

June 23, 2016

Mr. Brian Kalk, Commissioner
North Dakota Public Service Commission
Capitol Building
600 E. Boulevard Ave.
Bismarck, ND 58505

Dear Commissioner Kalk:

Pursuant to the requirements of the North Dakota Energy Conversion and Transmission Facility Siting Act, Basin Electric Power Cooperative hereby submits its Ten Year Plan.

Enclosed is an original and 9 copies of the plan.

Sincerely,

A handwritten signature in blue ink, appearing to read "P. Sukut".

Paul M. Sukut
CEO & General Manager

vw
ATTACHMENT

1 PU-16-351 Filed 06/24/2016 Pages: 55
2016 Ten Year Plan
Basin Electric Power Cooperative
Paul Sukut, CEO & General Manager

STATE OF NORTH DAKOTA)
)
COUNTY OF BURLEIGH)

AFFIDAVIT OF MAILING

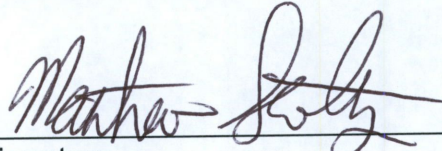
I hereby certify that the following list contains the names and last address of each designated state agency and/or state official given notice of filing of the Basin Electric Power Cooperative Ten Year Plan pursuant to the Rules and Regulations of the North Dakota Public Service Commission governing the Siting of Energy Conversion and Transmission Facilities. I hereby certify that I have, by depositing letters of notice with the United States Postal Service, caused notice to be given all such state agencies and state officials that Basin Electric Power Cooperative has filed their Ten Year Plan with the North Dakota Public Services Commission.

Name

Last Known Address

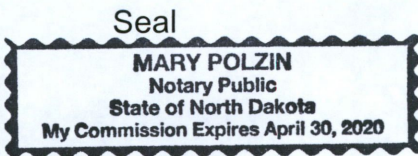
See Exhibit A Attached

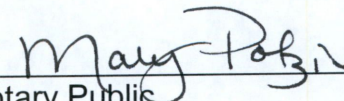
See Exhibit A Attached



Signature

On this 20th day of June, 2016, Matthew Stoltz known to me, under oath deposed and said the above Affidavit of Mailing is true and correct.





Notary Public

Mail to: Public Service Commission
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EXHIBIT A

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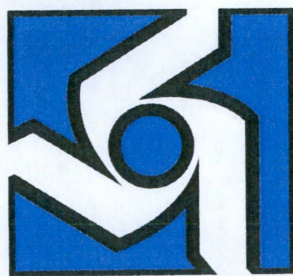
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**BASIN ELECTRIC
POWER COOPERATIVE**

A Touchstone Energy® Cooperative 

The Touchstone Energy logo features a stylized human figure in blue, with two orange figures on either side, all connected by a blue arc at the bottom.

NORTH DAKOTA TEN-YEAR PLAN

2016

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INTRODUCTION

Basin Electric Power Cooperative is a regional rural electric wholesale power supplier headquartered at 1717 East Interstate Avenue, Bismarck, North Dakota. The region served by Basin Electric includes all or portions of nine states encompassing Montana, Wyoming, Colorado, North Dakota, South Dakota, Nebraska, Minnesota, Iowa and New Mexico. Basin Electric owns and operates or otherwise jointly shares energy conversion and transmission facilities throughout this region. Basin Electric is the parent company to seven subsidiaries: Dakota Gasification Company, Dakota Coal Company, Montana Limestone Company, Wyoming Line Producers, Souris Valley Pipeline LTD., PrairieWinds ND 1 Inc., and PrairieWinds SD 1 Inc. A ten-year plan for Dakota Gasification Company will be submitted under separate cover by Dakota Gasification Company.

SECTION A: EXISTING ENERGY CONVERSION FACILITIES

Basin Electric owns all or portions of sixteen existing energy conversion facilities. Six of these facilities are in North Dakota; the Antelope Valley Station near Beulah; the Leland Olds Station near Stanton; PrairieWinds ND1 near Minot; the Minot Wind Project near Minot; the Pioneer Generation Station near Williston; and the Lonesome Creek Generation Station near Watford City. Other existing energy conversion facilities outside of North Dakota are the Laramie River Station at Wheatland, Wyoming; the Wyoming Distributed Generation in Wyoming; the Dry Fork Station near Gillette, Wyoming; the Spirit Mound Station at Vermillion, South Dakota; the Chamberlain Wind Project at Chamberlain, South Dakota; the Groton Generation Station near Groton, South Dakota; Crow Lake Wind Project near White Lake, South Dakota; Deer Creek Station near Brookings, South Dakota; Wisdom Unit 2 at Spencer, Iowa; and the Culbertson Generation Station near Culbertson, Montana.

Basin Electric purchases all of the output from Waste Heat Recovery Units located near St. Anthony, North Dakota; Zeeland, North Dakota; Killdeer, North Dakota and three other Heat Recovery Units located in South Dakota; one in Montana; and one in Minnesota. Basin Electric also purchases all the output from the North Dakota 1 Wind Energy Center near Edgeley and Kulm, North Dakota; the Wilton Wind Energy Center near Wilton, North Dakota; the Baldwin Wind Project near Baldwin, North Dakota; the South Dakota Wind Energy Center near Highmore, South Dakota; the Day County Wind Project near Groton, South Dakota; the Campbell County Wind Project near Pollock, South Dakota; and the Pipestone, Minnesota School District Wind Turbine. Basin Electric purchases a portion of Unit #4 of the George Neal Station near Salix, Iowa; the City of Madison, South Dakota Diesel Generators; Walter Scott Energy Center Units 3&4 near Council Bluffs, IA; Duane Arnold Energy Center near Palo, Iowa; Wisdom Station Units 1&2 near Spencer, Iowa; Spencer Combustion Turbine, Spencer, Iowa; Estherville, Iowa Diesel Generation; Pocahontas, Iowa Diesel Generation; Webster City, Iowa Combustion Turbine; and various wind facilities near Ayrshire, Iowa; Duncan/Klemme County, Iowa; Lakota, Iowa; and Superior, Iowa.

The most recent Energy Information Administration (EIA) Form No. 923 for the Antelope Valley Station and the Leland Olds Station are included as Exhibit 1.

SECTION B: ENERGY CONVERSION FACILITIES UNDER CONSTRUCTION

Basin Electric is currently constructing the Lonesome Creek Station Unit #4 and #5 in 2016. Each unit is a 45 MW natural gas fired combustion turbine located near Watford City, North Dakota.

Basin Electric is constructing twelve 9.3 MW natural gas fired reciprocating engine peaking units at the existing Pioneer Generation Station west of Williston, North Dakota.

Basin Electric has signed Power Purchase Agreements with the following wind facilities that are still in various stages of construction; 150 MW Lindahl Wind Project near Tioga, North Dakota; the 150 MW Brady Wind Project near New England, North Dakota; the 150 MW Brady II Wind Project near New England, North Dakota; and the 104 MW Sunflower Wind Project near Hebron, North Dakota. All these projects have expected commercial operation dates by the end of 2016.

SECTION C: PROPOSED ENERGY CONVERSION FACILITIES ON WHICH CONSTRUCTION IS INTENDED WITHIN THE ENSUING FIVE YEARS

Basin Electric's latest forecast has seen an increase in expected member load, especially in the western ND oil producing region. This latest forecast has led to Basin Electric exploring a possible combined cycle unit in the spring of 2024. The size and location of this unit is still being discussed. If and when this project is committed to, a more defined schedule will be developed. Basin Electric will continue to monitor the load growth as it materializes and continue to meet the needs of our membership.

SECTION D: PROPOSED ENERGY CONVERSION FACILITIES DURING THE NEXT TEN-YEAR TIME PERIOD

Basin Electric is evaluating the development of new generating resources (coal, nuclear, gas, and wind) in the Dakotas to meet Basin Electric's forecasted load growth.

