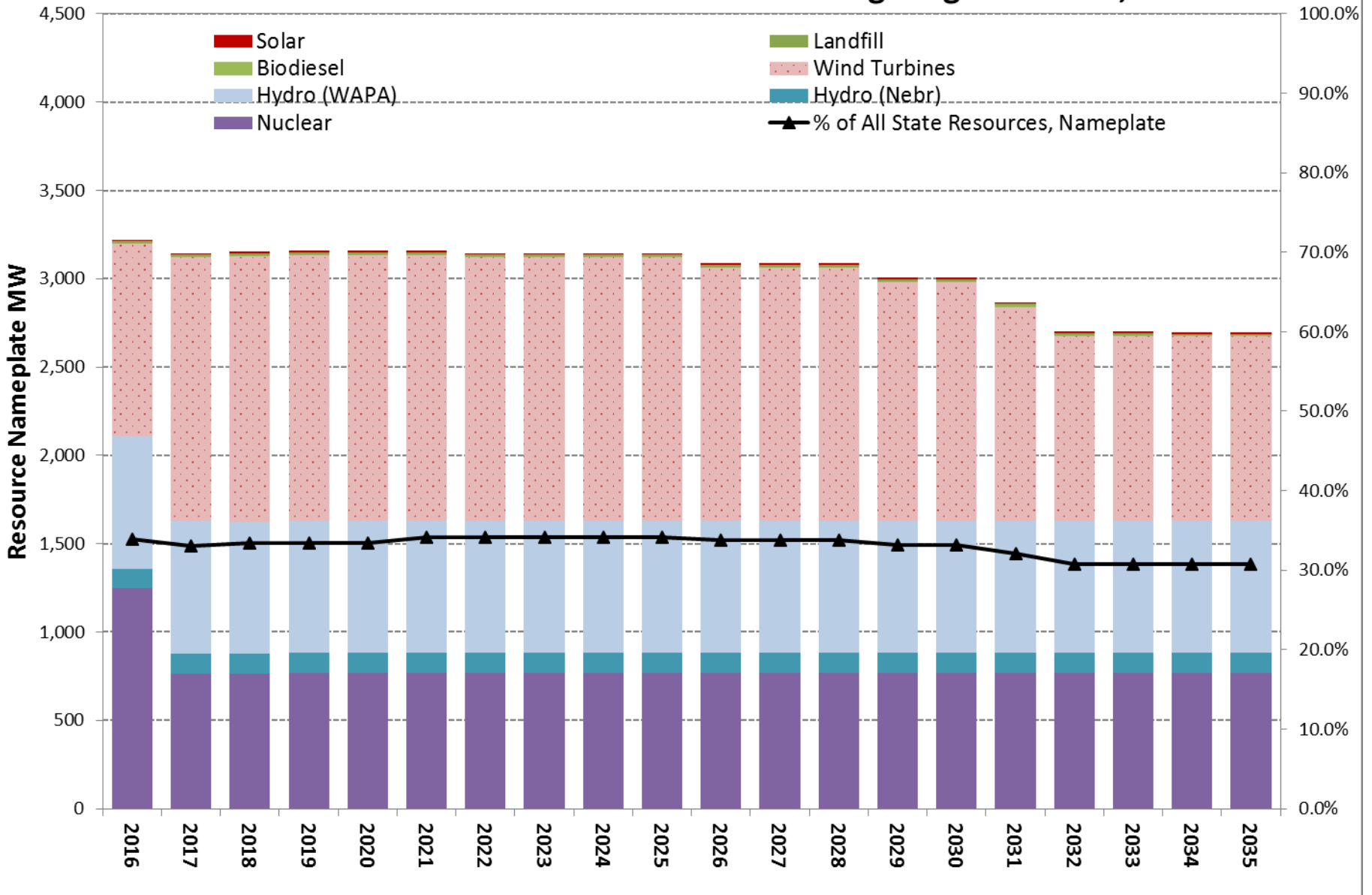
### 2016 Statewide Existing Generating Capability Data

