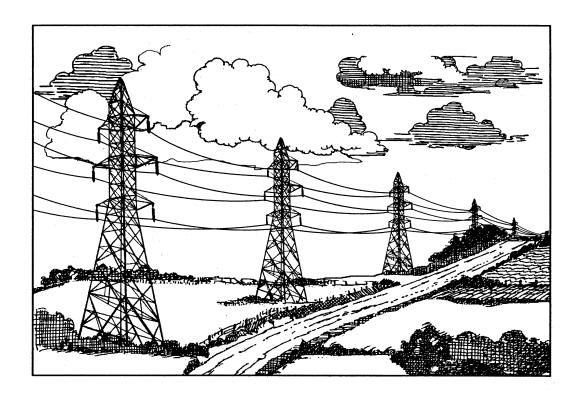
## TWENTY-FIRST BIENNIAL REPORT OF THE NEBRASKA POWER REVIEW BOARD



to the Governor of Nebraska July 1, 2018 through June 30, 2020

#### INTRODUCTION

The Nebraska Power Review Board is pleased to present its Biennial Report covering the period of July 1, 2018 through June 30, 2020. The report is prepared in compliance with the requirements set out in Neb. Rev. Stat. § 70-1003(5). The report contains information on the Board's budget and activities during the two-year period, and provides a brief description for each application upon which the Board took action. These include applications for generation facilities, transmission facilities located outside a power supplier's service area, amendments to retail service area agreements, and amendments to public power district charters.

### TWENTY-FIRST BIENNIAL REPORT OF THE NEBRASKA POWER REVIEW BOARD

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#### **BOARD MEMBERS**

Chair	Frank Reida, Omaha Term expires January 1, 2023
Vice Chair	Chuck Hutchison, Bellevue Term expires January 1, 2021
Member	Dennis Grennan, Columbus Term expires January 1, 2022
Member	Elizabeth Hilyard, Gering Term expires January 1, 2024
Member	Greg Moen, Norfolk Term expires January 1, 2021

#### STAFF

Executive Director and General Counsel	.Timothy J. Texel
Business Manager	.Rebecca Hallgren
Paralegal	. Sara Birkett

#### **EXPENDITURE REPORTS**

DEDCOMAL CEDVICES	2018-19	2019-20
PERSONAL SERVICES Salaries, wages, and per diems	210,349.81	207,586.84
TOTAI		207,586.84
. 3.7		207,000.01
OPERATING EXPENSES		
Postage	1,158.71	1,340.75
Communications	0.00	0.00
Data Processing Expense	3,824.88	3,927.85
Publications & Printing	1,118.30	1,009.13
Awards	0.00	0.00
Dues and Subscriptions	3,693.35	3,732.74
Conference Registrations	2,479.02	2,444.12
Rent Expense -Building	13,600.92	13,600.92
Rent Depreciation Surcharge	5,768.16	5,768.16
Repair and Maintenance - Building	0.00	0.00
Repair and Maintenance - Office Equipment	59.00	0.00
Repair and Maintenance - Data Processing	0.00	0.00
Office Supplies	767.29	1,647.65
Miscellaneous Supplies Expense	0.00	0.00
Non-Capitalized Equipment	3,583.00	0.00
Food Expense	0.00	0.00
Accounting and Auditing Services	420.00	420.00
Purchasing Assessment	309.00	309.00
HRMS Assessment (Human Resources)	178.00	178.00
Legal Related Expenses	439.30	35.00
SOS Temp Service - Personnel	0.00	0.00
Temp Serv - Outside	0.00	0.00
Engineer & Architectural Services (SPP Contractor)	166,800.00	166,400.00
Management Consultant Services	8,500.00	8,500.00
IT Consulting-Other	888.00	0.00
Janitorial/Security Services	120.00	120.00
Customized Development	0.00	6,040.00
Insurance Expense	25.41	25.41
Surety & Notary Bonds	16.47	16.47
Other Operating Expense	19.00	0.00
TOTAL	_ 213,767.81	215,515.20
TRAVEL EXPENSE		
Board and Lodging	4,907.67	4,864.20
Meals - One Day Travel	0.00	0.00
Commercial Transportation	1,953.17	1,031.96
State-Owned Transportation	0.00	0.00
Personal Vehicle Mileage	7,127.91	8,431.38
Miscellaneous Travel	347.40	351.00
TOTAL	_ 14,336.15	14,678.54
GRAND TOTAL	- 438,453.77	437,780.58

#### STATISTICAL SUMMARY OF BOARD ACTIVITIES

July 1, 2018, to June 30, 2020

	2018-2019	2019-2020
Number of Board Meetings	- 08	10
Hearings Before the Power Review Board:		
Formal Complaints		1
Hearings	- 0	0
Construction Applications:		
Approved New Generation Facilities <sup>1</sup>		0
Microwave Communication Facilities <sup>2</sup>	- 0	0
Transmission Lines Over ½ Mile Outside		
Applicant's Service Area <sup>3</sup>	- 2	3
TOTAL Approved Generation & Transmission		
Applications to Date	- 1,641	1,644
Generation & Transmission Applications Denied		
In Current Biennial Period		0
TOTAL Denied Applications to Date		29
Privately Developed Renewable Energy Generation Facility	- 7	12
Transmission Lines ½ Mile or Less Outside a Power Supplier's		
Service Area <sup>4</sup>		11
TOTAL Lines Approved to Date		2,116
Applications Withdrawn or Dismissed to Date	- 80	80
Amendments to Service Area Agreements and Public Power District Cha	ırters:	
Retail Service Area Amendments		3
TOTAL Retail Service Area Agreements	- 419	419
Wholesale Service Area Agreements		0
TOTAL Wholesale Service Area Agreements		22
Petitions to Amend Public Power District Charters <sup>5</sup>		2

<sup>1</sup> During the July 1, 2018 through June 30, 2020, biennial period the Board approved a total of 0 applications for generation facilities.

<sup>&</sup>lt;sup>2</sup> During the July 1, 2018 through June 30, 2020, biennial period the Board approved a total of 0 applications for microwave facilities.

<sup>&</sup>lt;sup>3</sup> During the July 1, 2018 through June 30, 2020, biennial period the Board approved 5 applications for transmission lines for an estimated total cost of \$1,175,662,426.23.

<sup>&</sup>lt;sup>4</sup>Applications for construction of transmission lines one-half mile or less outside a power supplier's service area do not require formal approval by the Board if the affected service area holders consent to the project. An application must still be filed with the Board to satisfy notice requirements pursuant to Title 285, Nebraska Administrative Code, Chapter 2, section 3. During the July 1, 2018 through June 30, 2020, biennial period the Board received 21 applications that did not require a formal vote for a total estimated cost of \$149268.39.

<sup>&</sup>lt;sup>5</sup>Public power district charters are also commonly referred to as "petitions for creation." Once a district's petition for creation is approved, it becomes the district's charter. See *Custer Public Power District v. Loup River Public Power District*, 162 Neb. 300, 75 N.W. 2d 619 (1956).

GENERATION FACILITIES

The Power Review Board did not receive any applications to construct a generation facility which required formal Board approval during this biennial period.

MICROWAVE COMMUNICATION FACILITIES

The Power Review Board did not receive any applications to construct a microwave communication facility during this biennial period.

## TRANSMISSION LINE APPLICATIONS REQUIRING BOARD APPROVAL

#### PRB-3896 Loup River Public Power District

On May 7, 2018, the Loup River Public Power District filed an application to construct 2.5 miles of 34.5 kV three-phase transmission line. The purpose of the construction is to replace the overhead line that provides service to the Village of Petersburg and the surrounding area. The overhead line would be replaced with underground line due to the amount of wind and ice storms that put the line out of service. Cornhusker Public Power District and Nebraska Public Power District filed a Consent and Waiver Form. Loup River PPD estimated the cost of the project to be \$350,000. The Board consulted with the Game and Parks Commission as required by Neb. Rev. Stat. section 37-807(3). In a letter dated May 10, 2018, the Commission determined the project is in the range of the endangered Whooping Crane, threatened Western Prairie Fringed Orchid and Northern Long-eared Bat, but there are no records of the species in the project area, nor is there habitat for them. The Commission determined the project would have "no effect" on any state or federally listed endangered or threatened species. The Commission did not object to the approval of the project. At the Board's May 18, 2018, public meeting, the Board voted to approve PRB-3896.

#### PRB-3905 City of Hastings Utilities

On February 21, 2019, the City of Hastings Utilities filed an application for authority to construct 1.42 miles of 13.8 kV 3-phase distribution line in Adams County. The line would be located along 'J' Street and Technical Boulevard. The line would provide a back-up power source for the Whelan Energy Center, Central Community College, MPH Racetrack and the Elks Country Club. The line will be underbuilt on an existing 115 kV transmission line. Southern Public Power District submitted a Consent and Waiver form consenting to the project without a hearing. The Board consulted with the Game and Parks Commission as required by Neb. Rev. Statute 37-807(3). The Commission stated that the project is in the range of the endangered Whooping Crane and the threatened Northern Long-Eared Bat. There are no records of those species in the project area, nor is there habitat for them. The Commission determined the project would have "no effect" on either species, and did not object to the PRB's approval of the project. This is the first stage of a two-part project. Hastings will file another application for the second part of the project in the next year in order to spread the cost out between two fiscal years. At the Board's March 22, 2019, public meeting, the Board voted unanimously to approve PRB-3905.

#### PRB-3911 Lincoln Electric System

On September 19, 2019, the Lincoln Electric System filed an application for authority to construct .85 mile of 7.2/12.5 kilovolt distribution line in Lancaster County. The line would be located on the south side of the City, from Rokeby Road to Saltillo Road, along south 14<sup>th</sup> Street. The proposed distribution line is within the area that would be transferred as part of the service area agreement change in SAA 85-19-A. The items are related, but Executive Director Texel thought that it would be cleaner for the paperwork to have the items acted on separately. The line is to accommodate the Nebraska Department of Transportation's South Beltway project around Lincoln. Norris Public Power District submitted a Consent and Waiver form consenting to the project without a hearing. Norris PPD consented to the project and waived any hearing. The Board consulted with the Nebraska Game and Parks Commission, as required by Nebraska revised statute 37-807(3). A letter from Game and Parks was received on October 4, 2019, stating that the project is in the range of the threatened Northern Long-Eared Bat and Western Prairie Fringed Orchid. The Commission stated that there is no habitat suitable for these species in the project area. The Commission determined the project would have "no effect" on either species and did not object to the approval of the project. At the Board's October 25, 2019, public meeting, the Board voted unanimously to approve PRB-3911.

#### PRB-3913 Southern Public Power District

On November 15, 2019, Southern Public Power District filed an application for authority to construct .9 mile of 69-kilovolt subtransmission line with .15 mile of 12.47 kilovolt (kV) distribution line underbuilt in Buffalo County, Nebraska. The project will upgrade an existing 34.5 kV line to 69 kV. If the district were just reconductoring at the same voltage the application would not be necessary. The application gives the utility with the service area rights to the project location the ability to file either an objection or a consent and waiver. Nebraska Public Power District plans to upgrade its 115 kV Elm Creek substation. Southern PPD's existing line connects to the substation, and the bay that it connects to will be upgraded from 34.5 kV to 69 kV. Due to this Southern PPD needs to upgrade its line from 34.5 kV to 69 kV. Southern PPD's line was also quite old and needed to be reconductored. Dawson PPD submitted a Consent and Waiver form waiving the need for a hearing and consenting to the approval of the project. The Board consulted with the Nebraska Game and Parks Commission as required by Nebraska Revised Statute section 37-807(3). In a letter dated December 3, 2019, the Commission determined the project is in the range of the endangered Interior Least Tern and Whooping Crane, and the threatened Piping Plover, Northern Long-Eared Bat and River Otter. There is suitable habitat in the project area for all the mentioned species. The Commission provided conservation conditions that Southern PPD should implement to ensure no harm comes to the species or their critical habitat. The Commission

determined that if Southern PPD implements the conservation conditions set out in the letter, the project "May affect, but is not likely to adversely affect the mentioned species," and with those conditions, the Commission did not object to the approval of PRB-3913. At the Board's December 20, 2019 public meeting, the Board voted unanimously to approve PRB-3913.

#### PRB-3914 Nebraska Public Power District

On December 13, 2019, Nebraska Public Power District filed an application for authority to construct 2.2 miles of 69-kilovolt (kV) subtransmission line in Buffalo County, Nebraska. The project will upgrade an existing 34.5 kV line to 69 kV. If the district were just reconductoring at the same voltage the application would not be necessary. The application gives the utility with the service area rights to the project location the ability to file either an objection or a consent and waiver. Nebraska Public Power District's is upgrading its 115 kV Elm Creek substation. In the prior month the Board approved Southern PPD's request to upgrade an existing line that connected to the substation. The bay that Southern PPD's line connects to will be upgraded from 34.5 kV to 69 kV. Southern PPD and Dawson PPD both submitted a Consent and Waiver form waiving the need for a hearing and consenting to the approval of the project. The Board consulted with the Nebraska Game and Parks Commission as required by Neb. Rev. Stat. section 37-807(3). In a letter dated December 26, 2019, the Commission determined the project is in the range of the endangered Interior Least Tern and Whooping Crane, and the threatened Piping Plover, Northern Long-Eared Bat and River Otter. There is suitable habitat in the project area for all the mentioned species. The Commission provided conservation conditions that NPPD should implement to ensure no harm comes to the species or their critical habitat. The Commission determined that if NPPD implements the conservation conditions set out in the letter, the project "May affect, but is not likely to adversely affect the mentioned species," and with those conditions, the Commission did not object to the approval of PRB-3914. At the Board's January 24, 2020 public meeting, the Board voted unanimously to approve PRB-3914.