SECTION E: EXISTING TRANSMISSION FACILITIES (ELECTRIC)

Basin Electric's transmission and related substation facilities in North Dakota and their associated commercial dates are listed in the following table:

a. Transmission Lines

LINES - BY VOLTAGE

COMMERCIAL IN-SERVICE DATE

69 kV Lines

Leland Olds - Basin Electric Sub 01/09/66

115 kV Lines

Basin Electric Sub - Stanton Tap 01/09/66

Logan-Kenmare Line 04/01/79

Logan-Mallard Line 04/01/79

Charlie Creek-Squaw Gap 12/31/82

Squaw Gap-Richland 12/31/82

Blaisdell-Berthold 12/21/13

230 kV Lines

Leland Olds #1-Washburn Double Circuit 01/09/66

Leland Olds-Logan Line 03/31/80

Leland Olds #2 - Basin Electric Sub 12/15/75

Logan-Tioga 05/01/82

Tioga-Canadian Border (Estevan) 05/01/82

Belfield-Rhame 04/07/10

Williston-Tioga 01/10/11

Judson-Williston 12/22/15

345 kV Lines

Leland Olds-Groton-Watertown 12/15/75

Leland Olds-Ft. Thompson (SD) Line 12/15/75

Leland Olds-AVS North Line 11/30/83

Leland Olds-AVS South Line 07/01/84

Antelope Valley Station-Charlie Creek #1 11/30/83

Antelope Valley Station-Charlie Creek #2 09/18/15

Charlie Creek-Judson 12/22/15

500 kV Lines

Antelope Valley Station-Huron, SD 07/01/84
(345 kV operation)

b. Substations

115 kV Wm. J. Neal Station Switchyard 04/01/52

230 kV Leland Olds Switchyard 01/09/66

230 kV Washburn, ND Switchyard 01/09/66

115 kV Stanton Tap Structure 01/09/66

230/115/69 kV BEPC Substation	01/09/66
345/230 kV Leland Olds Switchyard Addition	12/15/75
230/115 kV Dickinson, ND Substation	12/15/75
230/115 kV Logan Substation	04/01/79
345/115 kV Charlie Creek Substation	11/30/83
345 kV Antelope Valley Station Switchyard	11/30/83
230/115 kV Neset Substation	10/07/09
230 kV Rhame Substation	04/07/10
230/115 kV Blaisdell Substation	05/24/12
230/115 kV Wheelock Substation	10/16/12
345/230 kV Judson Substation	12/22/15

- c. Basin Electric does not anticipate retiring any of its existing transmission facilities within the next ten (10) years.

SECTION F: EXISTING TRANSMISSION FACILITIES (PIPELINES)

Pipeline transmission facilities utilized by Basin Electric are water supply lines to the Leland Olds Station, Antelope Valley Station, a 12 mile long natural gas fuel supply pipeline associated with the Groton Generation Station, and a 13 mile long natural gas fuel supply pipeline associated with the Deer Creek Generation Station. The Leland Olds water line is approximately one-quarter mile in length and is located on plant site property owned by Basin Electric.

The water supply line for the Antelope Valley Station is a forty-two inch diameter steel-lined concrete pipe of approximately nine miles in length. The line runs directly north from the plant site to an intake structure and pumping station located on Lake Sakakawea. This line was designed and constructed as a joint use facility for Basin Electric and the adjacent Great Plains Synfuels Plant. The State of North Dakota's southwest water pipeline uses the same intake structure and pumping station as the Antelope Valley Station pipeline. The Basin Electric line was designed to have a maximum operating pressure of 160 PSI gauge and a flow rate of 30,000 GPM. The pipeline was constructed, with a minimum earth cover of 84 inches. The pipeline was placed in-service in 1984. A new parallel pipeline was installed in 2006, because of recurring failures of the existing line. The new line is steel pipe with the same design parameters. The old line will be maintained as a back-up facility. None of Basin Electric's pipeline facilities are projected for retirement within the next ten-year period.

DGC constructed a 3.5 mile, 10' diameter natural gas pipeline, in late 2013, with the sole purpose to provide AVS with access to natural gas for use only during startup activities.

SECTION G: **PROPOSED TRANSMISSION FACILITIES ON WHICH CONSTRUCTION IS INTENDED WITHIN THE ENSUING FIVE YEARS (ELECTRIC)**

Basin Electric is developing the Antelope Valley-Judson-Neset 345kV transmission line project. The entire project will consist of constructing approximately 190 miles of new single circuit 345kV and double circuit 345/115kV transmission lines, the construction of two new substations, modifications to three existing substations and a 345kV switchyard, river crossings, temporary construction staging sites and other facilities. The Antelope Valley-Judson 345kV segment was placed in service in 2015. The Judson-Neset 345kV segment is scheduled to be in service by November of 2017.

An additional 345kV transmission project (referred to as the North Killdeer Loop (NKL)) is planned to interconnect with the recently constructed Antelope Valley-Judson 345kV transmission line. The NKL will include a 345/115kV load serving substation named Round Up near Killdeer, a 345/115kV load serving substation named Kummer Ridge near Johnsons Corner, and a 345/115kV load serving substation named Patent Gate near Alexander. A 345kV line connecting Patent Gate Substation to Kummer Ridge Substation is also being constructed. All state and local permits for this project have been received and this project will be in service by the 3rd quarter of 2016. A 345kV line from Round Up to Kummer Ridge is under consideration at this time.

Transmission studies are underway to analyze any other required transmission improvements to accommodate network load growth. Results of these studies may indicate the need for additional load serving transmission facilities.

SECTION H: **PROPOSED TRANSMISSION FACILITIES ON WHICH CONSTRUCTION IS INTENDED WITHIN THE ENSUING FIVE YEARS (PIPELINE)**

Results of the resource development of new generating resources (refer to section D) will identify pipeline improvements necessary to support the supply required by the new resources. Generation studies are underway to analyze the required improvements to accommodate member load growth. Results of these studies may indicate the need for additional load serving generation facilities.

SECTION I: **PROPOSED TRANSMISSION FACILITIES DURING THE NEXT TEN-YEAR TIME PERIOD (ELECTRIC AND PIPELINE)**

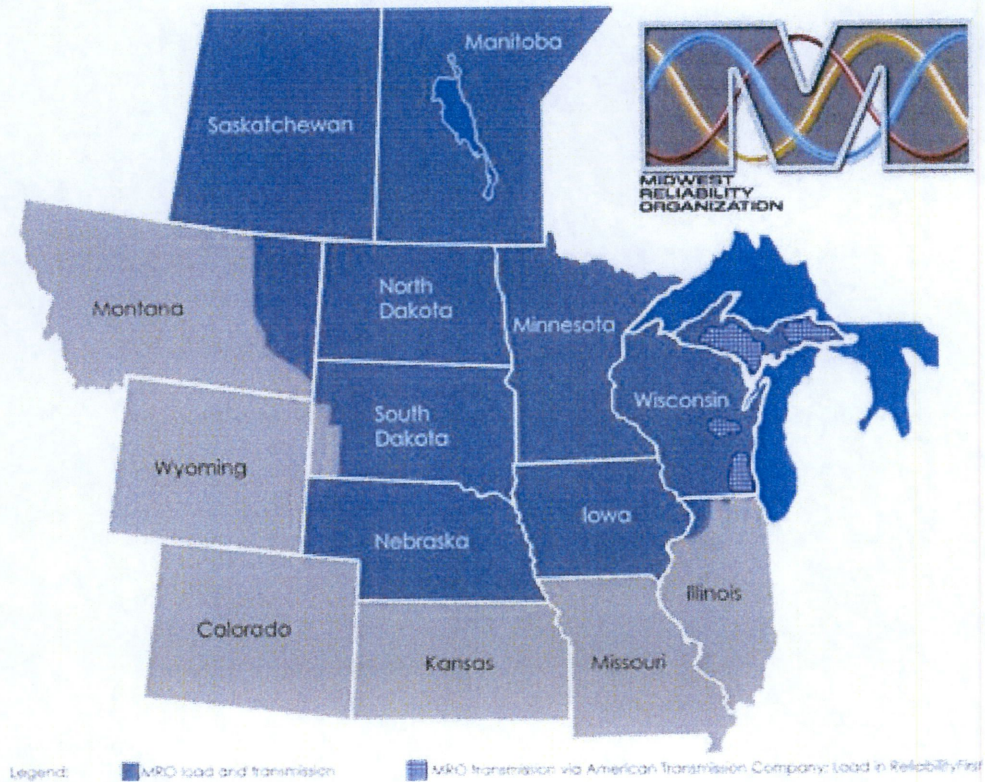
Results of the development of new generating resources (refer to section D) will identify transmission improvements necessary required by the new resources. Transmission studies are underway to analyze the required transmission improvements to accommodate network load growth. Results of these studies may indicate the need for additional load serving transmission facilities.