<u>Utility</u>	<u>Unit Name</u>	<u>Duty Cycle</u>	<u>Unit Type</u>	<u>Fuel Type</u>	<u>Commercial Operation Date</u>	<u>Summer Accredited Capacity</u>	<u>Summer Utility Capacity</u>	
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		
	<b>Nebraska City Total</b>							<b>27.5</b>
	NELIGH	Neligh	P	IC	OBL	2012	1.80	
		Neligh	P	IC	OBL	2012	1.80	
Neligh		P	IC	OBL	2012	1.80		
Neligh		P	IC	OBL	2012	0.40		
<b>Neligh Total</b>							<b>5.8</b>	
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	6.12		
	Fort Calhoun #1	B	ST	NUC	1973	482.80		
	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	655.90		
	Nebraska City #2	B	ST	SUB	2009	664.20		
	North Omaha #1	B	ST	SUB/NG	1954	0.00		
	North Omaha #2	B	ST	SUB/NG	1957	0.00		
	North Omaha #3	B	ST	SUB/NG	1959	86.00		
	North Omaha #4	B	ST	SUB/NG	1963	99.10		
	North Omaha #5	B	ST	SUB/NG	1968	216.70		
	Petersburg Wind	I	WT	WND	2012	7.21		
	Prairie Breeze Wind	I	WT	WND	2014	10.03		
	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		
Valley Wind Turbine #1	I	WT	WND	2001	0.00			
<b>OPPD Total</b>							<b>3,002.7</b>	

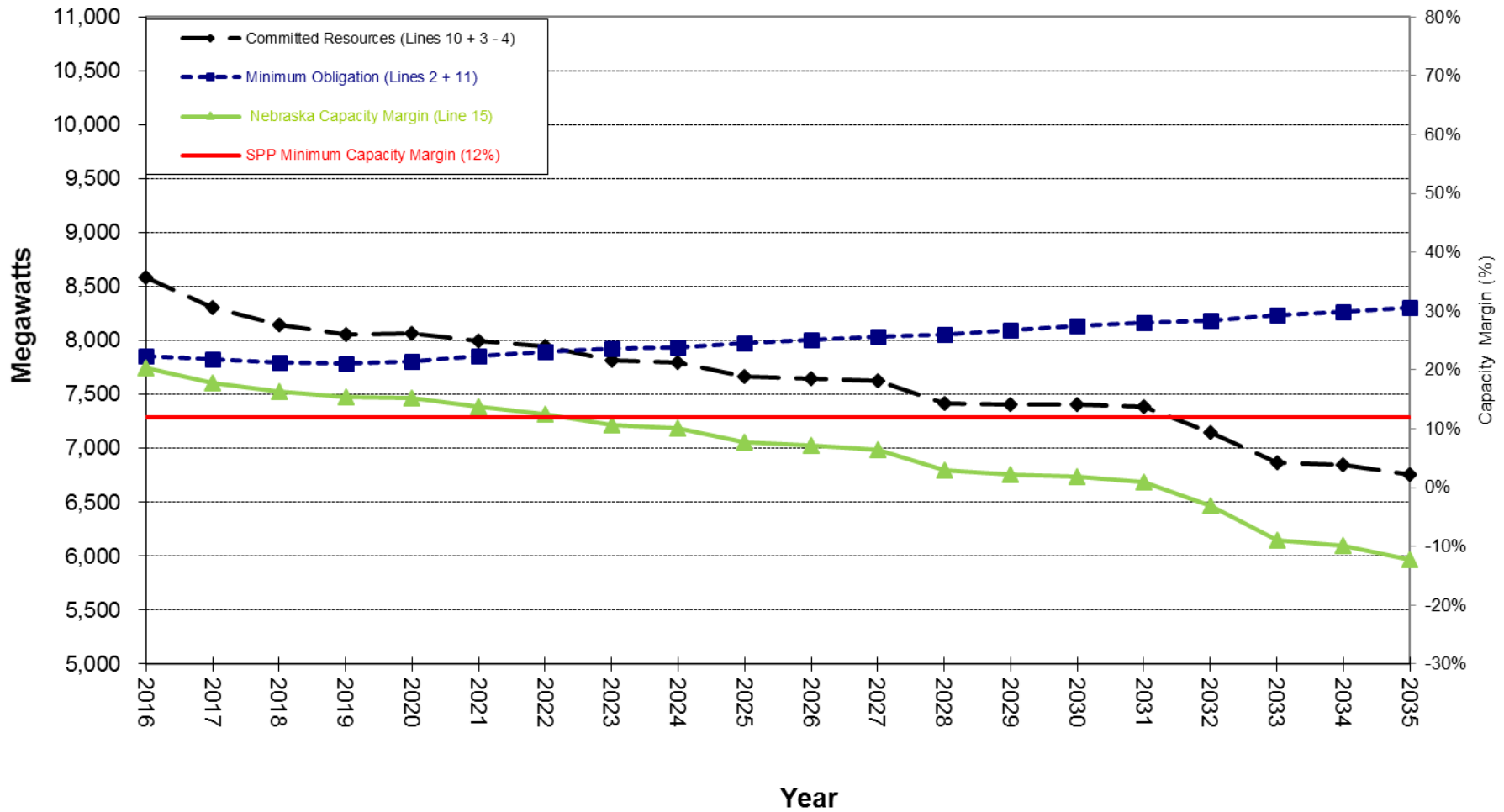
**EXHIBIT 7**  
**2016 Statewide Existing Generating Capability Data**