## RETAIL SERVICE AREA AGREEMENT AMENDMENTS

#### SAA 160-18-A City of Kimball High West Energy, Inc.

On September 11, 2018, the City of Kimball and High West Energy, Inc. filed a joint application to amend their retail service area agreement. The amendment is based on an annexation. The annexation occurred several years prior to filing the application. High West Energy transferred two tracts of territory on the southern edge of the City. Kimball annexed the two tracts of territory and began serving customers in the territory, but forgot to file an application with the Power Review Board to officially amend the service area boundary. The parties mutually agreed to the transfer even though it was not as of right on Kimball's part any longer. When Kimball took over the territory it did compensate High West Energy for the loss of infrastructure and customers. This amendment transferred the territory and made the new boundary official. At the Board's September 28, 2018 public meeting the Board voted to approve SAA 160-18-A.

### SAA 243-19-A City of Lexington Dawson Public Power District

On July 8, 2019, the City of Lexington and Dawson Public Power District filed a joint application to amend their retail service area agreement. The amendment involves the transfer of two tracts of territory that the City annexed. One tract of territory was identified as the "Lexington Industrial Addition" and was annexed in May 2002. Even though the annexation was accomplished more than one year ago, Dawson PPD agreed to transfer the territory to Lexington. There is an irrigation well located in this tract and Lexington had been serving it. The second tract of territory was identified as the "Heartland Military Museum Addition" and was annexed in May 2019. The museum was served by Dawson PPD, but, Lexington paid for the distribution line that serves the museum. Dawson PPD agreed to transfer the customer to the City without any compensation. At the Board's July 26, 2019 public meeting, the Board voted to approve SAA 243-19-A.

#### SAA 85-19-A Lincoln Electric System Norris Public Power District

On October 11, 2019, the Lincoln Electric System and Norris Public Power District filed a joint amendment to amend their retail service area agreement. The amendment would transfer a tract of land on the south edge of Lincoln from Norris PPD to LES. The area involved was approximately 3.9 square miles along Saltillo Road from 6<sup>th</sup> Street to 120<sup>th</sup> Street. There are 95 customers in the area to be transferred. LES agreed to pay Norris PPD \$2,375,000 for the facilities and the loss of customers in the territory. The Board members discussed the application and expressed appreciation for how well the two utilities were working together to effectuate the transfer and determine a fair payment. The Board was not involved in the decision of the amount of payment. The two parties worked that out prior to submitting the amendment. At the Board's October 25, 2019 public meeting, the Board voted to approve SAA 85-19-A.

SAA 310-20-A SAA 57-20-A Dawson Public Power District Nebraska Public Power District City of Kearney

On May 20, 2020, Nebraska Public Power District, Dawson Public Power District, and the City of Kearney filed a joint application to amend retail service area agreements 310 and 57. Both service area numbers are actually between NPPD and Dawson PPD. SAA 310 is between NPPD and Dawson PPD and SAA 57 was formerly between Dawson PPD and Platte Valley PPD. Platte Valley PPD was taken over by NPPD in 1970. NPPD serves Kearney at retail and hold the service area rights to the City. NPPD operates as the municipal electric provider in Kearney. The City of Kearney is not an actual party to the service area agreement, but it is the PRB's practice to allow a city in this position to participate in a joint application to amend a service area that affects the city. Kearney annexed the territory on the north edge of the City. NPPD and Kearny would like to incorporate that territory into NPPD's service area for Kearney. The development is known as "Arbor View First." The annexation occurred on June 25, 2019, which falls within the one year deadline. There was no financial exchange since there are no current customers and no facilities in the annexed area. At the Board's public meeting on June 8, 2020, the Board voted unanimously to approve SAA 310-20-A and SAA 57-20-A.

# WHOLESALE SERVICE AREA AGREEMENT MODIFICATIONS

The Power Review Board did not receive any applications to amend or create a wholesale service area agreement during this biennial period.

#### AMENDMENTS

T O

#### PUBLIC POWER DISTRICT CHARTERS

#### Norris Public Power District Charter Amendment 20

On November 6, 2019, Norris Public Power District filed a Petition for Charter Amendment 20. The purpose of the amendment was to reduce the number of directors from 13 to 12, and to redistribute the population from voting subdivision 6 into its adjoining subdivisions. The director representing subdivision 6 moved out of the district. As required by state law a notice was published in at least two local newspapers with general circulation in the District's territory for three consecutive weeks prior to acting on the amendment. Notice was published on November 13, 20, and 27, 2019 in the Beatrice Daily Sun and the Seward County Independent. The notice explained that any interested party could file a protest or objection. No Protests or Objections were filed. Since no protests or objections were filed, state law allows the Board to waive a hearing on the Petition. Exhibit B submitted with the Petition showed the proposed population distribution after the proposed amendments. The PRB's normal rule is that if the variance in population between voting subdivisions falls within ten percent of the ideal, the redistribution is given a presumption that the District made a good faith effort to distribute the population as equally as possible. The Nebraska Supreme Court has stated that distribution of population for voting purposes does not require mathematical perfection, as that is normally very difficult or not possible and can create confusion for the public. It often makes sense to follow geographic features such as rivers and other boundaries, avoiding splitting up municipalities or having voting areas split by a river, etc.

According to the population numbers on Exhibit B, there are subdivisions that would be outside the ten percent variance under the proposed redistricting plan. The controlling statute is section 70-664. That statute states "Unless it shall appear affirmatively that the adoption of such proposed amendment will be contrary to the best interests of such district, or that it will jeopardize and impair the rights of the creditors of such districts, or of other persons, the Nebraska Power Review Board shall issue in duplicate a certificate of approval of such proposed amendment . . . ." Section 70-612 states "Each subdivision shall be composed of one or more voting precincts, or divided precincts, and the total population of each subdivision shall be approximately the same." The Legislature seemed to acknowledge the complexity of redistricting and the importance of census figures in section 70-604, where it says "[N]o district shall be required to redistrict its subdivision for purposes of equalizing population more frequently than every ten years following publication of the most recent federal decennial census . . . ."

Norris PPD's charter divides its territory into 13 voting subdivisions. Each subdivision has one director representing that subdivision. The director that represents subdivision 6 is moving or has moved out of the district. The Petition would divide the voting population in subdivision 6 among its surrounding subdivisions and remove the current subdivision 6 from the District's charter. This would allow the District to reduce the number of directors. Norris PPD would try to apportion the subdivisions as equally as possible with the proposed changes, but to avoid the considerable time and expense for both the District and the county clerks, the District would prefer not to perform a comprehensive redistribution of the District's entire population right now. The most current population figures from the 2010 census would be used for the proposed changes. The numbers would most likely change considerably in the 2020 census. Thus, a comprehensive redistribution would necessarily be performed after the upcoming 2020 census figures are released. Norris PPD would like to avoid duplicating the considerable effort and costs by distributing the population in subdivision 6 to its adjoining subdivisions, then conducting a comprehensive overhaul of its subdivisions after the 2020 census. There were additional factors that have changed the District's population from the most recent figures. One is that the City of Lincoln recently annexed territory from Norris PPD. The exact population figures involved in that change are not available yet. In 2017, the district merged with the Seward County Public Power District. As a result, Norris PPD added two directors. The last time a charter amendment was done by Norris PPD the subdivision populations were within the 10% variance plus or minus from the average. The statute requires equal representation and the Petition arguably does not meet that. There have been substantial changes within the district that would justify the district going through the steps to redistrict to bring its subdivisions within the variance allowed. The statute refers to what would be population shifts, but in this situation Norris PPD also has changes due to other factors such as losing territory and customers to the Lincoln Electric System and the merger with Seward County PPD.

The Board had suggested Norris PPD consider eliminating one or more directors in conjunction with the 2017 amendment when the two districts merged. The proposed amendment was Norris PPD's attempt to comply with the Board's request. The other option is to have the Governor appoint a new director. Norris PPD's general manager pointed out that removing the director now would be a cost savings to the District and its customers. Since the District cannot redistrict in 2020 because it is an election year, the appointed director would necessarily serve for a year or two before a comprehensive redistricting could be done. By removing the open director seat now, it would save the District roughly \$40,000. The overall cost for one director each year is around \$20,000. The District has to notify the election commissioner by January 5, 2020, of any director vacancies.

The Board's purpose is ultimately to look after the best interests of the customers. The merger was a positive step and this is the natural next step in that process.

The Board briefly discussed the level of detail that should be in the motion. Executive Director Texel recommended that the motion could be to approve the Petition while the details based on the discussion at this time could be provided in the written certificate of approval. By voting at the meeting instead of waiting for the written order allows the District to move forward with any needed notifications to the applicable election officials. At the Board's December 20, 2019 public meeting the Board voted 3-2 to approve the Charter Amendment 20.

#### Municipal Energy Agency of Nebraska Charter Amendment 35

On January 29, 2020 the Municipal Energy Agency of Nebraska filed a Petition for Charter Amendment 35. The amendment would add the town of Oak Creek, Colorado and remove the City of Wood River, Nebraska as voting members of MEAN, and update the list of MEAN's current directors. The Board published notice of the petition in the Steamboat Pilot & Today newspaper on February 9, 2020, and in the *Shelton Clipper* newspaper on February 13, 2020. The Steamboat Pilot & Today newspaper is the closest newspaper with circulation in the town of Oak Creek. Statewide notice in Nebraska was published in the Omaha World Herald on February 12, 2020. Under Neb. Rev. Stat. section 18-2433, the Board must provide written notice to interested parties and consider a public hearing, which may be held at the option of the Board. Written Notice was sent to the Western Area Power Administration (WAPA), Tri-State Generation and Transmission Association, Inc. and Nebraska Public Power District, as those entities have wheeling or wholesale contracts with MEAN. Written notice was also sent to the mayors of Oak Creek and Wood River. No protests, objections or interventions were filed. As required by Neb. Rev. Stat. section 18-2427, MEAN provided the Board with a certified copy of MEAN's resolution approving the addition of Oak Creek and removal of Wood River as voting members of MEAN, a copy of ordinance 654 passed by the Oak Creek town board demonstrating the town's decision to join MEAN as a voting member, the list of names and addresses of the current MEAN directors, and a copy of ordinance 561 passed by the Wood River city council demonstrating the city's decision to withdraw as a member of MEAN. Neb. Rev. Stat. section 18-2433 sets out the approval criteria the Board is to use when deciding on approval of the petition. The statute says that proposed amendments to the charter shall be approved if the Board determines "the statements in the petition are true and conform to the public convenience and welfare, so long as the plants, systems and works, the operation of the same, the exercise of powers, and the assumptions of duties and responsibilities of, or on the

part of, such agency, do not nullify, conflict with, or materially affect those of any other district or a corporation organized under the provisions of Chapter 70, article 6 or 8, or the Electric Cooperative Corporation Act, or those of any part of such district or corporation." Oak Creek has a 1.3 megawatt electric load. It owns a CAT (Caterpillar) diesel generator. The town has been associated with MEAN for 21 years, but not as a voting member. Wood River has been receiving its power from Southern Public Power District for the last eight years. Due to this the MEAN Board asked the town to consider stepping down from its voting membership. At the Board's March 13, 2020 public meeting the Board voted 5-0 to waive a hearing and approve MEAN's Petition for Charter Amendment 35.

#### COMPLAINTS

## C-54 City of David City Against Butler Public Power District of David City, Nebraska

On January 22, 2020, the City of David City filed a formal Complaint against Butler Public Power District. The basis for C-54 was that Butler PPD's recent increases in its wheeling rate were unfair and unreasonable. The complaint was filed under the provisions of Nebraska Revised Statute Section 70-1018. Under 70-1018, if power suppliers are unable to resolve a dispute concerning rates for service, a dispute can be submitted to the PRB. The PRB's settlement recommendation is advisory only. A hearing was set for March 9. On February 20, Butler PPD filed its Answer to the C-54. A request for Continuance was filed and both parties agreed to reschedule for April 13. On March 30, David City filed a Motion to Dismiss, without prejudice. Pursuant to the PRB's Rules of Practice, Chapter 3, section 14, the PRB must vote to approve a request to withdraw any pleading once it is filed. At the Board's May 11, 2020 public meeting the Board voted unanimously to approve the dismissal of formal complaint C-54.

## PRIVATELY DEVELOPED RENEWABLE ENERGY GENERATION FACILITY

Nebraska Revised Statute section 70-1014.2(2)(a)(i)-(v) sets out the certification requirements for a privately developed renewable energy generation facility. These requirements are set out in a notice that is submitted to the Power Review Board. Once a private developer or facility owner submits a notice to the Power Review Board, the executive director has ten days to issue written acknowledgments that the privately developed renewable energy generation facility is exempt from sections 70-1012 to 70-1014.01.

In the biennial period of July 1, 2018 through June 30, 2020 the Power Review Board received 19 Notices of Certifications of Privately Developed Renewable Energy Facilities. There was one Notice withdrawn and refiled at a later date. The listings below provides the date of certification, the facility name, generating capacity, type of renewable and approximate location.