SECTION J: REGIONAL COORDINATION

Midwest Reliability Organization

Midwest Reliability Organization (MRO) is a non-profit organization dedicated to ensuring the reliability and security of the bulk power system in the north central region of North America, including parts of both the United States and Canada. MRO is one of eight regional entities in North America operating under authority from regulators in the United States through a delegation agreement with the North American Electric Reliability Corporation (NERC) and in Canada through arrangements with provincial regulators. The region includes more than 100 organizations that are involved in the production and delivery of power to more than 20 million people.

The primary purpose of MRO is to ensure compliance with reliability standards and perform regional assessments of the grid's ability to meet the demands for electricity.



Mid-West Electric Consumers Association

Basin Electric Power Cooperative is a member of the Mid-West Electric Consumers Association (Mid-West). Mid-West, which was founded in 1958, is a regional coalition of consumer-owned electric utilities that purchase power from the federal multi-purpose projects in the Missouri River Basin. Mid-West's Water & Power Marketing Committee meets throughout the year to discuss and review planned additions of Mid-West member utilities.

Southwest Power Pool

Basin Electric joined the Southwest Power Pool (SPP) in 2015. SPP oversees the bulk electric grid and wholesale power market in the central United States on behalf of a diverse group of utilities and transmission companies in 14 states including North Dakota. SPP establishes practices for system design, planning, adequacy, regional transmission service tariff, interconnections, operation, reliability, market designs and efficiency, and market power mitigation that will help to assure efficient and reliable power supply among the systems in SPP and SPP transmission customers. Basin Electric participates on various committees and work groups as a function of SPP.

Coordination with Area Utilities

Western Area Power Administration

Basin Electric coordinates regional power supplies with the Western Area Power Administration. An example is the Miles City, Montana DC converter station. The station was built by the Western Area Power Administration (WAPA) to transfer electric power across the east/west transmission separation. Basin Electric has financed 40% of the cost of the station and contracted with WAPA for 40% of the capacity of the 200 MW station. This station enables Basin Electric to serve Central Montana Electric Power Cooperative, a Class A member with electrical loads primarily located west of the east-west separation.

Montana-Dakota Utilities Co.

Member cooperatives of Basin Electric have a common service area in the western half of North Dakota with Montana-Dakota Utilities Co. (MDU).

The Tioga-Saskatchewan 230 kV line constructed by Basin Electric and Saskatchewan Power Corporation allows the purchase and sale of power among regional utilities. This line was reviewed with MDU and routed so that it could be tapped for future use by MDU and the member systems of Basin Electric. A result of this review was the Tioga 230/115 kV substation constructed by MDU and shared by Basin Electric.

The Miles City-Hettinger-New Underwood, SD, 230 kV line is another example of joint planning. This line was jointly planned and constructed with WAPA, MDU and Basin Electric. Basin Electric and MDU each have 25% capacity rights and WAPA owns and has capacity rights to 50% of the line.

SECTION K: ENVIRONMENTAL INFORMATION

The primary obligation of Basin Electric is to provide an adequate wholesale supply of dependable, low-cost electric power to its member systems, consistent with the public interest. In conjunction with this, Basin Electric endeavors to maximize the socio-economic benefits associated with electrical generation and transmission projects and

to minimize negative impacts associated with these projects. This is particularly true with respect to protecting the agricultural lifestyle and productivity of this region.

The Cooperative remains committed to preserving and enhancing the ecological balance of this region for the benefit of future generations. It is the policy of Basin Electric that environmental impacts be monitored and steps taken to mitigate and alleviate adverse effects. Basin Electric has instituted a variety of programs designed to maximize the most efficient use of energy and to benefit the human, agricultural, and biological environments.

Projects proposed by Basin Electric that have a federal nexus adhere to the requirements of the Rural Utilities Service or Western Area Power Administration Environmental Policies and Procedures which describe the procedures for compliance with the provisions of the National Environmental Policy Act (NEPA). Through the NEPA process, Basin Electric encourages state, federal and public participation in proposed projects so that once potential impact issues are identified appropriate mitigation measures can be formulated with the assistance of the participants to minimize potential impacts. An Environmental Assessment is developed which includes a comprehensive discussion and evaluation of environmental issues and serves as a baseline document for subsequent environmental regulatory permits and a federal Environmental Impact Statement when required. The goal of this process is to select a facility location that best minimizes environmental, cultural and socio-economic impacts and engineering and construction costs.

Basin Electric adheres to the appropriate North Dakota statutes regulating industrial development projects such as electrical generating facilities and high voltage transmission lines and substations. In addition, it is Basin Electric's practice to inform affected state and federal agencies when prospective projects are identified to solicit their input early in the planning process.

Basin Electric utilizes a socio-economic impact management program to assist communities in addressing population growth associated with the construction of energy conversion facilities. Basin Electric follows an open-planning process to determine the specific negative and positive impacts that may develop in an area, and works closely with the local citizens and public officials on key issues. Once issues are defined, strategies are recommended to alleviate the adverse conditions. Basin Electric further provides public officials with the technical assistance to secure financing for public services and facilities needed to alleviate negative impacts.

SECTION L: PROJECTED DEMAND FOR SERVICES

Exhibit 2 represents Basin Electric's sale to its Class A members. This exhibit represents Basin Electric's supplemental power supply responsibilities to its members. As a supplemental power supplier, Basin Electric is responsible for providing the members requirements in excess of the fixed amount of power they receive from WAPA and other sources.

An econometric based load forecast was completed in early 2016. The econometric forecasting system in the load forecast is a bottom up process that begins by developing econometric equations and forecasts for each distribution cooperative. The total system consists of approximately 350 forecasting equations and over 700 explanatory variables. Annual and monthly forecasts of energy and demand are conducted for a 20-year period. The distribution cooperative forecasts are combined to obtain the generation and transmission cooperative forecasts (G&T's). The G&T's power requirements are then separated into various power supply responsibilities. The Basin Electric components are combined to obtain the Basin Electric total power supply responsibility.

The modeling and forecasting is performed at Basin Electric. Throughout the modeling and forecasting process there is constant communication and review by our member systems and the Rural Utilities Service (RUS) in Washington, D.C. The RUS is responsible to review and approve close to 1,000 distribution cooperative forecasts as well as large G&T systems forecasts such as Basin Electric. The RUS insures that state of the art methods and technologies are being used to produce short term and long-term forecasts. Historical energy data is combined with external data obtained from government and private sector sources as well as membership to form econometric forecasting equations. External projections of explanatory economic and demographic variables used in the forecasting process are obtained from the Food and Agricultural Policy Research Institute at the University of Missouri-Columbia, MO.; Woods & Poole Economics, Inc.; and the Department of Energy, Washington, D.C.; as well as others.

Basin Electric's service area is electrically divided into western and eastern systems. These systems are separated by the east-west ties, which are boundaries that separate two major electrical regions of the United States. This boundary essentially runs south from Fort Peck, MT, approximately following the South Dakota-Wyoming, Nebraska-Wyoming, and Colorado-Kansas borders. As a result of this, Basin Electric must supply generating capacity and energy on both sides of the ties to serve its member-load requirements.

The resources available to Basin Electric to serve its members' east-side requirements are as follows:

Leland Olds Station: Leland Olds Unit 1 was placed in-service on January 9, 1966 and is a base-load coal fueled unit located near Stanton, ND with a net capacity of 222 MW. Leland Olds Unit 2 is a coal fueled unit that was placed in-service on December 15, 1975 and its net capacity is rated at 445 MW. Basin Electric installed emission control equipment at the Leland Olds Station which requires an increase to the station service. This equipment was put in service after the 2012 fall outage on Unit 2 reducing the net capacity from 448 MW to 445 MW due to additional station service required. The Unit 1 emissions control equipment was placed into service after the spring 2013 maintenance outage.

Antelope Valley Station: Basin Electric operates two 450 MW (net) thermal-generating base-load coal fired units near Beulah, ND. Unit 1 began commercial operation on July 1, 1984 and Unit 2 began partial commercial operation on June 1, 1986.

Designed to be environmentally sound, over \$319 million have been invested in capital pollution control asset investments for AVS to date. Dry Scrubbers use lime to capture and remove up to 90 percent of sulfur dioxide emissions from stack gases. Fabric filter bag houses capture and remove up to 99 percent of particulate matter. Each bag house contains more than 8,000, 35-foot tall bags. AVS is a "zero-discharge" facility; even water is used efficiently only leaving the plant site through evaporation.