<u>Utility</u>	<u>Unit Name</u>	<u>Duty Cycle</u>	<u>Unit Type</u>	<u>Fuel Type</u>	<u>Commercial Operation Date</u>	<u>Summer Accredited Capacity</u>	<u>Summer Utility Capacity</u>
<b>Nebraska Grand Total</b>						<b>TOTAL</b>	<b>7,730.4</b>
	<u>Duty Cycle</u>			<u>Fuel Type*</u>			
	B-Base			NUC-Uranium		OBL-Biodiesel	
	I-Intermediate			NG-Natural Gas		WAT-Hydro	
	P-Peaking			DFO-Distillate Fuel Oil		LFG-Landfill Gas	
				SUB-Subbituminous Coal		WND-Wind	
	<u>Unit Type*</u>						
	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 single generator)						
	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



## Exhibit 8 Statewide Capability vs. Obligation Committed Resources Less Retirements (Includes Purchases and Sales) (Fossil Units > 60 Years)



# **APPENDIX: A**

## **Nebraska Net Metering Report**

**2015**

UTILITY	TOTAL NUMBER OF QF	TOTAL ESTIMATED RATED GENERATING CAPACITY OF QUALIFIED FACILITIES (kilowatts)	TOTAL ESTIMATED NET KILOWATT-HOURS RECEIVED FROM CUSTOMER-GENERATOR	OF ENERGY PRODUCED BY THE CUSTOMER-GENERATORS (kilowatt-hours)
Alliance	zero			
Ansley	zero			
Arapahoe	zero			
Arnold	zero			
Auburn	zero			
Bartley	zero			
Battle Creek	zero			
Bayard	zero			
Beatrice	zero			
Beaver City	zero			
Benkelman	zero			
Blue Hill	zero			
Bradshaw	zero			
Brainard	zero			
Bridgeport	zero			
Broken Bow	zero			
Burt County PPD	14	108.3	13,939.00	33,367.00
Burwell	zero			
Butler PPD	2	35	10,980.00	41,630.00
Callaway	zero			
Cambridge	zero			
Campbell	zero			
Cedar-Knox PPD	4	32	14,439.00	48,000.00
Central City	9	210	145,841.00	145,841.00
Central NE P.P. & I.D.	zero			
Chappell	zero			
Cherry-Todd Electric	zero			
Chester	zero			
Chimney Rock PPD	1	11	6,345.00	8,906.00
Cornhusker PPD	3	43	11,537.00	32,043.00
Cozad	zero			
Crete	1	13.5	0.00	6,902.00
Cuming County PPD	2	96.38	198,499.00	206,344.00
Curtis	zero			
Custer PPD	3	53.42	6,400.00	34,000.00
Davenport	zero			
David City	zero			
Dawson PPD	3	52.6	53.87	73,347.00
Decatur	zero			
Deshler	zero			
DeWitt	zero			
Dorchester	zero			
Elk Creek	zero			
Elkhorn Rural PPD	1	9	165.00	12,445.00
Emerson	zero			
Endicott	zero			
Fairbury	1	25	1,944.00	13,971.00
Fairmont	zero			
Falls City	zero			
Franklin	zero			
Fremont	1	6.45	2,015.00	9,560.00
Friend	zero			
Gering	2	2.4	0.00	10,069.00
Gilead	zero			

UTILITY	TOTAL NUMBER OF QF	TOTAL ESTIMATED RATED GENERATING CAPACITY OF QUALIFIED FACILITIES (kilowatts)	TOTAL ESTIMATED NET KILOWATT-HOURS RECEIVED FROM CUSTOMER-GENERATOR	OF ENERGY PRODUCED BY THE CUSTOMER-GENERATORS (kilowatt-hours)
Giltner	zero			
Gothenburg	zero			
Grand Island	1	11	82.00	n/a
Grant	zero			
Greenwood	zero			
Hampton	zero			
Hastings	zero			
Hebron	zero			
Hemingford	zero			
Hickman	zero			
High West Energy, Inc.	zero			
Highline Electric Assoc.	zero			
Hildreth	zero			
Holbrook	zero			
Holdrege	zero			
Howard Greeley Rural PPD	zero			
Hubbell	zero			
Imperial	zero			
Imperial PPD	zero			
Indianola	zero			
K.B.R. Rural PPD	3	8	8,271.00	8,271.00
Kimball	zero			
LaCreek Electric Assoc. Inc.	zero			
Laurel	zero			
Leigh	zero			
Lexington	zero			
Lincoln Electric System	42	256	151,200.00	289,751.00
Lodgepole	zero			
Loup River PPD	4	84.80	37,728.00	74,527.00
Loup Valley Rural PPD	zero			
Lyman	zero			
Lyons	zero			
Madison	1	10	0.00	440.00
McCook PPD	1	5	3,366.00	8,878.00
Midwest Electric Membership Corp.	3	52.5	0.00	10,537.00
Minden	1		116.00	2,640.00
Mitchell	zero			
Morrill	zero			
Mullen	zero			
Nebraska City	1	3.5	958.00	18,400.00
Nebraska PPD	49	297.3	9,019.00	400,200.00
Neligh	zero			
Nelson	zero			
Niobrara Elec. Assoc. Inc.	zero			
Niobrara Valley Electric Membership	2	18	315.00	17,258.00
Norris PPD	36	293.09	0.00	296,507.00
North Central PPD	2	27	43,874.00	49,500.00
North Platte	1	3	114.00	3,780.00
Northeast NE PPD	5	70	41,985.00	-