- 1. May 28, 2020: Airport 009239 SCS Lexington, LLC; 1.2 MW AC Solar; Lexington Airport Authority near North Airport Road, Lexington, Nebraska
- 2. April 14, 2020: Gage Wind, LLC;124 MW; Gage County, between Pickrell and Adams, Nebraska
- 3. April 14, 2020: Goldenrod Solar Project, LLC; 443 MW; Pierce County near Meadow Grove, Nebraska
- 4. March 12, 2020: Rolling Prairie Solar, LLC; 250 MW; Otoe County near Avoca, Nebraska
- 5. March 12, 2020: Burt County Solar, LLC; 250 MW; Burt County near Tekamah, Nebraska
- 6. February 20, 2020: Valmont Industries, Inc.; 500 kW dc solar; Valmont's Valley Campus at 28800 Ida Street, Douglas County, Valley, Nebraska
- 7. February 18, 2020: Kimball Wind, LLC; 30 MW; Kimball County, Nebraska (Facility also received federal PURPA designation QF-17-494 and notified the Power Review of the QF filing. This submission preempted Power Review Board jurisdiction for any construction performed prior to submission of the Certification Notice.)
- 8. December 13, 2019: Bruce Hauschild; 5 kW solar; Lancaster County, Lincoln, Nebraska; Residential use

- 9. October 28, 2019: E. Mark Tiensvold Farms; 20 kW solar; Sheridan County, Rushville, Nebraska
- 10. July 26, 2019: Sol CES Projects, LLC; 4.375 MW AC solar; Scottsbluff, Nebraska
- 11. July 10, 2019: Butler County Solar LLC; 174.5 MW; northern Butler County near Bellwood, Nebraska
- 12. July 3, 2019: Milligan I Wind LLC; 300 MW; western Saline County near Milligan, Nebraska
- 13. January 16, 2019: Little Blue Wind LLC; 250 MW; Webster and Franklin Counties, Nebraska
- 14. November 16, 2018: Emerick Wind LLC; 302 MW; Madison and Pierce Counties, Nebraska
- 15. October 30, 2018: Thunderhead Wind Energy LLC; 500 MW; Antelope, Holt, and Wheeler Counties, Nebraska
- 16. October 25, 2018: Prairie Hills Wind, LLC; 220 MW; Custer County, Nebraska
- 17. October 17, 2018: Midland Feeders, LLC; 300 kW solar; Colfax County, Schuyler, Nebraska
- 18. October 17, 2018: Robert Kush Farms; 180 kW solar; Valley County, near the City of North Loup, Nebraska
- 19. October 15, 2018: (withdrawn) Thunderhead Wind Energy LLC; 500 MW; Antelope, Holt, and Wheeler Counties, Nebraska; refiled and notice certified on October 25, 2018

# ROSTER OF POWER SUPPLIERS OPERATING IN THE STATE OF NEBRASKA

Wholesale Power Suppliers	Gross Income Calendar Year 2018	Assessment Fiscal Year 2019-2020	Gross Income Calendar Year 2019	Assessment Fiscal Year 2020-2021
Central Nebraska Public Power & Irrigation District	\$16,618,317.00	\$1,957.34	\$20,984,039.00	\$2,752.47
*Loup River Public Power District	\$108,593,134.00	\$12,790.33	\$102,471,386.00	\$13,441.13
Municipal Energy Agency of Nebraska	\$52,411,885.00	\$6,173.18	\$49,168,535.00	\$6,449.42
*Nebraska Public Power District	\$1,143,790,000.00	\$134,717.99	\$1,073,373,000.00	\$140,793.90
*Omaha Public Power District	\$1,156,933,112.82	\$136,266.02	\$1,160,718,922.18	\$152,251.03
Tri-State G and T Association, Inc.	\$79,982,399.67	\$9,420.50	\$76,693,872.57	\$10,059.90

<sup>\*</sup>Indicates power suppliers that sell electricity at both wholesale and retail.

#### **Public Power Districts and Cooperatives**

Burt County Public Power District	\$12,759,279.00	\$1,502.81	\$13,042,632.94	\$1,710.80
Butler Public Power District	\$19,843,472.00	\$2,337.21	\$19,643,727.00	\$2,576.66
Cedar-Knox Public Power District	\$22,175,420.00	\$2,611.87	\$23,312,598.00	\$3,057.90
Cherry-Todd Electric Cooperative, Inc.	\$3,130,012.65	\$368.66	\$2,687,962.28	\$352.58
Chimney Rock Public Power District	\$7,012,077.00	\$825.90	\$6,707,449.00	\$879.81
Cornhusker Public Power District	\$35,429,261.00	\$4,172.93	\$35,955,473.00	\$4,716.26
Cuming County Public Power District	\$10,488,311.00	\$1,235.34	\$10,770,842.00	\$1,412.81
Custer Public Power District	\$28,284,575.00	\$3,331.42	\$26,986,854.71	\$3,539.85

Public Power Districts and Cooperatives	Gross Income Calendar Year 2018	Assessment Fiscal Year 2019-2020	Gross Income Calendar Year 2019	Assessment Fiscal Year 2020-2021
Dawson Public Power District	\$59,551,769.00	\$7,014.13	\$56,898,936.00	\$7,463.41
Elkhorn Rural Public Power District	\$26,104,184.13	\$3,074.61	\$27,576,035.98	\$3,617.14
High West Energy, Inc.	\$11,881,456.63	\$1,399.42	\$11,682,041.95	\$1,532.33
Highline Electric Association	\$9,275,537.63	\$1,092.49	\$9,079,914.20	\$1,191.01
Howard Greeley Rural Public Power District	\$12,631,574.00	\$1,487.77	\$12,076,991.00	\$1,584.13
Imperial Public Power District	\$2,300,283.00	\$270.93	\$2,279,433.00	\$298.99
K.B.R. Rural Public Power District	\$12,326,086.00	\$1,451.79	\$11,989,233.00	\$1,572.62
LaCreek Electric Association, Inc.	\$754,750.14	\$88.90	\$707,755.08	\$92.84
Loup Valleys Rural Public Power District	\$13,480,279.82	\$1,587.74	\$13,532,787.16	\$1,775.09
McCook Public Power District	\$18,207,259.00	\$2,144.49	\$17,841,755.00	\$2,340.30
Midwest Electric Cooperative, Inc.	\$25,428,169.92	\$2,994.98	\$25,526,778.00	\$3,348.34
Niobrara Electric Association, Inc.	\$1,394,913.00	\$164.30	\$1,398,940.00	\$183.50
Niobrara Valley Electric Membership Corporation	\$13,344,836.45	\$1,571.78	\$13,466,596.12	\$1,766.41
Norris Public Power District	\$86,607,851.00	\$10,200.86	\$84,350,862.00	\$11,064.27
North Central Public Power District	\$13,027,987.96	\$1,534.46	\$16,060,784.30	\$2,106.69
Northeast Nebraska Public Power District	\$26,104,672.78	\$3,074.66	\$29,852,267.83	\$3,915.71
Northwest Rural Public Power District	\$9,596,508.00	\$1,130.30	\$9,186,192.67	\$1,204.95

Public Power Districts and Cooperatives	Gross Income Calendar Year 2018	Assessment Fiscal Year 2019-2020	Gross Income Calendar Year 2019	Assessment Fiscal Year 2020-2021
Panhandle Rural Electric Membership Association	\$13,059,174.00	\$1,538.14	\$12,168,064.00	\$1,596.08
Perennial Public Power District	\$28,560,339.00	\$3,363.90	\$27,389,793.00	\$3,592.71
Polk County Rural Public Power District	\$12,728,370.00	\$1,499.17	\$11,822,531.19	\$1,550.76
Rolling Hills Electric Cooperative, Inc.	\$24,491.44	\$2.88	\$17,912.05	\$2.35
Roosevelt Public Power District	\$7,897,768.00	\$930.22	\$7,538,852.00	\$988.87
South Central Public Power District	\$18,409,980.00	\$2,168.37	\$16,650,981.00	\$2,184.10
Southern Public Power District	\$94,666,993.00	\$11,150.08	\$86,021,640.00	\$11,283.42
Southwest Public Power District	\$21,680,555.05	\$2,553.58	\$20,770,318.00	\$2,724.43
Stanton County Public Power District	\$13,307,977.00	\$1,567.44	\$13,169,686.97	\$1,727.46
Twin Valleys Public Power District	\$15,779,203.00	\$1,858.51	\$16,017,793.00	\$2,101.05
Wheatbelt Public Power District	\$18,946,680.00	\$2,231.58	\$19,197,667.00	\$2,518.15
Wyrulec Company	\$2,500,848.96	\$294.56	\$2,523,073.00	\$330.95
Y-W Electric Association, Inc.	\$752,141.70	\$88.59	\$774,171.93	\$101.55

Municipal Power Suppliers - Generation & Distribution	Gross Income Calendar Year 2018	Assessment Fiscal Year 2019-2020	Gross Income Calendar Year 2019	Assessment Fiscal Year 2020-2021
Alliance, City of	\$13,960,869.00	\$1,644.34	\$14,072,596.00	\$1,845.90
Ansley, Village of	\$643,848.64	\$75.83	\$671,328.06	\$88.06
Arnold, Village of	\$929,910.73	\$109.53	\$909,949.97	\$119.36
Auburn, City of	\$6,363,836.00	\$749.55	\$6,222,269.00	\$816.17
Beaver City, City of	\$828,209.66	\$97.55	\$813,391.08	\$106.69
Benkelman, City of	\$1,562,782.45	\$184.07	\$1,559,293.76	\$204.53
Blue Hill, City of	\$746,426.44	\$87.92	\$725,643.39	\$95.18
Broken Bow, City of	\$9,668,895.28	\$1,138.82	\$9,863,542.84	\$1,293.80
Burwell, City of	\$1,918,623.52	\$225.98	\$1,677,530.82	\$220.04
Callaway, Village of	\$906,637.00	\$106.79	\$970,434.87	\$127.29
Cambridge, City of	\$3,625,106.79	\$426.97	\$3,678,080.37	\$482.45
Campbell, Village of	\$251,823.78	\$29.66	\$243,053.70	\$31.88
Chappell, City of	\$952,063.45	\$112.14	\$915,621.64	\$120.10
Crete, City of	\$12,384,441.00	\$1,458.67	\$12,603,950.00	\$1,653.26
Curtis, City of	\$1,822,323.49	\$214.64	\$1,878,715.32	\$246.43
David City, City of	\$5,087,168.47	\$599.18	\$4,623,741.62	\$606.49
Deshler, City of	\$879,176.72	\$103.55	\$856,126.48	\$112.30
Emerson, City of	\$695,480.20	\$81.92	\$679,560.60	\$89.14
Fairbury, City of	\$6,173,659.15	\$727.15	\$9,533,624.00	\$1,250.52
Falls City, City of	\$5,487,219.00	\$646.30	\$5,524,914.00	\$724.70
Franklin, City of	\$1,323,739.34	\$155.91	\$1,328,774.75	\$174.29
Fremont, City of	\$43,913,005.00	\$5,172.17	\$44,512,233.00	\$5,838.65
Grand Island, City of	\$90,916,201.00	\$10,708.30	\$87,078,465.00	\$11,422.05
Hastings, City of	\$40,403,769.00	\$4,758.84	\$39,777,274.00	\$5,217.57
Holdrege, City of	\$9,894,503.00	\$1,165.40	\$9,664,153.00	\$1,267.64

Municipal Power Suppliers - Generation & Distribution	Gross Income Calendar Year 2018	Assessment Fiscal Year 2019-2020	Gross Income Calendar Year 2019	Assessment Fiscal Year 2020-2021
Imperial, City of	\$3,529,334.00	\$415.69	\$3,619,636.00	\$474.79
Kimball, City of	\$3,295,716.00	\$388.18	\$3,103,953.40	\$407.14
Laurel, City of	\$1,220,551.92	\$143.76	\$1,224,342.58	\$160.60
Lincoln, City of	\$325,423,999.00	\$38,329.12	\$309,474,267.00	\$40,593.61
Lodgepole, Village of	\$302,662.00	\$35.65	\$282,910.00	\$37.11
Lyons, City of	\$872,297.75	\$102.74	\$876,442.72	\$114.96
Madison, City of	\$4,687,570.91	\$552.11	\$6,002,861.71	\$787.39
Minden, City of	\$3,438,690.00	\$405.02	\$2,326,968.47	\$305.23
Mullen, City of	\$594,396.76	\$70.01	\$594,626.87	\$78.00
Nebraska City, City of	\$15,644,883.73	\$1,842.69	\$14,159,451.96	\$1,857.29
Neligh, City of	\$2,173,057.08	\$255.95	\$2,170,148.73	\$284.66
Ord, City of	\$3,388,480.17	\$399.10	\$3,724,499.01	\$488.54
Oxford, Village of	\$1,014,291.59	\$119.47	\$968,692.11	\$127.06
Pender, Village of	\$1,934,290.82	\$227.82	\$1,649,388.91	\$216.35
Plainview, City of	\$1,541,793.40	\$181.60	\$0.00	\$0.00
Randolph, City of	\$923,840.57	\$108.81	\$944,375.38	\$123.87
Red Cloud, City of	\$1,446,352.24	\$170.35	\$1,499,390.20	\$196.67
Sargent, City of	\$781,692.50	\$92.07	\$788,583.85	\$103.44
Schuyler, City of	\$11,743,550.00	\$1,383.18	\$11,492,846.00	\$1,507.51
Sidney, City of	\$9,911,172.00	\$1,167.36	\$9,899,755.00	\$1,298.55
Spalding, Village of	\$730,511.24	\$86.04	\$666,368.03	\$87.41
Stratton, Village of	\$401,988.95	\$47.35	\$410,168.45	\$53.80
Stuart, Village of	\$887,416.90	\$104.52	\$851,326.95	\$111.67
Tecumseh, City of	\$3,253,296.91	\$383.18	\$3,294,809.23	\$432.18
Trenton, Village of	\$629,766.68	\$74.18	\$651,863.38	\$85.50