Laramie River Station: Basin Electric, together with five other consumer-owned power supply entities, began construction of the Laramie River Station near Wheatland in southeast Wyoming in July, 1976. The station's three units became fully operational on November 1, 1982, with Unit 1 at a net capacity of 570 MW; Unit 2 at a net capacity of 570 MW; and Unit 3 at a net capacity of 570 MW. Basin Electric, as Project Manager and Operating Agent for the Missouri Basin Power Project, was assigned overall responsibility for the design, construction and operation of the power plant and related transmission. Units 2 and 3 of the Laramie River Station are electrically connected to the western system; Unit 1 is electrically connected to the eastern system. The amount of power Basin Electric receives from the eastern unit is 48 MW (net).

Spirit Mound Station: Basin Electric placed in service two 60 MW (net) nameplate fuel oil-fired combustion turbines on June 30, 1978. The combined winter rating of the two units is 120 MW (net) and the summer rating is 100 MW (net). The capacity is intended to be used primarily as reserves or replacement during initial outages of base-load units or during peak load periods when existing base-load units cannot meet the demand. The Spirit Mound Station is located near Vermillion, SD.

Earl F. Wisdom Unit 1: Basin Electric and Corn Belt Power Cooperative (Corn Belt), one of Basin Electric's member cooperatives, negotiated a power supply contract which provides that Corn Belt will sell to Basin Electric Corn Belt's 38 MW of uncommitted capacity and associated energy from the Earl F. Wisdom Unit 1. In return, Corn Belt entered into a wholesale power contract with Basin Electric whereby Basin Electric will sell and deliver to Corn Belt all of Corn Belt's capacity and energy requirements in excess of the power and energy available to Corn Belt from the Western Area Power Administration. In accordance with the Utility Mercury and Air Toxics Standards (MATs), Unit 1 stopped burning coal in January of 2014. Corn Belt and Basin Electric completed a retrofit of Unit 1 to switch from coal to natural gas for fuel. This retrofit was completed in June of 2014.

Earl F. Wisdom Unit 2: Basin Electric partnered with Corn Belt Power Cooperative to build the 80 MW natural gas peaking unit near Spencer, Iowa. Basin Electric owns one half of the unit, which was placed in service in April 2004. Basin Electric purchases 87.5 % of Corn Belt's owned half in response to Corn Belt entering into a Wholesale Power Contract; therefore, Basin Electric has 93.75% or 75 MW from the 80 MW combustion turbine.

Groton Generation Station: The Groton Station is located near Groton, SD. Basin Electric commissioned Groton Unit 1 in 2006 and Unit 2 in 2008. These LMS 100 natural gas units provide peaking power. Unit 1 has a winter rating of 98 MW and Unit 2 has a winter rating of 97 MW.

Culbertson Generation Station: The Culbertson Station is located near Culbertson, MT. Basin Electric commissioned Culbertson Unit 1 in 2010. The LMS 100 natural gas unit provides peaking power. The unit has a winter rating of 91 MW.

Deer Creek Station: The Deer Creek Station is located near Brookings, SD. Basin Electric commissioned the Deer Creek Station in August of 2012. The unit is a combined cycle natural gas facility that provides intermediate power. The unit has a winter rating of 300 MW.

Pioneer Generation Station: The Pioneer Station is located near Williston, ND. Basin Electric commissioned Pioneer Unit 1 in 2013 and Units 2 and 3 in January of 2014. Each unit consists of a LM 6000 natural gas unit and provides peaking power. Each unit has a winter rating of 45 MW for an ultimate total facility rating of 225 MW. Unit 1 has a synchronous clutch located between the combustion turbine and generator allowing the generator rotor to spin independent of the turbine providing voltage stability to the electric grid.

Lonesome Creek Generation Station: The Lonesome Creek Station is located near Watford City, ND. Basin Electric commissioned Lonesome Creek Unit 1 in 2013 and Units 2 and 3 in December 2014. Each unit consists of a LM 6000 natural gas unit and provides peaking power. Each unit has a winter rating of 45 MW for a total station generation capacity is 135MW. Unit 1 has a synchronous clutch located between the combustion turbine and generator allowing the generator rotor to spin independent of the turbine providing voltage stability to the electric grid.

Expansion of the Lonesome Creek Generation Station is underway. Basin Electric is constructing twelve 9.3 MW natural gas fired reciprocating engine peaking units at the existing Pioneer Generation Station west of Williston, North Dakota.

Chamberlain Wind Project: Basin Electric, in partnership with East River Power Cooperative, has constructed a wind energy project near Chamberlain, South Dakota. The 2.6 megawatt capacity project was placed into commercial service in January 2002. The energy is delivered to members as part of Basin Electric's overall power supply.

Minot Wind Project: Basin Electric, in partnership with Central Power Electric Cooperative, has constructed a wind energy project 14 miles south of Minot, North Dakota. The 2.6 megawatt capacity wind project was placed into commercial service in February 2002. Three additional turbines were added in December 2009 for a total output of 7.1 megawatts. The energy is delivered to members as part of Basin Electric's overall power supply.

PrairieWinds 1: Basin Electric, in partnership with PrairieWinds ND 1 Inc., has constructed a wind energy project of 77 turbines near Minot, North Dakota. The 115.5 MW capacity wind project was placed into commercial service in December, 2009.

Crow Lake Wind Project: Basin Electric, in partnership with Prairie Winds SD1 Inc., South Dakota Wind Partners and Mitchell Technical Institute, has constructed a wind energy project of 108 turbines near White Lake, South Dakota. The 162 MW capacity wind project was placed into commercial service. Basin Electric's subsidiary, Prairie Winds SD1, owns 100 turbines or 150 MW. Basin Electric has a purchase power contract for all 108 turbines or 162 MW from the Crow Lake Wind Project.

WAPA Peaking Capacity: In 1968 Basin Electric executed a long-term contract with the federal government for USBR (now WAPA) hydro peaking from the dams in the Missouri River Basin. This contract currently provides Basin Electric with 268.2 MW of winter peaking capacity at load and for Basin Electric to return a like amount of energy to Western during off-peak period.

George Neal IV: Basin Electric and Northwest Iowa Power Cooperative (NIPCO), one of Basin Electric's member cooperative, negotiated a power supply contract which provides that NIPCO will sell to Basin Electric NIPCO's 31 MW of uncommitted capacity and associated energy from Unit No. 4 of the George Neal Generating Station (Neal IV). In return NIPCO entered into a wholesale power contract with Basin Electric whereby Basin Electric will sell and deliver to NIPCO all of NIPCO's capacity and energy requirements in excess of the power and energy available to NIPCO from the Western Area Power Administration.

Basin Electric and Corn Belt Power Cooperative (Corn Belt), one of Basin Electric's member cooperatives, negotiated a power supply contract which provides that Corn Belt will sell to Basin Electric Corn Belt's 73 MW of uncommitted capacity and associated energy from Unit No. 4 of the George Neal Generating Station (Neal IV). In return, Corn Belt entered into a wholesale power contract with Basin Electric whereby Basin Electric will sell and deliver to Corn Belt all of Corn Belt's capacity and energy requirements in excess of the power and energy available to Corn Belt from the Western Area Power Administration.

Walter Scott 3 and 4: Basin Electric and Corn Belt Power Cooperative (Corn Belt), one of Basin Electric's member cooperatives, negotiated a power supply contract which provides that Corn Belt will sell to Basin Electric Corn Belt's 26 MW of uncommitted capacity and associated energy from Unit No. 3 and 45 MW of uncommitted capacity and associated energy from Unit No. 4 of the Walter Scott Energy Center. In return, Corn Belt entered into a wholesale power contract with Basin Electric whereby Basin Electric will sell and deliver to Corn Belt all of Corn Belt's capacity and energy requirements in excess of the power and energy available to Corn Belt from the Western Area Power Administration.

Duane Arnold Energy Center: Basin Electric and Corn Belt Power Cooperative (Corn Belt), one of Basin Electric's member cooperatives, negotiated with a power supply contract which provides that Corn Belt will sell to Basin Electric Corn Belt's 62 MW of uncommitted capacity and associated energy from the Duane Arnold Energy Center. In return, Corn Belt entered into a wholesale power contract with Basin Electric whereby Basin Electric will sell and deliver to Corn Belt all of Corn Belt's capacity and energy requirements in excess of the power and energy available to Corn Belt from the Western Area Power Administration.

Western Native American Purchase: Basin Electric receives a Native American Allocation of 37 MW in the winter and 38 MW in the summer season. This allocation is a result of congressional action that made federal power available to the Native Americans.