UTILITY	TOTAL NUMBER OF QF	TOTAL ESTIMATED RATED GENERATING CAPACITY OF QUALIFIED FACILITIES (kilowatts)	TOTAL ESTIMATED NET KILOWATT-HOURS RECEIVED FROM CUSTOMER-GENERATOR	OF ENERGY PRODUCED BY THE CUSTOMER-GENERATORS (kilowatt-hours)
Northwest Rural PPD	9	97.5	6,453.00	65,526.00
Omaha PPD	64	423	25,975.00	605,670.00
Ord	1	0.3	930.00	N/A
Oxford	zero			
Panhandle Rural Electric Association Membership	3	20.04	5,430.00	13,167.00
Pender	zero			
Perennial PPD	4	36	2,216.00	13,817.00
Pierce	zero			
Plainview	zero			
Polk	zero			
Polk County Rural PPD	1	25	12,005.00	24,000.00
Prague	zero			
Randolph	zero			
Red Cloud	1	5	1,533.00	11,594.00
Reynolds	zero			
Rolling Hills Electric Coop. Inc.	zero			
Roosevelt PPD	6	21.6	4,701.00	9,793.00
St. Paul	zero			
Sargent	zero			
Schuyler	zero			
Scribner	zero			
Seward	2	24	5,242.00	16,013.00
Seward County PPD	3	10.15	1,149.00	5,350.00
Shickley	zero			
Sidney	zero			
Snyder	zero			
South Central PPD	2	25	8,870.00	29,599.00
South Sioux City	2	4.8	0.00	-
Southern PPD	9	96	22,632.00	336,384.00
Southwest PPD	1	1.9	0.00	2,820.00
Spalding	zero			
Spencer	zero			
Stanton Co. PPD	2	15	7,169.00	-
Stratton	zero			
Stromsburg	zero			
Stuart	zero			
Superior	1	2.4	760.00	760.00
Sutton	zero			
Syracuse	zero			
Talmage	zero			
Tecumseh	zero			
Trenton	zero			
Twin Valley PPD	1	2.4	1,292.00	2,768.00
Valentine	zero			
Wahoo	2	6	1,200.00	7,000.00
Wakefield	zero			
Walthill	zero			
Wauneta	zero			
Wayne	zero			
West Point	zero			
Weston	zero			
Wheatbelt PPD	6	69.8	13,294.00	29,463.00



UTILITY	TOTAL NUMBER OF QF	TOTAL ESTIMATED RATED GENERATING CAPACITY OF QUALIFIED FACILITIES (kilowatts)	TOTAL ESTIMATED NET KILOWATT-HOURS RECEIVED FROM CUSTOMER-GENERATOR	OF ENERGY PRODUCED BY THE CUSTOMER-GENERATORS (kilowatt-hours)
Wilber	zero			
Wilcox	zero			
Winside	zero			
Wisner	zero			
Wood River	zero			
Wymore	zero			
Wyrulec Company	1	0.25	15.00	869.00
Y-W Electric Assoc. Inc.	zero			
<b>Total 2016</b>	320	2,723.38	830,051.87	3,031,707.00

**Previous Years Total**

<b>2015</b>	253	1,733.28	351,026.73	1,885,300.90
<b>2014</b>	199	1,467.77	262,657.00	1,367,243.00
<b>2013</b>	162	1,085.73	192,343.00	1,221,256.00
<b>2012</b>	113	622.93	84,906.00	675,334.00
<b>2011</b>	82	395.88	65,018.00	388,802.00
<b>2010</b>	45	214.88	24,117.00	137,461.00