Municipal Power Suppliers - Generation & Distribution	Gross Income Calendar Year 2018	Assessment Fiscal Year 2019-2020	Gross Income Calendar Year 2019	Assessment Fiscal Year 2020-2021
Wahoo, City of	\$5,768,483.00	\$679.42	\$6,475,209.35	\$849.35
Wakefield, City of	\$3,758,492.97	\$442.68	\$3,747,682.57	\$491.58
Wauneta, Village of	\$839,563.70	\$98.89	\$845,484.31	\$110.90
Wayne, City of	\$7,784,884.80	\$916.92	\$7,499,690.89	\$983.73
West Point, City of	\$6,835,146.69	\$805.06	\$6,817,050.79	\$894.19
Wilber, City of	\$1,681,817.16	\$198.09	\$1,709,833.33	\$224.28
Municipal Power Supplier	- Distribution Only			
Arapahoe, City of	\$1,504,122.26	\$177.16	\$1,484,293.67	\$194.69
Bartley, Village of	\$615,691.99	\$72.52	\$811,562.00	\$106.45
Battle Creek, City of	\$1,153,047.63	\$135.81	\$1,132,343.61	\$148.53
Bayard, City of	\$1,231,563.88	\$145.06	\$1,235,343.61	\$162.04
Beatrice, City of	\$16,839,927.18	\$1,983.44	\$1,679,714.33	\$220.33
Bradshaw, Village of	\$394,571.83	\$46.47	\$478,259.46	\$62.73
Brainard, Village of	\$499,311.58	\$58.81	\$453,013.31	\$59.42
Bridgeport, City of	\$1,848,498.50	\$217.72	\$1,957,407.38	\$256.75
Central City, City of	\$3,798,925.04	\$447.45	\$3,759,858.97	\$493.18
Chester, Village of	\$294,818.84	\$34.72	\$287,369.56	\$37.69
Cozad, City of	\$4,935,927.28	\$581.36	\$4,909,420.05	\$643.97
Davenport, Village of	\$377,501.89	\$44.46	\$368,713.85	\$48.36
Decatur, Village of	\$512,546.27	\$60.37	\$500,928.72	\$65.71
DeWitt, Village of	\$566,037.00	\$66.67	\$497,854.00	\$65.30
Dorchester, Village of	\$773,573.28	\$91.11	\$719,195.58	\$94.34

Municipal Power Suppliers - Distribution Only	Gross Income Calendar Year 2018	Assessment Fiscal Year 2019-2020	Gross Income Calendar Year 2019	Assessment Fiscal Year 2020-2021
Elk Creek, Village of	\$98,435.60	\$11.59	\$89,997.71	\$11.80
Endicott, Village of	\$117,402.90	\$13.83	\$98,004.92	\$12.86
Fairmont, Village of	\$526,502.21	\$62.01	\$531,499.87	\$69.72
Friend, City of	\$1,244,385.67	\$146.57	\$1,224,812.51	\$160.66
Gering, City of	\$9,947,965.52	\$1,171.69	\$9,554,266.00	\$1,253.23
Gilead, Village of	\$47,470.85	\$5.59	\$47,948.30	\$6.29
Giltner, Village of	\$342,046.27	\$40.29	\$364,252.37	\$47.78
Gothenburg, City of	\$5,306,488.63	\$625.01	\$5,192,290.38	\$681.07
Grant, City of	\$2,162,736.55	\$254.73	\$2,131,719.63	\$279.62
Greenwood, Village of	\$442,301.72	\$52.10	\$544,728.94	\$71.45
Hampton, Village of	\$584,905.21	\$68.89	\$551,893.36	\$72.39
Hebron, City of	\$2,169,762.50	\$255.56	\$1,954,493.38	\$256.37
Hemingford, Village of	\$1,407,548.40	\$165.78	\$1,125,556.79	\$147.64
Hickman, City of	\$1,456,692.92	\$171.57	\$1,459,020.57	\$191.38
Hildreth, Village of	\$353,012.06	\$41.58	\$357,458.62	\$46.89
Holbrook, Village of	\$185,070.97	\$21.80	\$0.00	\$0.00
Hubbell, Village of	\$118,814.98	\$13.99	\$78,778.94	\$10.33
Indianola, City of	\$547,237.04	\$64.45	\$549,062.54	\$72.02
Lexington, City of	\$17,689,268.12	\$2,083.48	\$17,677,698.62	\$2,318.78
Lyman, Village of	\$665,470.77	\$78.38	\$670,567.18	\$87.96
Mitchell, City of	\$1,579,514.37	\$186.04	\$1,551,537.49	\$203.51
Morrill, Village of	\$2,317,710.29	\$272.98	\$2,326,968.47	\$305.23
Nelson, City of	\$537,818.17	\$63.35	\$529,112.28	\$69.40

Municipal Power Suppliers - Distribution Only	Gross Income Calendar Year 2018	Assessment Fiscal Year 2019-2020	Gross Income Calendar Year 2019	Assessment Fiscal Year 2020-2021
North Platte, City of	\$28,473,789.63	\$3,353.70	\$9,186,192.67	\$1,204.95
Pierce, City of	\$2,435,418.23	\$286.85	\$2,476,332.40	\$324.82
Polk , Village of	\$452,278.14	\$53.27	\$477,310.89	\$62.61
Prague, Village of	\$304,570.95	\$35.87	\$316,468.48	\$41.51
Reynolds, Village of	\$100,544.64	\$11.84	\$108,202.09	\$14.19
St. Paul, City of	\$2,646,615.73	\$311.72	\$2,629,335.67	\$344.89
Scribner, City of	\$1,082,143.06	\$127.46	\$1,078,322.56	\$141.44
Seward, City of	\$9,780,820.88	\$1,152.01	\$9,602,864.88	\$1,259.60
Shickley, Village of	\$423,387.63	\$49.87	\$9,899,755.00	\$1,298.55
Snyder, Village of	\$742,252.74	\$87.42	\$721,840.29	\$94.68
South Sioux City, City of	\$21,950,717.00	\$2,585.40	\$22,839,612.00	\$2,995.86
Spencer, Village of	\$684,065.00	\$80.57	\$686,861.00	\$90.10
Stromsburg, City of	\$1,635,855.51	\$192.67	\$1,166,345.60	\$152.99
Superior, City of	\$2,547,482.00	\$300.05	\$2,578,377.00	\$338.20
Sutton, City of	\$2,050,122.10	\$241.47	\$2,017,882.14	\$264.68
Syracuse, City of	\$2,050,122.10	\$241.47	\$2,017,882.14	\$264.68
Talmage, Village of	\$226,832.44	\$26.72	\$240,079.47	\$31.49
Valentine, City of	\$4,753,586.61	\$559.89	\$4,677,811.65	\$613.59
Walthill, Village of	\$601,392.88	\$70.83	\$597,324.55	\$78.35
Weston, Village of	\$247,081.18	\$29.10	\$246,590.77	\$32.35
Wilcox, Village of	\$502,117.27	\$59.14	\$526,404.45	\$69.05
Winside, Village of	\$323,151.53	\$38.06	\$338,925.84	\$44.46
Wisner, City of	\$1,635,855.51	\$192.67	\$1,620,857.66	\$212.61
Wood River, City of	\$1,431,011.20	\$168.55	\$1,382,569.01	\$181.35
Wymore, City of	\$1,185,956.46	\$139.68	\$1,149,468.07	\$150.78

# **POWER SUPPLIERS BY CATEGORY**

	Fiscal Year <u>2017-2018</u>		Fiscal Year <u>2018-2019</u>	
Supplier	Number of Suppliers	Gross Income Calendar Year 2016	Number of Suppliers	Gross Income Calendar Year 2017
Wholesale	5	\$ 2,463,532,017.00	5	\$2,383,185,268.56
Generation and Transmission Associations	1	\$ 80,723,495.77	1	\$ 85,218,498.37
Public Power Districts and Cooperatives	39	\$ 730,998,326.18	38	\$ 749,974,556.51
Municipal-Generation and Distribution	56	\$ 633,770,585.06	56	\$ 654,082,476.10
Municipal-Distribution Only	65	\$ 166,297,578.57	65	\$ 167,114,997.27
INDUSTRY TOTAL	166	\$ 4,075,322,002.58	165	\$4,039,575,796.81
	Fiscal Year 2019-2020		Fiscal Year <u>2020-2021</u>	
Supplier		Gross Income Calendar Year 2018		Gross Income Calendar Year 2019
<b>Supplier</b> Wholesale	2019-2020 Number of		2020-2021 Number of	Calendar Year
•	2019-2020 Number of Suppliers	Calendar Year 2018	2020-2021 Number of Suppliers	Calendar Year 2019
Wholesale  Generation and Transmission	Number of Suppliers	<b>Calendar Year 2018</b> \$ 2,478,346,448.82	Number of Suppliers	Calendar Year 2019 \$2,406,715,882.18
Wholesale  Generation and Transmission Associations  Public Power Districts	2019-2020  Number of Suppliers  5	\$ 2,478,346,448.82 \$ 79,982,399.67	Number of Suppliers  5	Calendar Year 2019 \$2,406,715,882.18 \$ 76,693,872.57
Wholesale  Generation and Transmission Associations  Public Power Districts and Cooperatives  Municipal-Generation	2019-2020 Number of Suppliers  5	\$ 2,478,346,448.82 \$ 79,982,399.67 \$ 729,455,047.26	Number of Suppliers  5  1  38	Calendar Year 2019 \$2,406,715,882.18 \$ 76,693,872.57 \$ 716,677,325.36

# LOAD AND CAPABILITY REPORT PREPARED BY NEBRASKA POWER ASSOCIATION



# 2019 NEBRASKA POWER ASSOCIATION LOAD AND CAPABILITY REPORT

August 2019

### 2019 Nebraska Power Association Load and Capability Report

### **Executive Summary**

In summary, based on existing and committed resources, the statewide deficit occurs in 2029 for the Minimum Obligation as shown in Exhibit 1. The statewide deficit for the Minimum Obligation in the 2018 report showed a State deficit occurring after 2037. Exhibit 2 is the corresponding load and capability data in tabular format. The change in the statewide deficit year is primarily due to projected load growth in OPPD's load forecast and no new Committed capacity identified to offset the load increase. OPPD has identified Studied capacity additions in future years to meet its load forecast which will contribute to meeting the statewide Minimum Obligation. The Minimum Obligation, with Planned and Studied resources included is satisfied in all years as shown in Exhibit 3. 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.

### 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 (2019-2038).

### 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 2019 through 2038, the average annual compounded peak demand growth rate for the State is projected at 0.7% per year (individual utilities range from -0.4%/yr. to 1.6%/yr.). The escalation rate that was shown in last year's report for 2018 through 2037 was 0.4%.

### 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 2019 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 718 MW in 2019 and 824 MW by 2038.

### Resources

### **Existing/Committed**

The State has an "Existing" in-service summer accreditable generating resource capability of 7,564 MW. This is up from 7,535 MW shown in the previous report. The changes were mostly increases in wind accreditation and not accrediting OPPD's 55.4 MW Sarpy County #1 in 2019. There are 210 MW of "Committed" nameplate resources included in this report (the projects have Nebraska Power Review Board approval if required – PURPA qualifying and non-utility renewable projects do not need NPRB approval). This consists of 50 MW from Grand Island's Prairie Hills Wind Farm in 2020 and 160 MW from OPPD's Sholes Wind Farm in 2019. There is an additional 35.4 MW of committed renewable behind the meter generation (BTM) to be added between 2019 and 2021.

### 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 BTM community solar project and battery energy storage system in 2020 totaling 9.5 MW.

### <u>Studied</u>

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, peaking, and unspecified resources considering current and future needs. The result is a listing of the preferable mix of renewable, base load, intermediate, peaking and unspecified 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 875 MW of "Studied" resources that include 0 MW of nameplate renewable (wind) resources, 25 MW of base load capacity, 0 MW of intermediate capacity, and 850 MW of unspecified capacity by 2038.

### Committed/Planned/Studied Exhibits

Exhibit 3 shows the statewide load and capability chart considering 7,564 MW of Existing, 210 MW of Committed (nameplate), 0 MW Planned, and 875 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, (which includes BTM). Exhibit 6 summarizes the Existing, Committed, Planned, and Studied renewable resources and also includes BTM resources in the tabulation.

OPPD has identified Studied capacity additions in future years to meet its load forecast. This Studied capacity amount has been identified as unspecified since the type of resource to meet this demand has not been determined. OPPD's load forecast has been provided to SPP and includes load growth which will require additional capacity if current projections remain valid. OPPD is monitoring its load growth as it continues to develop its Studied capacity additions.

### **Non-Utility Resources**

Non-utility wind purchases have also accelerated and are summarized as follows. This information is gathered from publicly available industry publications and newspapers. These projects also do not represent retail choice. The 318 MW (nameplate rated) Rattlesnake Creek wind facility began commercial operation in December 2018 and energy from this facility will be purchased by Facebook and Adobe Systems. Facebook is procuring energy from Rattlesnake Creek for their data facility in Sarpy County. The WEC Energy Group (an electric generation and distribution and natural gas delivery holding company), based in Milwaukee, Wisconsin, signed a Purchase and Sale Agreement for 80% of the Upstream Wind Energy Center (202.5 MW nameplate) located just north of the City of Neligh. Invenergy, the developer, has retained a 20% interest in the project which went commercial in the first part of 2019. Both the J.M. Smucker Company and Vail Resorts have Power Purchase Agreements in place to purchase energy from the 230 MW (nameplate) Plum Creek Wind Project in Wayne County. Smucker's purchase is for 60 MW while Vail Resorts will purchase 310,000 MWh annually for 12 years. Hormel Foods has announced a Power Purchase Agreement for wind energy from a new wind farm near Milligan (Milligan 3), located in Saline County 60 miles southwest of Lincoln. This project is also expected to be completed in 2020. The wind farm will be capable of 74 MW (nameplate) of power.