Rapid City DC Tie: Basin Electric and Black Hills Power, Inc. have jointly constructed a 200 MW asynchronous tie at Rapid City, SD. This tie enables Basin Electric to serve load located on eastern system using capacity and/or energy from west side resources and vice versa. The Basin Electric ownership percentage is 65% and the Black Hills Power, Inc. ownership percentage is 35%. Currently, Basin Electric has rights to 130 MW of the tie.

Stegall (David Hamil) DC Tie: Tri-State G&T Association constructed a 110 MW asynchronous tie at Stegall, NE. Basin Electric has acquired all rights to this tie. This enables Basin Electric to serve load located on the eastern system using capacity and/or energy from west side resources and vice versa.

Other Short-Term Resources: Basin Electric has also entered into a number of short-term purchase agreements to meet contractual power supply obligations. Due to the relatively short duration of these arrangements no specifics are provided.

Long-Term Resource: Basin Electric has entered into long-term purchase agreements to meet contractual power supply obligations. A 40 megawatt wind energy project is located just west of Edgeley, ND; two 49.5 MW wind energy projects are located near Wilton, ND; a 40 megawatt wind energy project is located near Highmore, SD; a 99 MW wind energy project is located near Groton, SD; a 94 MW wind energy project located near Pollock, SD and a 100 MW wind energy project is located near Baldwin, ND. Basin Electric also entered into a long-term purchase agreement with the City of Madison which provides 10 MW of peaking power from a diesel unit at Madison, SD. Basin Electric has a purchase power agreement with Ormat Industries for eight 5.5 MW waste heat recovery units. Three sites are in North Dakota near St. Anthony, Manning, and Zeeland. Three sites are in South Dakota, one in Montana and one in Minnesota. Basin Electric also purchases the output from the following generating facilities from its member cooperative Corn Belt, 25 MW from the Webster City, IA combustion turbine; 13 MW from the diesel generators at Estherville, IA; 10 MW from the combustion turbine located at Spencer, IA; and from the following wind generating projects, 7.3 MW of Hancock County, 16.8 MW of Crosswinds, 10.5 MW from Lakota and 10.5 MW from Superior, all located within Iowa.

Basin Electric also has long term purchases from Minnesota Power for 100 MW (ending in 2020); 50 MW from Heartland Consumers Power District (ending in 2021); 50 MW from PPL EnergyPlus (ending in 2020); 50-200 MW from Minnkota Electric Power Cooperative (ending in 2018); 25 MW of capacity from Great River Energy and 25 MW of capacity from Xcel Energy (ending in 2019); 50 MW from Cargill (ending in 2021); 100 MW from Minnkota Electric Power Cooperative (ending in 2022); 50 MW of capacity from Manitoba Hydro (ending in 2020); 75-175 of capacity from Dairyland Power Cooperative (ending in 2023); 150 MW of capacity from Missouri River Energy Services (ending in 2023); and 100 MW of capacity from Minnesota Power (ending in 2018).

Future Power Supply: For discussion of future power supply, please refer to Section B (Energy Conversion Facilities Under Construction) and Section D (Proposed Energy Conversion Facilities During the Next Ten-Year Time Period).

The resources available to Basin Electric to serve its members' west-side requirements are as follows:

Laramie River Station: The Laramie River Station capacity that Basin Electric will receive from Unit 2 and Unit 3 on the west is 675 MW (net).

Miles City DC Tie: Basin Electric and the Western Area Power Administration have jointly constructed a 200 MW back-to-back, AC-DC-AC tie built at Miles City, MT. This tie, which provides a 40% capacity entitlement, enables Basin Electric to serve Central Montana Electric Power Cooperative Inc., a Class A member with electrical loads located primarily west of the east-west ties, using capacity from east-side resources such as Antelope Valley Station. Basin Electric currently has rights for 110 MW in an east-west direction only.

Wyoming Distributed Generation: The Wyoming Distributed Generation consists of 9 peaking units located at 3 sites; Arvada, Hartzog and Barber Creek. These units are natural gas fired units with a total net output of 45 MW summer and 54 MW winter. These units were released for commercial operation in 2002. These units currently are utilized for meeting our operating reserves for Basin Electric's west side electrical requirements.

Dry Fork Station: The Dry Fork Station is a 405 MW (net) coal fired power plant located 10 miles north of Gillette, Wyoming. This station was released for commercial operation in 2011. Basin Electric owns 92.9% of the station or 376 MW.

The load values contained in Exhibit 2 were obtained from the econometric based load forecast. These loads have been adjusted to an at-generator system coincident basis by allowing for reserves, on-peak losses and system diversity as outlined in Exhibit 3.

1. Basin Electric has no concentrated load centers due to the regional and rural nature of the total load. The fuel sources and transportation facilities for existing and future plants are as follows:

<u>Plant</u>	<u>Fuel Source</u>	<u>Transportation</u>
Leland Olds Station	ND Lig/WY (PRB) Coal	Rail
Spirit Mound Station	Oil	Pipeline
Laramie River Station	Wyoming (PRB) Coal	Rail
Antelope Valley Station	ND Lig/WY (PRB) Coal	Mine Mouth/Rail
Minot Wind Project	Wind	N/A
Wyoming Distributed Gen	Natural Gas	Pipeline
Wisdom Unit 2	Natural Gas/Fuel Oil	Pipeline
Chamberlain Wind Project	Wind	N/A
Groton Generation Station	Natural Gas	Pipeline

PrairieWinds 1 Wind Project	Wind	N/A
Crow Lake Wind Project	Wind	N/A
Culbertson Gen Station	Natural Gas	Pipeline
Deer Creek Station	Natural Gas	Pipeline
Dry Fork Station	Wyoming (PRB) Coal	Mine Mouth
Pioneer Gen Station	Natural Gas	Pipeline
Lonesome Creek Gen Station	Natural Gas	Pipeline

2. Pursuant to federal and state laws, Basin Electric will examine all alternatives capable of producing an adequate and reliable source of energy for its member cooperatives.

Specific alternatives selected will be evaluated considering environmental, engineering and economic factors. Additional facilities, transmission and generation will be designed and operated in accordance with state and federal standards.

EXHIBIT 1

**U.S. Department of Energy Form EIA-923
(distributed only to the Public Services Commission)**

NOTICE: This report is mandatory under the Federal Energy Administration Act of 1974 (Public Law 93-275). Failure to comply may result in criminal fines, civil penalties and other sanctions as provided by law. For further information concerning sanctions and data protections see the provision on sanctions and the provision concerning confidentiality of information in the instructions. **Title 18 USC 1001 makes it a criminal offense for any person knowingly and willingly to make to any Agency or Department of the United States any false, fictitious, or fraudulent statements as to any matter within its jurisdiction.**

SCHEDULE 1. IDENTIFICATION

Survey Contact

Contact Joseph Leingang Submit Date 03-JUN-16
Title Director of Fuels
Address 1717 E. Interstate Avenue
City/State/Zip Bismarck ND 58503
Email jleingang@bepc.com Phone (701) 557-5648 Fax (701) 557-5144

Supervisor of Contact Person for Survey

Contact Terry Retterath
Title Industrial Engineer III
Address 1717 E. Interstate Avenue
City/State/Zip Bismarck ND 58503
Email tlratt@bepc.com Phone (701) 223-0441 Fax (701) 557-5144

Report For

Company Name Basin Electric Power Coop
Plant Name Antelope Valley
Plant ID 6469 Plant County Mercer
Plant Address Hwy 200
Plant City Beulah Plant State ND
Regulated Yes No
CHP Yes No
CHP Efficiency %

For contact detail go to <http://www.eia.doe.gov/oss/forms.html#eia-923>

SCHEDULE 6. NONUTILITY ANNUAL SOURCE AND DISPOSITION OF ELECTRICITY
(Instructions for SCHEDULE 6 are on page 13)

SCHEDULE 6 collects calendar year data (no monthly detail).
Report all generation in **megawatthours (MWh)** rounded to a whole number.

- | | |
|--------------------------------|---|
| (1) Gross Generation (Annual) | (4) Station Use |
| (2) Other Incoming Electricity | (5) Direct Use |
| | (6) Total Facility Use (4 + 5) |
| | (7) Retail Sales to Ultimate Customers |
| | (8) Sales for Resale (MWh) |
| | (9) Provided Tolling Agreement (MWh) |
| | (10) Other Outgoing Electricity |
| (3) Total Sources (1 + 2) | (11) Total Disposition (6 + 7 + 8 + 9 + 10) |

Total Sources must equal Total Disposition (3 = 11)

Plants that cannot separate Station Use and Direct Use may enter zero in Station Use and the sum of Station Use and Direct Use in the Direct Use field.

Types of Other Incoming Electricity
List all of the types of incoming electricity included in (2)
Other Incoming Electricity

Types of Other Outgoing Electricity
List all of the types of outgoing electricity in item (10)
Other Outgoing Electricity

U.S. Department of Energy
Energy Information Administration
Form EIA-923

Supplemental EIA923 Power Plant Operations Report
Year: **2015** Plant: **6469** **Antelope Valley**

Form Approval
OMB No. 1905-0129
Approval Expires 05/31/2017

SCHEDULE 7. PART A. ANNUAL REVENUES FROM SALES FOR RESALE

Complete Schedule 7, Part A, only if a positive value was entered on Schedule 6, Item (8): "Sales for Resale."

Sales for Resale are energy supplied to electric utilities, cooperatives, municipalities, federal and state electric agencies, power marketers, or other entities, for resale to end-use consumers.

Report in thousand dollars. For example \$1,987,234 should be entered as 1,987

Annual Revenues from Sales for Resale (in thousand dollars)

SCHEDULE 7. PART B. ANNUAL RETAIL SALES, REVENUES AND NUMBER OF CUSTOMERS FROM RETAIL SALES

Report by state and end-use customer sectors (Residential, Commercial, industrial and Transportation).

Complete an individual Schedule 7, Part B, for each state where customers are located, only if a positive value was entered on Schedule 6, Item (7), "Retail Sales to Ultimate Customers."

Annual Retail Sales, Revenue, and Number of Customers:

- Retail sales are sold directly to an end-use customer (i.e., the energy is consumed by the customer, onsite, and is not resold to other customers).
- Enter annual retail sales, revenue, and number of customers for each state where customer(s) are located.
- Report Annual Retail Sales in megawatthours (Mwh), by sector.
- Report Annual Revenue in thousand dollars, by sector.
- Report Number of Customers, by sector.

State					
Items	Residential	Commercial	Industrial	Transportation	Total
Retail Sales (Mwh)					
Revenue (\$ 000's)					
Number of Customers					

SCHEDULE 8. PART B. FINANCIAL INFORMATION RELATED TO COMBUSTION BY-PRODUCTS

Complete an individual Schedule 8, Part B, annually, for each organically fueled thermoelectric power plant with a total steam turbine capacity greater than, or equal to, 100 megawatts.

- Data reported in Schedule 8, Part B must correspond to the combustion by-product data reported on Schedule 8, Part A.
- If actual data are not available, provide an estimate value.
- Report all values in thousand dollars, to the nearest thousand.

Operation and Maintenance (O&M) Expenditures During Year (Thousand Dollars)

Type	(1) Fly Ash	(2) Bottom Ash	(3) Flue Gas Desulfurization	(4) Water Pollution Abatement	(5) Other Pollution Abatement	(6) Total (1 + 2 + 3 + 4 + 5)
Collection	2,347	884	18,721		1,434	23,386
Disposal						
Other						

Capital Expenditures for New Structures and Equipment During Year, Excluding Land and Interest Expense (Thousand Dollars)

Type	(7) Air Pollution Abatement	(8) Water Pollution Abatement	(9) Solid/Contained Waste	(10) Other Pollution Abatement
Amount	6,450	0	5,871	0

Byproduct Sales Revenue During Year (Thousand Dollars)

Type	(11) Fly Ash	(12) Bottom Ash	(13) Fly and Bottom Ash Sold Intermingled	(14) Flue Gas Desulfurization	(15) Other Byproduct Revenue	(16) Total (11+12+13+14+15)
Amount	4	0	0	0	0	4

SCHEDULE 8. PART C. AIR EMISSIONS CONTROL INFORMATION

Complete an individual Schedule 8, Part C, annually for each thermoelectric or combined cycle power plant with a total steam turbine capacity greater than, or equal to, 10 megawatts. Report operational data for emission of sulfur dioxide (SO₂), nitrogen oxides (NO_x), particulates, mercury, and acid gases.
 Environmental Equipment and/or Technology Type

Column A: Boiler, Fuel Gas Desulfurization (FDG), and Flue Gas Particulate (FGP) unit IDs must match the ID as reported on Form EIA-860, "Annual Electric Generator Report."
 Column B: Technology Type: See the forms instructions document to obtain the technology type codes associated with each unit type.
 Column E through Q: See the forms instructions documents for detailed guidance in completing the questionnaire items.

Annual Operations																			
Environmental Equipment and/or Technology Type							NOx Emission Rate (lbs/MMBtu)		Particulate Matter Control				Sulfur Dioxide Control				Mercury Control	Acid Gas Control	
Types	PM Control ID	SO ₂ CONTROL ID	NOX Control ID	Mercury Control	Status	Hours in Service	Entire Year	May through September	Emission Rate (0.01 lb/MMBtu)	Removal Efficiency Rate at AOF	Tested Efficiency Particulate Removal (at 100% Load)	Test Date (MM-YYYY)	Removal Efficiency Rate at AOF	Removal Efficiency (at 100% Load)	Test Date (MM-YYY)	Quantity of FGD Sorbent Used (nearest 0.1 thousand tons)	FGD Unit Electrical Energy Consumption	Removal Efficiency (nearest 0.1% by weight)	Removal Efficiency (nearest 0.1% by weight)
LN			B1		OP	8297	.112	.115											
OV			B1		OP	8297	.112	.115											
LN			B2		OP	8587	.36	.37											
OV			B2		OP	8587	.36	.37											
BR	BH1				OP	8278			.01	71.4	99.9	09-1983							
BR	BH2				OP	8514			.01	74.1	99.9	08-1986							
OT				1	OP	4776													20.1
OT				2	OP	4967													12.9
SD		FGD1			OP	8784							67.3	63.9	09-1983	55.8	23839		
SD		FGD2			OP	8784							71.8	85.8	08-1986	57.5	28139		

SCHEDULE 8. PART C. AIR EMISSIONS CONTROL INFORMATION

Annual Operations																			
Environmental Equipment and/or Technology Type							NOx Emission Rate (lbs/MMBtu)		Particulate Matter Control				Sulfur Dioxide Control				Mercury Control	Acid Gas Control	
Types	PM Control ID	SO2 CONTROL ID	NOX Control ID	Mercury Control	Status	Hours in Service	Entire Year	May through September	Emission Rate (0.01 lb/MMBtu)	Removal Efficiency Rate at AOF	Tested Efficiency Particulate Removal (at 100% Load)	Test Date (MM-YYYY)	Removal Efficiency Rate at AOF	Removal Efficiency (at 100% Load)	Test Date (MM-YYY)	Quantity of FGD Sorbent Used (nearest 0.1 thousand tons)	FGD Unit Electrical Energy Consumption	Removal Efficiency (nearest 0.1% by weight)	Removal Efficiency (nearest 0.1% by weight)
Flue Gas Desulfurization Unit ID				Feed Materials and Chemicals			FGD Operation and Maintenance Expenditures During Year, Excluding Electricity (Thousand Dollars)						Maintenance, Material and All Other Costs				Total		
						Land and Supervision			Waste Disposal										
FGD1									\$4,979		\$2,489		\$626		\$725				\$8,819
FGD2									\$5,182		\$2,492		\$651		\$2,840				\$11,165

SCHEDULE 8. PART D. COOLING SYSTEM INFORMATION, MONTHLY OPERATIONS

Complete an individual Schedule 8, Part D for each thermoelectric power plant (organically fueled, nuclear and combined cycle) with a total steam capacity greater than, or equal to, 100 megawatts.

- Complete a separate schedule for each reporting month.
- Complete a separate row for each cooling system.
- If actual data are not available, provided an estimated value.
- If the source of cooling water is a well or municipal water system, do not complete the Cooling Water Temperature sections.