### Non-Carbon, Renewable and Demand Side Resources

The State has 1,693 MW of commercially operating renewable nameplate resources for the peak of 2019 of which 52 MW are behind the utility meter (not net metered) as shown in Exhibit 6. There is also 111 MW of instate hydro for Nebraska use not included in this total. 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 is determined by following SPP's criteria to calculate the 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. SPP's Supply Adequacy Working Group is currently pursuing implementation of an effective load carrying capability (ELCC) method of determining wind, solar and storage accreditation which would replace the currently used criteria. The method is scheduled to go into effect for the summer of 2023. The ELCC is a probabilistic based accreditation reflecting an intermittent resource's ability to reliably serve load. The existing accreditation method produces a resulting accreditation which is independent of overall penetration of that type of resource in the SPP footprint. Contrarily, the ELCC is affected by overall penetration level of the resource in a footprint, and the general principle is that as overall penetration grows, the accreditation benefit on a percent of nameplate goes

down. During the years before 2023, SPP will provide ELCC accreditation levels on an annual basis to provide SPP members/stakeholders with an indication of the magnitude of percentage accreditation in anticipation of actual implementation for the summer of 2023. Even with low accredited capacity ratings, in the case of 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 achieving 10% of its energy supply for native load from 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 meet the goal in 2019.

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. Due to timely precipitation, 312 MW of demand was reduced in 2018. Another 5 MW of demand reduction was realized from other sources.

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

NPPD has 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 2018 are 288,100 MWh and demand reductions are 47 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.
- 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 2018, non-carbon generation resources were approximately 56% 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 2018 OPPD met 31.9% of retail customer electrical energy requirements with wind energy, energy from landfill gas and hydro energy. OPPD's renewable portfolio at 2018 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 November 2019. The Fort Calhoun Community Solar Facility located in Washington County, Nebraska has an anticipated commercial operation date of August 2019. With 976.7 MW of wind and solar in OPPD's portfolio by the end of 2019, 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 2019. 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 total membership, MEAN's system-wide resource portfolio includes 48% non-carbon resources on the basis of nameplate capacity, consisting of 32% WAPA hydro allocations, 14% renewables (wind, small hydro, and landfill gas), and 2% nuclear. For the state of Nebraska, MEAN's non-carbon resources represent 42.5% of the portfolio.

In 2018, MEAN finalized the latest addition to 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 was 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 instead came online in June of 2018.

MEAN recently explored community solar garden installations to satisfy community demands for localized green initiatives. In 2018, MEAN surveyed Participant communities soliciting the level of interest in locally-owned solar facilities. Based on the results of that survey, MEAN staff contacted Participants to further discussions and determined six communities ready to proceed toward solar procurement. MEAN facilitated a joint RFP for more advantageous pricing. The Participants and MEAN are currently engaged in bid evaluation and hope to move toward installation in 2019 or early 2020. The total requested solar capacity was 4.6 MW, although this will likely decrease with final commitments.

MEAN previously 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. Should Participant communities desire a larger allowance for community-owned renewables, the Board can take up the issue for an increase in this limitation.

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. In 2019, MEAN initiated additional energy efficiency incentives offered to residential end-use customers of its Participants. These new programs include rebates for programmable thermostats, residential insulation, and HVAC tune-ups.

## 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 2018 forecast, the projected total demand growth through 2023 is 23 MW. LES has 95 MW of sustainable generation and demand reduction resources planned through the end of the current five-year target period. Future projects include the continuation of LES' demand-side management portfolio, the Sustainable Energy Program (SEP), and LES' Peak Rewards, a smart thermostat demand response program.

Under the Peak Rewards program, LES 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 summer 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-MW<sub>DC</sub>/4-MW<sub>AC</sub> solar facility, which began commercial operation in June 2016. The facility represents the first utility-scale solar project in Nebraska and is still one of the largest projects in the region.

The community solar project also supports LES' 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. New for 2019, LES customers are now able to purchase ½ panels and also make the associated payments over 36 months via their normal LES bill.

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 was equivalent to 45 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 its customer, Central Community College, to implement a 1.7 MW wind turbine on the Hastings CCC campus.

Hastings Utilities has recently started construction of a 1.5 MW Community Solar Project to respond to customer requests for renewable energy. Customers can participate by purchase of solar panels or solar shares. It is anticipated the project will be completed before the end of 2019.

### 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. In 2017, Grand Island Utilities signed a Power Purchase Agreement with Sempra for 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.

In 2017, Grand Island Utilities signed a Power Purchase Agreement for a 1 MW behind the meter solar installation with Sol Systems. This facility went into service in 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 is ~1 MW and was completed in September 2018. Electric customers were allowed to own the solar panels or purchase shares.

### **SPP Generator Interconnection Queue**

The SPP Generator Interconnection Queue process provides a means for planners and developers to submit new generation interconnection projects into the Queue for validation, study, analysis and, ultimately, execution of a Generator Interconnection Agreement.

A listing of the projects in the Queue from May of this year for Nebraska shows around 900 nameplate megawatts for battery storage, 2,000 MW of solar and 10,000 MW of wind. For reference, there is at this time approximately 2,000 MW of nameplate wind installed in the State. Many or most of these proposed projects listed in the SPP Queue will not get built.

### **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 <sub>DC</sub> (4 MW <sub>AC</sub>) 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 8.5 MW <sub>AC</sub>. OPPD will soon have a community solar facility sized at 5 MW. OPPD's customers have already subscribed to the full production of this facility. Therefore, more private involvement with local utilities is providing additional opportunities to increase the utilization of renewable energy.

In addition, an NPPD retail community also has plans to tie a 1 MW / 2 MWh Battery Energy Storage System (BESS) to a community solar project. The BESS will be charged through generation provided by the solar unit and discharged daily to accomplish several goals, such as demand management, voltage support, and smoothing and shifting variable renewable energy generation. The BESS unit will store approximately the amount of electricity that a small home would use over the course of two months.

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 2038.

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

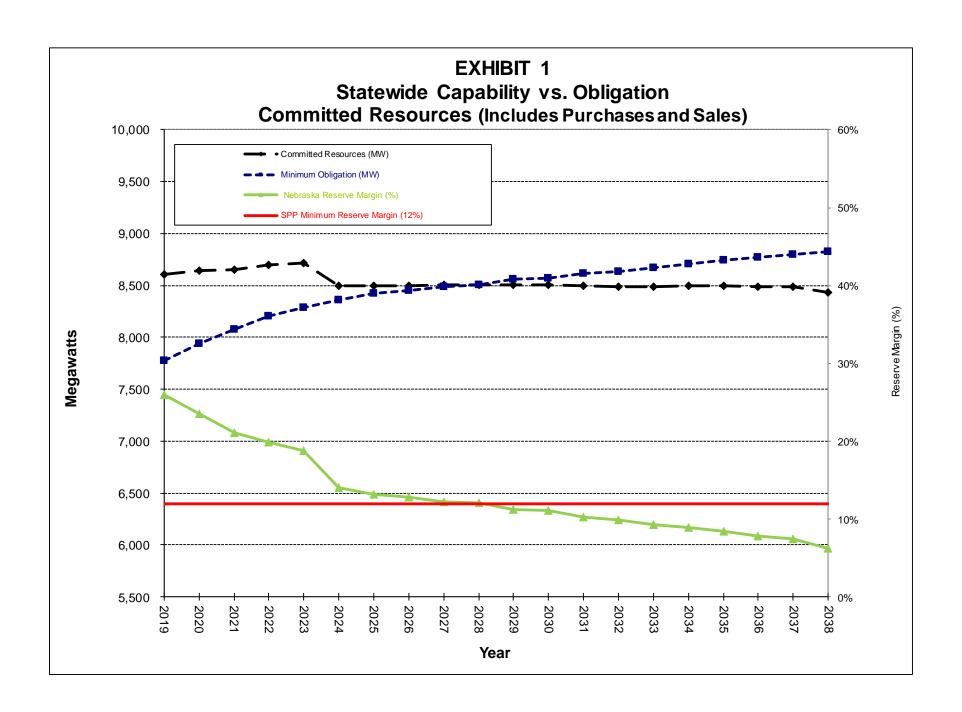
received a new 30 year operating license, with the license requiring renewal in 2047. Given the focus on carbon free generation resources NPPD and Loup are assuming these facilities will continue to be maintained and licensed and will remain an essential part of NPPD's generation mix for an extended 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.

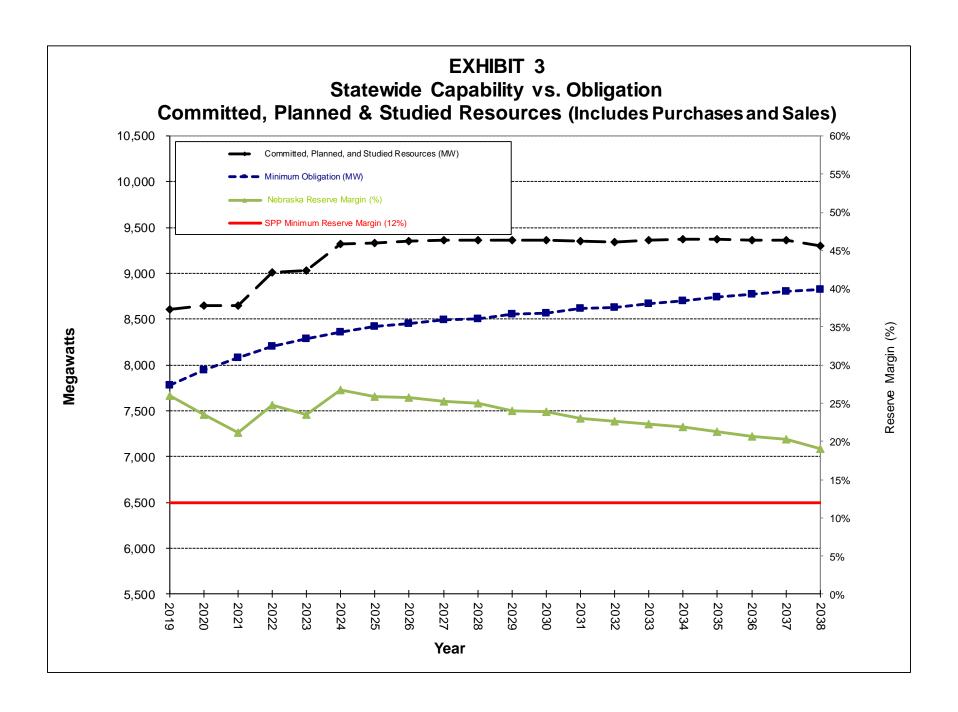
Nebraska's existing generator capability resources are listed by unit in Exhibit 7. Nebraska has 7,564 MW of existing resources. 1,135 MW or 15% of that total are greater than 50 years old today. Another 2,656 MW or 36% are 41 to 50 years old today. Most of these units have no planned retirement date. By 2038 approximately 3,791 MW will reach 60 years of age in this 20 year study.

Although Nebraska has sufficient generating resources when including studied resources beyond 2038 as shown in Exhibits 3 & 4, 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 2021, while a 70 year life of plant would show a state deficit in 2027. This example is considered conservative since fossil units are capable of operating for more than 70 years. Each utility will make their own determination on the life of their generating plants taking into account many factors, including economics. At this time, there are no plans to retire these older units unless stated in the report.



### **EXHIBIT 2 NEBRASKA STATEWIDE Committed Load & Generating Capability in Megawatts** Summer Conditions (June 1 to September 30) Year 2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 7,060 | 7,210 | 7,331 | 7,444 | 7,516 | 7,586 | 7,642 | 7,665 | 7,700 | 7,712 | 7,763 | 7,772 | 7,814 | 7,827 | 7,865 | 7,892 | 7,928 | 7,953 | 7,979 | 7,999 | 0.7% 1 Annual System Demand 1.232 | 1.201 | 1.192 | 1.184 | 1.180 | 1.182 | 1.185 | 1.187 | 1.190 | 1.192 | 1.195 | 1.197 | 1.199 | 1.202 | 1.204 | 1.206 | 1.208 | 1.210 | 1.212 | 1.212 2 Firm Power Purchases - Total 3 Firm Power Sales - Total 152 110 96 77 77 77 77 77 77 77 77 77 77 77 4 Annual Net Peak 5,980 6,120 6,235 6,338 6,414 6,481 6,535 6,555 6,587 6,597 6,645 6,653 6,692 6,703 6,739 6,764 6,797 6,820 6,844 6,865 Demand (1-2+3) 7,564 7,632 7,634 7,635 7,635 7,313 7,313 7,310 7,310 7,310 7,305 7,305 7,292 7,281 7,279 7,279 7,279 7,279 7,265 7,265 7,265 7,205 5 Net Generating Capability (owned) **6 Firm Capacity Purchases** 993 1.067 890 899 935 828 827 824 824 819 820 817 813 812 812 813 814 815 815 -Total 7 Firm Capacity Sales 924 1,069 1,149 931 918 860 749 746 742 742 736 736 733 728 726 726 726 726 725 725 -Total 8 Adjusted Net Capability 7,530 7,556 7,552 7,594 7,616 7,388 7,393 7,391 7,392 7,393 7,388 7,388 7,377 7,366 7,365 7,366 7,366 7,366 7,353 7,354 7,295 (5+6-7)9 Net Reserve Capacity 734 748 761 770 778 784 787 790 792 797 798 803 804 809 812 816 818 821 824 718 Obligation (4 x 0.12) 10 Total Firm Capacity 6.698 6.854 6.983 7.099 7.184 7.259 7.319 7.342 7.377 7.389 7.442 7.451 7.495 7.507 7.548 7.576 7.613 7.638 7.665 7.689 Obligation (4+9) 11 Surplus or Deficit (-) Capacity 832 702 569 495 432 129 74 49 15 4 -63 -141 -183 -210 -247 -311 -118 @ Minimum Obligation (8-10) 12 Nebraska Reserve Margin ((8-25.9% 23.5% 21.1% 19.8% 18.7% 14.0% 13.1% 12.8% 12.2% 12.1% 11.2% 11.0% 10.2% 9.9% 9.3% 8.9% 8.4% 7.8% 7.5% 6.3% 4)/4) 13 Nebraska Capacity Margin ((8-4)/8) 20.6% 19.0% 17.4% 16.5% 15.8% 12.3% 11.6% 11.3% 10.9% 10.8% 10.1% 9.9% 9.3% 9.0% 8.5% 8.2% Committed Resources (MW) (8+2-8,611 8,647 8,649 8,700 8,718 8,493 8,500 8,501 8,505 8,508 8,505 8,508 8,498 8,491 8,491 8,494 8,497 8,486 8,489 8,429 Minimum Obligation (MW) (1+9) 7,777 7,944 8,080 8,205 8,286 8,364 8,427 8,452 8,490 8,504 8,560 8,571 8,617 8,632 8,674 8,704 8,704 8,771 8,800 8,823