Cooling System ID	Cooling System Type	Cooling System Status	Annual Amt of Hours Chlorine in added to Service Per Cooling Water (1000 lbs)	Average Monthly Rate of Cooling Water (to nearest 0.1 gallons per minute)				Method of Measure	Cooling Water Temperature (degrees Fahrenheit)					Volume Cooling Water (to nearest 0.001 million gallons per month)					
				Div	Withdrawal	Discharge	Consumption		Avg at Intake	Max at Intake	Avg at Discharg	Max at Discharg	Method of Measure	Div	Withdrawal	Discharge	Consumption		
Report Month 1																			
CC1	RI	OP	744	2.576	3177	3177	0	3177	2	32					7	141.81	141.81	0	141.81
Report Month 2																			
CC1	RI	OP	672	2.358	3219	3219	0	3219	2	32					7	129.803	129.803	0	129.803
Report Month 3																			
CC1	RI	OP	743	2.756	3319	3319	0	3319	2	32					7	151.726	151.726	0	151.726
Report Month 4																			
CC1	RI	OP	591	2.197	2799	2799	0	2799	2	34					7	120.934	120.934	0	120.934
Report Month 5																			
CC1	RI	OP	728	2.832	3493	3493	0	3493	2	46					7	155.915	155.915	0	155.915
Report Month 6																			
CC1	RI	OP	617	2.599	3312	3312	0	3312	2	54					7	143.077	143.077	0	143.077

SCHEDULE 8. PART D. COOLING SYSTEM INFORMATION, MONTHLY OPERATIONS

Complete an individual Schedule 8, Part D for each thermoelectric power plant (organically fueled, nuclear and combined cycle) with a total steam capacity greater than, or equal to, 100 megawatts.

- Complete a separate schedule for each reporting month.
- Complete a separate row for each cooling system.
- If actual data are not available, provided an estimated value.
- If the source of cooling water is a well or municipal water system, do not complete the Cooling Water Temperature sections.

Cooling System ID	Cooling System Type	Cooling System Status	Service Per month	Cooling Water (1000 lbs)	Annual Amt of Hours Chlorine in added to (1000 lbs)	Average Monthly Rate of Cooling Water (to nearest 0.1 gallons per minute)				Cooling Water Temperature (degrees Fahrenheit)					Volume Cooling Water (to nearest 0.001 million gallons per month)				
						Div	Withdrawal	Discharge	Consumption	Method of Measure	Avg at Intake	Max at Intake	Avg at Discharg	Max at Discharg	Method of Measure	Div	Withdrawal	Discharge	Consumption
Report Month 7																			
CC1	RI	OP	744	3.195	3939	3939	0	3939	2	64					7	175.843	175.843	0	175.843
Report Month 8																			
CC1	RI	OP	624	2.79	3440	3440	0	3440	2	73					7	153.592	153.592	0	153.592
Report Month 9																			
CC1	RI	OP	562	2.265	2886	2886	0	2886	2	68					7	124.683	124.683	0	124.683
Report Month 10																			
CC1	RI	OP	744	2.559	3156	3156	0	3156	2	64					7	140.872	140.872	0	140.872
Report Month 11																			
CC1	RI	OP	720	2.443	3113	3113	0	3113	2	54					7	134.488	134.488	0	134.488
Report Month 12																			
CC1	RI	OP	739	2.41	2973	2973	0	2973	2	37					7	132.711	132.711	0	132.711

SCHEDULE 8. PART D. COOLING SYSTEM INFORMATION, MONTHLY OPERATIONS

Complete an individual Schedule 8, Part D for each thermoelectric power plant (organically fueled, nuclear and combined cycle) with a total steam capacity greater than, or equal to, 100 megawatts.

- Complete a separate schedule for each reporting month.
- Complete a separate row for each cooling system.
- If actual data are not available, provided an estimated value.
- If the source of cooling water is a well or municipal water system, do not complete the Cooling Water Temperature sections.

Cooling System ID	Cooling System Type	Cooling System Status	Service Per month	Annual Amt of Chlorine in added to Cooling Water (1000 lbs)	Average Monthly Rate of Cooling Water (to nearest 0.1 gallons per minute)				Method of Measure	Cooling Water Temperature (degrees Fahrenheit)					Volume Cooling Water (to nearest 0.001 million gallons per month)			
					Div	Withdrawal	Discharge	Consumption		Avg at Intake	Max at Intake	Avg at Discharge	Max at Discharge	Method of Measure	Div	Withdrawal	Discharge	Consumption
Report Month 1																		
CC2	RI	OP	744	2.532	3123	3123	0	3123	2	32				7	139.282	139.282	0	139.282
Report Month 2																		
CC2	RI	OP	669	2.292	3130	3130	0	3130	2	32				7	126.11	126.11	0	126.11
Report Month 3																		
CC2	RI	OP	681	2.415	2978	2978	0	2978	2	32				7	132.845	132.845	0	132.845
Report Month 4																		
CC2	RI	OP	720	2.596	3308	3308	0	3308	2	34				7	142.797	142.797	0	142.797
Report Month 5																		
CC2	RI	OP	744	2.766	3410	3410	0	3410	2	46				7	152.102	152.102	0	152.102
Report Month 6																		
CC2	RI	OP	720	3.022	3850	3850	0	3850	2	54				7	166.201	166.201	0	166.201

SCHEDULE 8. PART D. COOLING SYSTEM INFORMATION, MONTHLY OPERATIONS

Complete an individual Schedule 8, Part D for each thermoelectric power plant (organically fueled, nuclear and combined cycle) with a total steam capacity greater than, or equal to, 100 megawatts.

- Complete a separate schedule for each reporting month.
- Complete a separate row for each cooling system.
- If actual data are not available, provided an estimated value.
- If the source of cooling water is a well or municipal water system, do not complete the Cooling Water Temperature sections.

Cooling System ID	Cooling System Type	Cooling System Status	Annual Amt of Hours Chlorine in added to Service Per Water (1000 lbs)	Average Monthly Rate of Cooling Water (to nearest 0.1 gallons per minute)				Method of Measure	Cooling Water Temperature (degrees Fahrenheit)					Volume Cooling Water (to nearest 0.001 million gallons per month)					
				Div	Withdrawal	Discharge	Consumption		Avg at Intake	Max at Intake	Avg at Discharge	Max at Discharge	Method of Measure	Div	Withdrawal	Discharge	Consumption		
Report Month 7																			
CC2	RI	OP	741	3.153	3887	3887	0	3887	2	64					7	173.402	173.402	0	173.402
Report Month 8																			
CC2	RI	OP	672	2.973	3666	3666	0	3666	2	73					7	163.508	163.508	0	163.508
Report Month 9																			
CC2	RI	OP	632	2.614	3330	3330	0	3330	2	68					7	143.747	143.747	0	143.747
Report Month 10																			
CC2	RI	OP	744	2.686	3312	3312	0	3312	2	64					7	147.733	147.733	0	147.733
Report Month 11																			
CC2	RI	OP	720	2.494	3179	3179	0	3179	2	54					7	137.214	137.214	0	137.214
Report Month 12																			
CC2	RI	OP	744	2.503	3087	3087	0	3087	2	37					7	137.684	137.684	0	137.684

U.S. Department of Energy
Energy Information Administration
Form EIA-923

Supplemental EIA923 Power Plant Operations Report
Year: **2015** Plant: **6469** **Antelope Valley**

Form Approval
OMB No. 1905-0129
Approval Expires 05/31/2017

SCHEDULE 9. COMMENTS
(Instructions for SCHEDULE 9. are on page 20.)

Schedule	Part	Item	Comments
8	C	OT	Sorbent injection for Hg control

Generator Id	Generator Retirement Dates		Comments
	Retirement Month	Retirement Year	
	Changes in Ownership (Provide name of purchaser and date sold.)		

ERRORS

Purchase Type	Fuel	Schedule	Prime Mover	Equipment ID	Rpt Month	Supplier	Error Number & Description	Ranges	Override Comment
C	NG	2				DAKOTA GASIFICATION COMPANY	108 The Total Delivered Cost reported with this fuel is outside the expected lowest/highest bounds. Check for wrong units (report cents per million Btu), or if correct, provide comments explaining the deviation. Zero should only be entered for self-produced fuels such as waste coal or waste oil if no costs were incurred. Example: \$1.234/MMBtu = 123.4 Cents/MMBtu.	200 2000	It really was that low. By the way, I can't go back to tab 2A. The system won't allow me to go back and click that tab. Please fix that. Thanks!
		8A					808 You have entered a cost in O&M Expenditures for FGD on Schedule 8B (Part 3), but have not entered a positive quantity of FGD Gypsum or By-products in any column on Schedule 8A. Please enter the quantity of FGD byproduct or FGD Gypsum associated with the costs in Schedule 8B.		Corrected
		8C		OT			1815 A comment is required on Schedule 9 for the Other Equipment Type (OT) you selected on Schedule 8C. Please enter Schedule 8, Part C, and Item OT next to the explanation comment.		Sorbent injection for Hg control
		8D		CC1	1		872 The value reported for Monthly Amount of Chlorine Added to Cooling Water is higher than expected. Data should be in thousand pounds, for example, 3000 pounds should be entered as 3.		Corrected
		8D		CC1	2		872 The value reported for Monthly Amount of Chlorine Added to Cooling Water is higher than expected. Data should be in thousand pounds, for example, 3000 pounds should be entered as 3.		Corrected
		8D		CC1	3		872 The value reported for Monthly Amount of Chlorine Added to Cooling Water is higher than expected. Data should be in thousand pounds, for example, 3000 pounds should be entered as 3.		Corrected. I missed a decimal point
		8D		CC2	1		872 The value reported for Monthly Amount of Chlorine Added to Cooling Water is higher than expected. Data should be in thousand pounds, for example, 3000 pounds should be entered as 3.		Corrected
		8D		CC2	2		872 The value reported for Monthly Amount of Chlorine Added to Cooling Water is higher than expected. Data should be in thousand pounds, for example, 3000 pounds should be entered as 3.		Corrected
		8D		CC2	3		872 The value reported for Monthly Amount of Chlorine Added to Cooling Water is higher than expected. Data should be in thousand pounds, for example, 3000 pounds should be entered as 3.		Corrected
		8D					864 The code for "Other" was selected for the 'Measured or Estimated' Water Temperature. Specify the method in an override comment.		Data from USGS