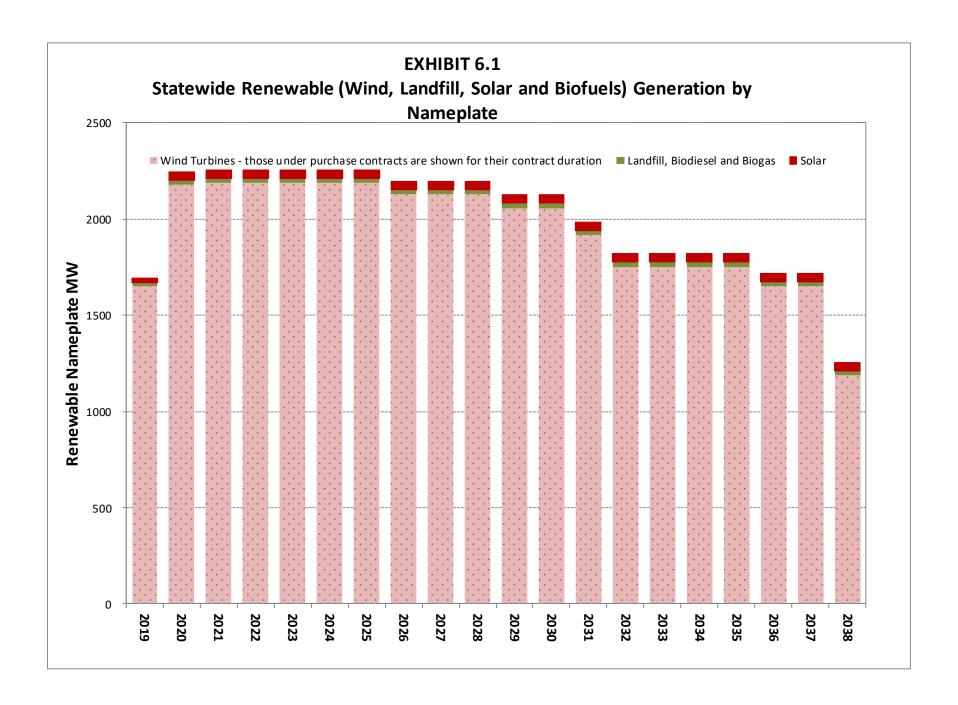


### **EXHIBIT 4 NEBRASKA STATEWIDE** Committed, Planned & Studied Load & Generating Capability in Megawatts Summer Conditions (June 1 to September 30) 2022 2023 2024 2026 2027 2028 2030 2031 2032 2037 Year 2019 2020 2021 2025 2029 2033 2034 2035 2036 2038 1 Annual System Demand 7.331 7.444 7.516 7.586 7.642 7.665 7.700 7.712 7.763 7.772 7.814 7.827 7.865 7.892 7.928 7.953 7.979 2 Firm Power Purchases - Total 1,201 1,192 1,184 1,180 1,182 1,185 1,187 1,190 1,192 1,195 1,197 1,199 1,202 1,204 1,206 1,208 1,210 1,212 1,212 3 Firm Power Sales - Total 152 110 96 77 77 77 77 77 77 77 77 77 77 77 77 77 77 77 4 Annual Net Peak 5,980 6,120 6,235 6,338 6,414 6,481 6,535 6,555 6,587 6,597 6,645 6,653 6,692 6,703 6,739 6,764 6,797 6,820 6,844 6,865 Demand (1-2+3) 5 Net Generating Cap-7.564 7.632 7.634 7.945 7.945 8.143 8.143 8.143 8.165 8.165 8.165 8.166 8.160 8.140 8 ability (owned) 891 993 1,067 899 935 828 827 824 820 813 **6 Firm Capacity Purchases** 890 824 819 817 813 812 812 814 815 815 -Total 7 Firm Capacity Sales 1,069 1,149 749 746 742 742 736 726 931 918 860 736 733 728 726 726 726 725 725 -Total 8 Adjusted Net Capability 7,530 7,556 7,552 7,904 7,926 8,218 8,223 8,246 8,247 8,248 8,243 8,243 8,232 8,221 8,240 8,241 8,241 8,228 8,229 8,170 (5+6-7)9 Net Reserve Capacity 718 734 748 761 770 778 784 787 790 792 797 798 803 804 809 812 816 818 821 824 Obligation (4 x 0.12) 6.697 | 6.854 | 6.983 | 7.098 | 7.184 | 7.259 | 7.319 | 7.342 | 7.378 | 7.389 | 7.443 | 7.451 | 7.495 | 7.507 | 7.548 | 7.575 | 7.613 | 7.638 | 7.665 | 7.689 10 Total Firm Capacity Obligation (4+9) 11 Surplus or Deficit (-) Capacity 833 702 569 806 959 904 904 869 859 800 793 629 590 742 736 714 692 665 564 481 @ Minimum Obligation (8-10) 12 Nebraska Reserve Margin ((8-4)/4) 25.9% 23.5% 21.1% 24.7% 23.6% 26.8% 25.8% 25.8% 25.2% 25.0% 24.0% 23.9% 23.0% 22.7% 22.3% 21.8% 21.3% 20.6% 20.2% 19.0% 13 Nebraska Capacity Margin ((8-4)/8) 20.6% 19.0% 17.4% 19.8% 19.1% 21.1% 20.5% 20.5% 20.1% 20.0% 19.4% 19.3% 18.7% 18.2% 17.9% 17.5% 17.1% 16.8% 16.0% 18.5% Committed, Planned and Studied Resources (MW) (8+2-3) 8.611 8.647 8.649 9.010 9.028 9.323 9.330 9.356 9.360 9.363 9.360 9.363 9.353 9.346 9.366 9.369 9.372 9.361 9.364 9.304 Minimum Obligation (MW) (1+9) 8.205 8,286 8,364 8,504 8,560 8,571 8,617 8,632 7.777 7,944 8,080 8,427 8,452 8,490 8,674 8,704 8,744 8,771 8,800 8,823

Tomis and Districts   Subscip Congress Start Gaster   Subsci							Cc	mr	mitte	ad F	Plann		HIBI nd S		d Re	25011	rces	MW	,												
Fromoth Fromoth Food	Utility	<u>Unit Name</u>	New Existing	Committed	Planned	Studied														2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
From the first   From	Fremont	Future Base				s	В		NG		25.0	0	0	0	0	0	0	0	25	25	25	25	25	25	25	25	25	25	25	25	25
Grant Maser   Pesis Hills Wind Fisher   Pesis Hills Wind Fisher   Pesis Hills Wind Fisher   Pesis Healing Commently Solve   Col.   Sol.   Sol.												0	0	0	0	0	0	0	0	_	_	_	0	_	_		_		0	0	0
Martings	Fremont	Total									25.0	0	0	0	0	0	0	0	25	25	25	25	25	25	25	25	25	25	25	25	25
Contaming   Paintings	Grand Island	Prairie Hills Wind Farm		C	+		B	D	10/		50.0	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	50.0
Heatings			_	Ŭ	_	_	١.,	IX									_							_							50.0
Primer lase					_																										
Second	Hastings		_	С			R	R	S	Υ	1.5	0	2	2	2	2	2	2	2	2	2	2		_	_	2	2	_		2	2
Full	Ha affer an		ᆫ								4.5			_		_									_						0
Total	Hastings	Total									1.5	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
ES   Total	LES	Future Peak		Ĺ	1		Р				0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Supernor Sciar   E	LES	Total	_				4							_		_	_						_	_	_	_		_	_		0
Superior Schar   E	T I D'																														
Future Vise   Puture Vise   Puture Vise   Puture Vise Mediate	Towns and Districts	•	l_	С			_	_	_					_	-				_				_	_	-			_	_		5
Total			E	1			R	+	S	Y	0.8			_			_					_		_	-		_	-	-		1
Future Intermediate	Towns and Districts		<u> </u>	_		_					5.9			_			_							_	_	_			_		5.8
Figure thespecified Figure Base	Towns and Districts	lotai									5.8	0.8	0.8	3.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.6
Filture Description Base	MEAN	Future Intermediate		T			ī				0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MEAN   Southern PPD - Autron Wind Farm   C   R R W V 18.3   0.0 11 11 11 11 11 11 11 11 11 11 11 11 11		Future Unspecified				s	U					0	0	0	0	0	50	50			50	50	50			50	50	50	50	50	50
Southern PPD - Aurora Wind Farm Custer PPD - Paire Hills Wind Cust		Future Base					В				0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Custer PPD - Praise Hills Wind Scatsshift Community Solar - Phase 2 C C R R R W Y A B B B B B B B B B B B B B B B B B B	MEAN	Total									50.0	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	50.0	50.0	50.0
Custer PPD - Prairie Hills Wind  C C R R R W Y 4.6 0.0 4.6 4.6 4.6 4.6 4.6 4.6 4.6 4.6 4.6 4.6																															
Scottable Community Solar - Phase 2   C   P   R R N W Y 46 00 46 46 46 46 46 46 46 46 46 46 46 46 46	NPPD	Southern PPD - Aurora Wind Farm					_		_		11.3	0	11	11	11	11	11	11	11	11	11	-11	11	11	11	11	11	11	11	11	11
Norlink Community Solar   Norlink Cateny Entroy, Storage System   Norlink Cateny Entroy, Storage System   Norlink Cateny Entroy, Storage System   Future Peak   Norlink Cateny Entroy, Storage System   Future Norlink Cateny Entroy, Storage System   Norlink Cateny Entroy, Storage System   Norlink Cateny Entroy, Storage System   Future Norlink Cateny Entroy, Storage System   Norlink Cateny Entr		Custer PPD - Prairie Hills Wind		_				_	_		8.0			_	_	_	_	_			_	_	_		-	_	_	_	_	_	8
Norfolk Battery Energy Storage System				С																											4.6
Future Renewable							R	R	_								_							_		_					8.5
Future Pleak Future Intermediate Future State Future Intermediate Future Resources Included Future Intermediate Future Resources Included Future Intermediate Future Intermediate Future Resources Included Future Intermediate Future Resources Included Future Intermediate Future Intermedi					P		Ļ	-	S	Y														_		_					1.0
Future Intermediate Future Base									-						_													_			0
Future Base							P	+														_		_		_	_				0
NPPD							l '	+							_		_									_			_	-	0
OPPD   Sholes Wind   C	NDDD		_	<u> </u>		_	1 0																								33
OPPD Community Solar  Future Base  DP   C   C   C   C   C   C   C   C   C	NFFD	lotai									33.4	U	23	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33
Future Base	OPPD	Sholes Wind		С	Ì		R	R	W		160.0	0	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160
Future Unspecified   S U   800.0 0 0 0 0 310 310 780 780 780 780 780 780 780 780 800 80		OPPD Community Solar							S	Υ	5.0	0																		5	5
Future Peak Future Intermediate Future Renewable Future R							_					0			0		0	0	0	0	0	0	0	0	0	0	0		0	0	0
Future Intermediate		Future Unspecified				S	U				800.0	0	0	0	310	310	780	780	780	780	780	780	780	780	780	800	800	800	800	800	800
Future Renewable   R R W   965.0   0   165   165   475   475   945   9		Future Peak					Р				0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nebraska Grand Total   965.0   165   165   475   475   945							ı				0.0			_	-		_	_						_		_	_	_	_		0
Nebraska Grand Total							R	R	W			_				_					_				_			_	_		0
Fuel type	OPPD										965.0	0	165	165	475	475	945	945	945	945	945	945	945	945	945	965	965	965	965	965	965
H-Hydro HS-Run of River   No Behind Meter Resources Included   2019   2020   2021   2022   2023   2024   2025   2026   2027   2028   2029   2030   2031   2032   2033   2034   2035   2036   2037   2035   2036   2037   2036   2037   2038   20		Nebraska Grand Total			-			+			1131	1	243	254	566	566	1086	1086	1111	1111	1111	1111	1111	1111	1111	1131	1131	1131	1131	1131	113
Debiesel NG-Natural Gas New Existing 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Unit Type	Fuel type																													
N-Nuclear O-Oil CT-Combustion Turbine Coal-Coal Planned Planne	H-Hydro	HS-Run of River	No E	Behin	d Mete	r Res	sourc	es Ind																							
CT-Combustion Turbine								-	N	_																					0
CC-Combined Cycle HR-Reservoir Planned Renewable 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0					-			+									_														210
C-Pulverized Coal UR-Uranium Future Renewable 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0					-			<u>.</u>	<u> </u>																						0
R-Renewable Wind-Wind Future Peak 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0					-												_									_					0
L-Landfill Gas   Future Intermediate   0   0   0   0   0   0   0   0   0					-			F									_														0
Future Unspecified 0 0 0 310 310 830 830 830 830 830 830 830 830 830 83	K-Kenewable				-		-	Feet	_																						0
S-Solar Future Base Q Q Q Q Q Q Q 25 25 25 25 25 25 25 25 25 25 25 25 25		L-Landfill Gas			-																										0
o-soliar		S Salaa			-			ru																							850
				-	-		-	-	-	utur				U																	25 1085

EXHIBIT 6  Renewable Resources																													
Utility	<u>Unit Name</u>	Existing	Committed	Planned	Studied	Unit Type	ا <u>ت</u> و يا	Benind Meter-Non Utility Fuel Type	Nameplate, Yearly Values are	2019	2020		2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Beatrice	Cottonwood Wind Farm Bea	Е				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	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 Grand Is	Fremont Solar Prairie Breeze 3 Wind	E				R R	Y	S	2.3 35.8	2.31 35.8	2.31 35.8	2.31 35.8	2.31 35.8	2.31 35.8	2.31 35.8	2.31 35.8	2.31 35.8												
Grand Is	*Prairie Hills Wind Farm	亡	С			R		Wind		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	50.0
Grand Is	Grand Island Solar	Е				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	1.0
Hastings Hastings	CCC Hastings Wind Hastings Community Solar	E	С			R 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
LES	LES Wind Turbines	Е	٦			R	Y	Wind		1.32	1.5	1.5	1.5	1.5	1.5	1.5 0.0	1.5 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5 0.0	0.0	0.0	0.0
LES	Landfill Gas	Е				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 LES	Arbuckle Mtn. Wind	E	<u> </u>			R		Wind		100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	0	0	0
LES	Buckeye Wind Prairie Breeze 2 Wind	E	<u> </u>		$\vdash$	R R		Wind		100 73.4	100 73	100 73	100 73	100 73	100 73	100 73	100 73	100 73											
LES	LES Community Solar	E				R	Υ	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
MEAN	*Kimball Wind	Е				R		Wind		30.0	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	0
NNPPD NPPD	Cottonwood Wind NNPPD Ainsworth Wind	E				R R		Wind		17.5 59.4	17.5 59	17.5 59	17.5 59	17.5 59	17.5 59	17.5 59	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5 0	17.5	17.5 0	17.5 0	17.5	0.0
NPPD	Elkhorn Ridge Wind	E		L	H	R		Wind		80	80	80	80	80	80	80	80	80	80	0	0	0	0	0	0	0	0	0	0
NPPD	Laredo Ridge Wind	Е				R		Wind		80	80	80	80	80	80	80	80	80	80	80	80	0	0	0	0	0	0	0	0
NPPD NPPD	Springview Wind	E	<u> </u>	_	H	R R		Wind		3	3	3	3	3	3	3	3	3	3	3	3	3	0	0	0	0	0	0	0
NPPD	Broken Bow Wind Broken Bow II Wind	E				R R		Wind		80 73	73	73	73	73	73	73	73												
NPPD	Crofton Bluffs Wind	Е	L	L		R		Wind		42	42	42	42	42	42	42	42	42	42	42	42	42	0	0	0	0	0	0	0
NPPD	Steele Flats Wind	Е				R		Wind		75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75	75
NPPD NPPD	Future Renewable  Loup PPD - Creston Ridge Wind	E	-		S	R R	Υ	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 PPD - 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	Loup PPD - City of Schuyler Solar	Е				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 NPPD	Southern PPD - Aurora Wind Farm	E	С			R	Y	Wind		0	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3
NPPD	Scottsbluff Community Solar Venango Community Solar	E				R R	Y	S	0.1	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
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 NPPD	City of Central City Solar Park (2)	E	-		H	R 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 City of Holdrege Housing Proj 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 Lexington Solar	Е				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 NPPD	City of Seward Wind	E				R	Υ	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	Cornhusker PPD - Renewable Solar LLC  Custer PPD - Sterner Solar	E				R R	Y	S	0.3 0.5	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 - Sunny Delight Solar	E				R	Υ	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	Е				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 NPPD	Custer PPD - JDRM LLC Solar Custer PPD - B&R LLC Solar	E	_			R 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	Custer PPD - Cockerill Fertilizer Solar 1	Е				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 NPPD	Custer PPD - Cockerill Fertilizer Solar 2	Ε	С			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 - Prairie Hills Wind  Dawson PPD - Willow Island Solar	E	L			R R	Y	Wind	8.0 0.3	0.0	0.0	8.0 0.3	8.0 0.3	8.0 0.3	8.0 0.3	8.0 0.3	8.0 0.3	0.3	0.3	0.3	8.0 0.3	8.0 0.3	8.0 0.3	8.0 0.3	8.0 0.3	8.0 0.3	8.0 0.3	8.0 0.3	8.0 0.3
NPPD	Perennial PPD - Fairmont Area Wind Farm	Е				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	Polk Co PPD - Osceola Wind	E	Ļ	Ĺ	Ц	R	Υ	Wind		2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
NPPD NPPD	Scottsbluff Community Solar - Phase 2 Norfolk Community Solar	-	С	Р	Н	R R	Y	S	4.6 8.5	0	4.6 8.5	4.6 8.5	4.6 8.5	4.6 8.5	4.6 8.5	4.6 8.5	4.6 8.5	4.6 8.5											
NPPD	Norfolk Battery Energy Storage System	L	L	P	Ħ		Y	ES	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	1.0	1.0	1.0
NELIGH	Neligh	E			П	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	6.5
OPPD OPPD	Elk City Landfill Flat Water Wind	E	Ͱ	-	Н	R R		L Wind	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	6.3
OPPD	Petersburg Wind	E	1		H	R		Wind		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	Е				R		Wind		201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201	201
OPPD OPPD	Grande Prairie Wind Sholes Wind	Ε	_	-	Н	R		Wine		400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	0
OPPD	*Rattlesnake Creek Wind	E	С		H	R R		Wind		0	160 308	160 318	160 318	160 318	160 318	160 318	160 318	160 318	160 318	160 318	160 318								
OPPD	OPPD Community Solar	Ē	С	L		R	Υ	S	5.0	0	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
OPPD	Future Renewable	Ę			П	R		Wind		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SSC	Cottonwood Wind SSC Green Star Gasifier	Е	С	-	Н	R R		Y OBG		15.6 0	16 0	16	16 5	16	16 5	16 5	16 5	16 5	16 5	16 5	5								
SSC	South Sioux City Solar	E	٦		H	R	Υ	Y OBG	2.0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	0	0
Superior	Superior Solar	Ē				R	Y	s	0.8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	Nebraska Grand Total								2266.0	1693	2243	2254	2256	2256	2256	2255	2195	2195	2195	2125	2125	1985	1820	1820	1820	1820	1720	1718	1255
Unit Type R-Renewable	Fuel type Wind-Wind									2010	2020	2024	2022	2022	2024	2025	2000	2027	2020	2020	2020	2024	2022	2022	2024	2025	2020	2027	2020
r-renewable	L-Landfill Gas	E, C	, P &	S tot	als do	not in	nclude E	втм	Existing	2019 1640	2020 1949	2021 1949	2022 1949	2023 1949	2024 1949	2025 1949	2026 1889	2027 1889	2028 1889	2029 1819	2030 1819	2031 1679	2032 1514	2033 1514	2034 1514	2035 1514	2036 1414	1414	<u>2038</u> 951
	BD-Biodiesel								Committed		210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210	210
	S-Solar OBG-Other Biomass Gas	+			$\vdash$				Planned Studied		0	0	0	0	0	0	0	0	0	0	0	0 <u>0</u>	0	0	0	0	0	0	0
* See report fo	r additional information								TOTAL		2159		2159		2159			2099	2099	2029	2029	1889		1724	1724	1724	1624		1161

													T 6A																	
						1				<u>Behi</u>	nd M	<u>eter</u>	Res	ource	es_															
Utility	<u>Unit Name</u>	Existing	Committed	Planned	Studied	Unit Type	Behind Meter - Utility	Behind Meter - Non Utility	Fuel Type	Nameplate, Yearly Values are Nameplate	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Fremont	Fremont Solar	Е				R	Υ		S	2.3	2.31	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Grand Island	Grand Island Solar		С			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	Ε	L			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
Hastings LES	Hastings Community Solar	_	С			R	Y		S	1.5		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
LES	LES Wind Turbines LES Community Solar	E				R R	Y		Wind	1.3 3.6	1.3 3.6	1.3 3.6	1.3 3.6	1.3 3.6	1.3 3.6	1.3 3.6	3.6	3.6	3.6	0.0 3.6	0.0 3.6	0.0 3.6	3.6	3.6	3.6	0.0 3.6	0.0 3.6	0.0 3.6	3.6	0.0 3.6
LES	LES Service Center Solar	E				R	1	Υ	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	Е				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	Ε				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	Ε				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 LES	EZ Go, 1 EZ Go, 2	E		H		R 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	wina S	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	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	Ε				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	Lazio Inc.	Ε				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
NPPD	Capitol Beach Comm Solar  Loup PPD - Creston Ridge Wind	E				R R	Υ	Y	S Wind	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	Loup Creston Ridge (#2)	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 PPD - City of Schuyler 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	Southern PPD - Aurora Wind Farm		С			R	Υ		Wind	9.2	0	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3	11.3
NPPD	Scottsbluff Community Solar	Ε				R	Y		S	0.1	0.13	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	Ε				R	Y		S	0.1	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	5.7
NPPD NPPD	City of Central City Solar Park	E				R 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) City of Gothenburg Solar	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 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	Ε				R	Υ		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	Ε				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	Cornhusker PPD - Renewable Solar LLC	Ε				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 - 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 NPPD	Custer PPD - Sunny Delight Solar	E				R 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 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	Ε				R	Υ		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	Custer PPD - Cockerill Fertilizer Solar 1	Ε				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 - Cockerill Fertilizer Solar 2	Ε				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 - Prairie Hills Wind	_	С			R	Y		Wind	8.0	0.0	0.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
NPPD NPPD	Dawson PPD - Willow Island Solar Perennial PPD - Fairmont Area Wind Fare	E				R R	Y		S Wind	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 6.9	0.3	0.3	6.9
NPPD	Polk Co PPD - Osceola Wind	E				R	Y		Wind	6.9 2.5	6.9 2.5	6.9 2.5	6.9 2.5	6.9 2.5	6.9 2.5	6.9 2.5	6.9 2.5	6.9 2.5	6.9 2.5	6.9 2.5	6.9 2.5	6.9 2.5	6.9 2.5	6.9 2.5	6.9 2.5	6.9 2.5	2.5	6.9 2.5	6.9 2.5	2.5
NPPD	Scottsbluff Community Solar - Phase 2		С			R	Υ		S	4.6	0.0	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
NPPD	Norfolk Community Solar			Р		R	Υ		S	8.5	0.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
NPPD	Norfolk Battery Energy Storage System			Р			Y		ES	1.0	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	1.0
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	_	С	H		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 Superior	South Sioux City Solar Superior Solar	Ε	С	H		R R	Y		S	1.0	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
- apoliti	·		٦	_		ı n	1		3				1 07																	
	BTM Nebraska Grand Total					+				94.9	54	89	97	97	97	97	96	96	96	96	96	96	96	96	96	96	96	96	96	96
Unit Type	Fuel type										0015	0000	000:	0000	0000	000	000-	0000	000-	0000	0000	0000	000.	000-	0000	000 :	000-	0000	000-	0000
R-Renewable	Wind-Wind L-Landfill Gas					$\vdash$				Existing	2019 52	<u>2020</u> 52	<u>2021</u> 52	<u>2022</u> 52	2023 52	<u>2024</u> 52	<u>2025</u> 51	<u>2026</u> 51	<u>2027</u> 51	2028 51	2029 51	<u>2030</u> 51	2031 51	<u>2032</u> 51	2033 51	<u>2034</u> 51	2035 51	2036 51	<u>2037</u> 51	2038 51
	BD-Biodiesel					+			(	Committed	2	27	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
	S-Solar									Planned	0	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
									_																					



**EXHIBIT 7 2019 Statewide Existing Generating Capability Data** Commercial

Summer

<b>Utility</b> Towns/Districts	Unit Name Cottonwood Wind NNPPD	Duty Cycle	Unit Type WT	Fuel Type WND	Operation Date 2018	Accredited Capacity 6.00	Summer Utility <u>Capacity</u>
Towns/District	Cottonwood Wind SSC	·	WT	WND	2018	<u>0.78</u>	6.8
TOWNS/DISCHOL							0.0
Falls City	Falls City #7	Р	IC	NG/DFO	1972	5.00	
r and only	Falls City #8	Р	IC	NG/DFO	1981	5.00	
	Falls City	Р	IC	NG/DFO	2018	9.30	
Falls City	Total						19.3
Fremont	Fremont #6	В	ST	SUB/NG	1958	15.50	
	Fremont #7	В	ST	SUB/NG	1963	21.00	
	Fremont #8	В	ST	SUB/NG	1976	82.00	
	СТ	Р	GT	NG/DFO	2003	36.00	
_	Cottonwood Wind Farm	l I	WT	WND	2018	<u>2.04</u>	
Fremont	Total						156.5
Grand Island	Burdick GT1	Р	GT	NG/DFO	1968	13.00	
	Burdick GT2	Р	GT	NG/DFO	2003	34.00	
	Burdick GT3	Р	GT	NG/DFO	2003	34.00	
	Platte Generating Station	В	ST	SUB	1982	100.00	
	Prairie Breeze 3 Wind	I I	WT	WND	2016	<u>0.00</u>	
Grand Island	Total						181.0
Hastings	CCC Hastings Wind	<u> </u>	WT	WND	2016	0.00	
	DHPC-#1	P	GT	NG/DFO	1972	18.00	
	Hastings-NDS#4	Р	ST	NG/DFO	1957	16.00	
	Hastings-NDS#5	Р	ST	NG/DFO	1967	24.00	
	Whelan Energy Center #1	В	ST	SUB	1981	76.00	
	Whelan Energy Center #2	В	ST	SUB	2011	220.00	
Hastings	Total						354.0
LES	Arbuckle Mtn. Wind	1	WT	WND	2016	14.00	
	Buckeye Wind	1	WT	WND	2016	58.40	
	J St	Р	GT	NG/DFO	1972	29.00	
	Landfill Gas	В	IC	LFG	2014	4.80	
	Laramie River #1	В	ST	SUB	1982	198.20	
	LES Community Solar	В	PV	SUN	2016	0.00	
	Prairie Breeze 2 Wind	I	WT	WND	2016	13.10	
	Rokeby 1	Р	GT	NG/DFO	1975	70.50	
	Rokeby 2	Р	GT	NG/DFO	1997	90.40	
	Rokeby 3  LES Wind Turbines	P	GT	NG/DFO	2001	94.20	
	Terry Bundy	P	WT CS	WND NG/DFO	1999 2003	<mark>0.00</mark> 118.20	
	Terry Bundy	P	GT	NG/DFO	2003	45.50	
	Walter Scott #4	В	ST	SUB	2007	<u>103.40</u>	
LES	Total		0.	005	2007	100.40	839.7
MEAN	Alliance #1	Р	IC	DFO	2002	1.8480	
IVILAIN	Alliance #2	P	IC	DFO	2002	1.8490	
	Alliance #3	r P	IC	DFO	2002	1.8490	
	Ansley #2	Р	IC	NG/DFO	1972	0.8500	
	Ansley #3	P	IC	NG/DFO	1968	0.5000	
	Benkelman #1	Р	IC	NG/DFO	1968	0.7850	
	Broken Bow #2	Р	IC	NG/DFO	1971	3.1000	
	Broken Bow #4	Р	IC	NG/DFO	1949	0.8000	
	Broken Bow #5	Р	IC	NG/DFO	1959	1.0000	
	Broken Bow #6	Р	IC	NG/DFO	1961	2.0000	
	Burwell#2	Р	IC	NG/DFO	1962	0.8030	
	Burwell#3	Р	IC	NG/DFO	1967	1.0040	
	Burwell#4	Р	IC	NG/DFO	1972	1.2110	
	Callaway #3	P -	IC	DFO	1958	0.4910	
	Callaway #4	Р	IC	DFO	2004	0.3840	
	Chappell #5	Р	IC 60	DFO	1982	1.1000	

EXHIBIT 7
2019 Statewide Existing Generating Capability Data

					Commercial	Summer	
					<b>Operation</b>	Accredited	Summer Utility
Utility	Unit Name	<b>Duty Cycle</b>	Unit Type	Fuel Type	<u>Date</u>	<b>Capacity</b>	<u>Capacity</u>
MEAN (contd)	Crete #7	Р	IC	NG/DFO	1972	6.1510	
	Curtis #1	Р	IC	NG/DFO	1975	1.2000	
	Curtis #2	Р	IC	NG/DFO	1969	1.0800	
	Curtis #4	Р	IC	NG/DFO	1955	0.8000	
	Kimball #1	Р	IC	NG/DFO	1955	1.00	
	Kimball #2	Р	IC	NG/DFO	1956	1.00	
	Kimball #3	Р	IC	NG/DFO	1959	0.90	
	Kimball #4	Р	IC	NG/DFO	1960	0.90	
	Kimball #5	Р	IC	NG/DFO	1951	0.70	
	Kimball #6	Р	IC	NG/DFO	1975	3.50	
	Oxford #2	P	IC	NG/DFO	1952	0.65	
	Oxford #3	Р	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	Р	IC	NG/DFO	1973	1.925	
	Pender #4	Р	IC	DFO	1961	0.821	
	Red Cloud #2	Р	IC	NG/DFO	1953	0.696	
	Red Cloud #3	Р	IC	NG/DFO	1960	1.001	
	Red Cloud #4	Р	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	2.200	
	West Point #2 West Point #3	P	IC	NG/DFO	1959	1.130	
	West Point #4	P	IC	NG/DFO	1965	0.820	
	Wisner #5	P	IC	DFO	2008		
MEAN	Total	Г	iC	DFO	2006	<u>1.521</u>	55.7
IVIEAN	Total						33. <i>1</i>
NPPD	ADM	В	ST	SUB	2009	57.50	
	Ainsworth Wind	<u>-</u>	WT	WND	2005	9.38	
	Auburn #1	P	IC				
	Auburn #2	P	IC	NG/DFO NG/DFO	1982 1949	2.10 0.00	
	Auburn #4	P	IC	NG/DFO			
		P	IC		1993	3.60	
	Auburn #5	P	IC	NG/DFO	1973 1967	3.30 2.50	
	Auburn #6 Auburn #7	P	IC	NG/DFO		4.80	
	Beatrice Power Station	Ī	CS	NG/DFO NG	1987		
		ı P	IC		2005	220.00 0.00	
	Belleville 4	P	IC	NG/DFO	1955		
	Belleville 5	P	IC	NG/DFO	1961	1.40	
	Belleville 6	P		NG/DFO	1966	2.50	
	Belleville 7		IC	NG/DFO	1971	3.30	
	Belleville 8	P	IC	NG/DFO	2006	2.80	
	Broken Bow Wind		WT	WND	2013	16.02	
	Broken Bow II Wind	I P	WT	WND	2014	9.89	
	Cambridge		IC OT	DFO	1972	3.00	
	Canaday	Р	ST	NG	1958	99.30	
	Columbus 1	В	HY	WAT	1936	15.00	
	Columbus 2	В	HY	WAT	1936	15.00	
	Columbus 3	В	HY	WAT	1936	15.00	
	Cooper Crofton Bluffs Wind	B	ST	NUC	1974	770.00	
	David City 1	P	WT IC	WND NG/DFO	<b>2013</b> 1960	<b>5.09</b> 1.30	
	•	P					
	David City 2		IC	DFO NC/DEO	1949	0.80	
	David City 3	P P	IC	NG/DFO	1955	0.90	
	David City 4	P P	IC	NG/DFO DFO	1966 1996	1.80	
	David City 5		IC			1.33	
	David City 6	P	IC	DFO	1996	1.33	
	David City 7	P •	IC	DFO	1996	1.34	
	Elkhorn Ridge Wind	1	WT	WND	2009	9.66	•
	Emerson #2	Р	IC	NG/DFO	1968	0.20	
	Emerson #3	Р	IC	NG/DFO	1948	0.00	
	Emerson #4	Р	IC	NG/DFO	1958	0.20	
	Franklin 1	Р	IC <sub>61</sub>	NG/DFO	1963	0.65	

EXHIBIT 7

2019 Statewide Existing Generating Capability Data

					Commercial	Summer	
					<b>Operation</b>	Accredited	Summer Utility
Utility	<u>Unit Name</u>	Duty Cycle	Unit Type	Fuel Type	<u>Date</u>	<u>Capacity</u>	<u>Capacity</u>
NPPD (contd)	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	В	ST	SUB	1979	665.00	
	Gentleman 2	В	ST	SUB	1982	700.00	
	Hallam	P	GT	DFO	1973	42.50	
	Hebron	P	GT	NG	1973	41.50	
	Jeffrey 1 (CNPPID)	В	HY	WAT	1940	0.00	
	Jeffrey 2 (CNPPID)	B B	HY	WAT	1940	0.00	
	Johnson I 1 (CNPPID)		HY	WAT	1940	0.00	
	Johnson I 2 (CNPPID) Johnson II (CNPPID)	B B	HY HY	WAT	1940 1940	0.00	
	•	В	HY	WAT		0.00	
	Kearney Kingsley (CNPPID)	В	HY	WAT WAT	1921 1985	0.00 37.50	
	Laredo Ridge Wind	Ī	WT	WND	2011	18.11	
	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	Р	IC	DFO	1946	0.50	
	McCook	Р	GT	DFO	1973	42.70	
	Monroe	В	HY	WAT	1936	3.00	
	North Platte 1	В	HY	WAT	1935	12.00	
	North Platte 2	В	HY	WAT	1935	12.00	
	Ord 1	Р	IC	NG/DFO	1973	5.00	
	Ord 2	Р	IC	NG/DFO	1966	1.00	
	Ord 3	Р	IC	NG/DFO	1963	2.00	
	Ord 4	Р	IC	DFO	1997	1.40	
	Ord 5	Р	IC	DFO	1997	1.40	
	Sheldon 1	В	ST	SUB	1961	104.00	
	Sheldon 2	В	ST	SUB	1965	115.00	
	Spencer 1	В	HY	WAT	1927	0.66	
	Spencer 2	В	HY	WAT	1952	0.66	
	Springview Wind	I	WT	WND	2012	0.39	
	Steele Flats Wind	I	WT	WND	2013	18.66	
	Wahoo #1	Р	IC	NG/DFO	1960	1.70	
	Wahoo #3	Р	IC	NG/DFO	1973	3.60	
	Wahoo #5	P	IC	NG/DFO	1952	1.80	
	Wahoo #6	Р	IC	NG/DFO	1969	2.90	
	Western Sugar	В	ST	SUB	2014	4.55	
	Wilber 4	P	IC IC	DFO	1949	0.78	
	Wilber 5	P P		DFO	1958	0.59	
NDDD	Wilber 6	Р	IC	DFO	1997	1.57	2 420 4
NPPD	Total						3,130.1
Wakefield	Wakefield 2	Р	IC	NG/DFO	1955	0.54	
. ranonoia	Wakefield 4	P	IC	NG/DFO	1961	0.69	
	Wakefield 5	Р	IC	NG/DFO	1966	1.08	
	Wakefield 6	Р	IC	NG/DFO	1971	1.13	
Wakefield	Total						3.4
Wayne	Wayne 1	Р	IC	DFO	1951	0.75	
	Wayne 3	Р	IC	DFO	1956	1.75	
	Wayne 4	Р	IC	DFO	1960	1.85	
	Wayne 5	Р	IC	DFO	1966	3.25	
	Wayne 6	Р	IC	DFO	1968	4.90	
	Wayne 7	P	IC	DFO	1998	3.25	
	Wayne 8	Р	IC	DFO	1998	3.25	
Wayne	Total						19.0

EXHIBIT 7

2019 Statewide Existing Generating Capability Data

			9	<u> </u>	Commercial	Summer	
					Operation	Accredited	Summer Utility
Utility	Unit Name	Duty Cycle	Unit Type	Fuel Type	Date	Capacity	Capacity
Nebraska City	Nebraska City #5	P	IC	NG/DFO	1964	1.60	<u>oupdoity</u>
	Nebraska City #6	P	IC	NG/DFO	1967	1.50	
	Nebraska City #7	P	IC	NG/DFO	1969	1.50	
	Nebraska City #8	Р	IC	NG/DFO	1970	3.50	
	Nebraska City #9	Р	IC	NG/DFO	1974	5.60	
	Nebraska City #10	Р	IC	NG/DFO	1979	5.80	
	Nebraska City #11	Р	IC	NG/DFO	1998	4.00	
	Nebraska City #12	Р	IC	NG/DFO	1998	<u>4.00</u>	
Nebraska City	•	•	.0	110/21 0	1000	<u>1.00</u>	27.5
nobracia ony	· ota·						2.10
NELIGH	Neligh	P	IC	OBL	2012	1.78	
	Neligh	P	IC	OBL	2012	1.84	
	Neligh	P	IC	OBL	2012	1.82	
	Neligh	P	IC	OBL	2012	0.40	
Neligh	Total						5.8
OPPD	Cass County #1	Р	GT	NG	2003	161.70	
	Cass County #2	Р	GT	NG	2003	161.10	
	Elk City Station #1-4	В	IC	LFG	2002	3.17	
	Elk City Station #5-8	В	IC	LFG	2006	3.11	
	Flat Water Wind	1	WT	WND	2011	10.92	
	Grande Prairie Wind	1	WT	WND	2016	67.60	
	Jones St. #1	Р	GT	DFO	1973	61.30	
	Jones St. #2	Р	GT	DFO	1973	61.30	
	Nebraska City #1	В	ST	SUB	1979	654.30	
	Nebraska City #2	В	ST	SUB	2009	691.00	
	North Omaha #1	В	ST	NG	1954	64.80	
	North Omaha #2	В	ST	NG	1957	90.80	
	North Omaha #3	В	ST	NG	1959	86.00	
	North Omaha #4	В	ST	SUB/NG	1963	120.10	
	North Omaha #5	В	ST	SUB/NG	1968	216.20	
	Petersburg Wind	1	WT	WND	2012	7.29	
	Prairie Breeze Wind	1	WT	WND	2014	37.71	
	Sarpy County #1	Р	GT	NG/DFO	1972	0.00	
	Sarpy County #2	Р	GT	NG/DFO	1972	55.90	
	Sarpy County #3	Р	GT	NG/DFO	1996	107.70	
	Sarpy County #4	Р	GT	NG/DFO	2000	49.00	
	Sarpy County #5	Р	GT	NG/DFO	2000	47.90	
	Tecumseh #1	Р	IC	DFO	1949	0.60	
	Tecumseh #2	Р	IC	DFO	1968	1.40	
	Tecumseh #3	Р	IC	DFO	1952	1.00	
	Tecumseh #4	Р	IC	DFO	1960	1.20	
	Tecumseh #5	Р	IC	DFO	1993	<u>2.30</u>	
OPPD	Total						2,765.4
Nahraaka C	rand Tatal					TOTAL	7.504.0
Nebraska G						TOTAL	7,564.2
	Duty Cycle			Fuel Type*			

 Duty Cycle
 Fuel Type\*

 B-Base
 NUC-Uranium
 OBL-Biodiesel

 I-Intermediate
 NG-Natural Gas
 WAT-Hydro

 P-Peaking
 DFO-Distillate Fuel Oil
 LFG-Landfill Gas

<u>Unit Type\*</u> SUB-Subbituminous Coal WND-Wind

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

**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