Supplemental EIA923 Power Plant Operations Report

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NOTICE: This report is mandatory under the Federal Energy Administration Act of 1974 (Public Law 93-275). Failure to comply may result in criminal fines, civil penalties and other sanctions as provided by law. For further information concerning sanctions and data protections see the provision on sanctions and the provision concerning confidentiality of information in the instructions. **Title 18 USC 1001 makes it a criminal offense for any person knowingly and willingly to make to any Agency or Department of the United States any false, fictitious, or fraudulent statements as to any matter within its jurisdiction.**

SCHEDULE 1. IDENTIFICATION

Survey Contact

Contact: Joseph Leingang
Title: Director of Fuels
Address: 1717 E. Interstate Avenue
City/State/Zip: Bismarck ND 58503
Email: jleingang@becp.com
Phone: (701) 557-5648 Fax: (701) 557-5144
Submit Date: 06-JUN-16

Supervisor of Contact Person for Survey

Contact: Terry Retterath
Title: Industrial Engineer III
Address: 1717 E. Interstate Avenue
City/State/Zip: Bismarck ND 58503
Email: tlrat@becp.com
Phone: (701) 223-0441 Fax: (701) 557-5144

Report For

Company Name: Basin Electric Power Coop
Plant Name: Leland Olds
Plant ID: 2817 Plant County: Mercer
Plant Address: Hwy 200
Plant City: Stanton Plant State: ND
Regulated: Yes No
CHP: Yes No
CHP Efficiency: %

For contact detail go to <http://www.eia.doe.gov/oss/forms.html#eia-923>

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SCHEDULE 6. NONUTILITY ANNUAL SOURCE AND DISPOSITION OF ELECTRICITY

(Instructions for SCHEDULE 6 are on page 13)

SCHEDULE 6 collects calendar year data (no monthly detail).

Report all generation in **megawatthours (MWh)** rounded to a whole number.

- | | |
|--------------------------------|---|
| (1) Gross Generation (Annual) | (4) Station Use |
| (2) Other Incoming Electricity | (5) Direct Use |
| | (6) Total Facility Use (4 + 5) |
| | (7) Retail Sales to Ultimate Customers |
| | (8) Sales for Resale (MWh) |
| | (9) Provided Tolling Agreement (MWh) |
| | (10) Other Outgoing Electricity |
| (3) Total Sources (1 + 2) | (11) Total Disposition (6 + 7 + 8 + 9 + 10) |

Total Sources must equal Total Disposition (3 = 11)

Plants that cannot separate Station Use and Direct Use may enter zero in Station Use and the sum of Station Use and Direct Use in the Direct Use field.

Types of Other Incoming Electricity
List all of the types of incoming electricity included in (2)
Other Incoming Electricity

Types of Other Outgoing Electricity
List all of the types of outgoing electricity in item (10)
Other Outgoing Electricity

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SCHEDULE 7. PART A. ANNUAL REVENUES FROM SALES FOR RESALE

Complete Schedule 7, Part A, only if a positive value was entered on Schedule 6, Item (8): "Sales for Resale."

Sales for Resale are energy supplied to electric utilities, cooperatives, municipalities, federal and state electric agencies, power marketers, or other entities, for resale to end-use consumers.

Report in thousand dollars. For example \$1,987,234 should be entered as 1,987

Annual Revenues from Sales for Resale (in thousand dollars)

SCHEDULE 7. PART B. ANNUAL RETAIL SALES, REVENUES AND NUMBER OF CUSTOMERS FROM RETAIL SALES

Report by state and end-use customer sectors (Residential, Commercial, industrial and Transportation).

Complete an individual Schedule 7, Part B, for each state where customers are located, only if a positive value was entered on Schedule 6, Item (7), "Retail Sales to Ultimate Customers."

Annual Retail Sales, Revenue, and Number of Customers:

- Retail sales are sold directly to an end-use customer (i.e., the energy is consumed by the customer, onsite, and is not resold to other customers).
- Enter annual retail sales, revenue, and number of customers for each state where customer(s) are located.
- Report Annual Retail Sales in megawatthours (Mwh), by sector.
- Report Annual Revenue in thousand dollars, by sector.
- Report Number of Customers, by sector.

State					
Items	Residential	Commercial	Industrial	Transportation	Total
Retail Sales (Mwh)					
Revenue (\$ 000's)					
Number of Customers					

SCHEDULE 8. PART B. FINANCIAL INFORMATION RELATED TO COMBUSTION BY-PRODUCTS

Complete an individual Schedule 8, Part B, annually, for each organically fueled thermoelectric power plant with a total steam turbine capacity greater than, or equal to, 100 megawatts.

- Data reported in Schedule 8, Part B must correspond to the combustion by-product data reported on Schedule 8, Part A.
- If actual data are not available, provide an estimate value.
- Report all values in thousand dollars, to the nearest thousand.

Operation and Maintenance (O&M) Expenditures During Year (Thousand Dollars)

Type	(1) Fly Ash	(2) Bottom Ash	(3) Flue Gas Desulfurization	(4) Water Pollution Abatement	(5) Other Pollution Abatement	(6) Total (1 + 2 + 3 + 4 + 5)
Collection	1,588	1,244	1,352			4,184
Disposal						
Other						

Capital Expenditures for New Structures and Equipment During Year, Excluding Land and Interest Expense (Thousand Dollars)

Type	(7) Air Pollution Abatement	(8) Water Pollution Abatement	(9) Solid Contained Waste	(10) Other Pollution Abatement
Amount	20,488	0	6,909	0

Byproduct Sales Revenue During Year (Thousand Dollars)

Type	(11) Fly Ash	(12) Bottom Ash	(13) Fly and Bottom Ash Sold Intermingled	(14) Flue Gas Desulfurization	(15) Other Byproduct Revenue	(16) Total (11+12+13+14+15)
Amount	262	135	9			406

SCHEDULE 8. PART C. AIR EMISSIONS CONTROL INFORMATION

Complete an individual Schedule 8, Part C, annually for each thermoelectric or combined cycle power plant with a total steam turbine capacity greater than, or equal to, 10 megawatts. Report operational data for emission of sulfur dioxide (SO2), nitrogen oxides (NOx), particulates, mercury, and acid gases.

Environmental Equipment and/or Technology Type

Column A: Boiler, Fuel Gas Desulfurization (FDG), and Flue Gas Particulate (FGP) unit IDs must match the ID as reported on Form EIA-860, "Annual Electric Generator Report."

Column B: Technology Type: See the forms instructions document to obtain the technology type codes associated with each unit type.

Column E through Q: See the forms instructions documents for detailed guidance in completing the questionnaire items.

Annual Operations

Environmental Equipment and/or Technology Type					NOx Emission Rate (lbs/MMBtu)		Particulate Matter Control				Sulfur Dioxide Control				Mercury Control	Acid Gas Control			
Types	PM Control ID	SO2 CONTROL ID	NOX Control ID	Mercury Control	Status	Hours in Service	Entire Year	May through September	Emission Rate (0.01 lb/MMBtu)	Removal Efficiency Rate at AOF	Tested Efficiency Particulate Removal (at 100% Load)	Test Date (MM-YYYY)	Removal Efficiency Rate at AOF	Removal Efficiency (at 100% Load)	Test Date (MM-YYY)	Quantity of FGD Sorbent Used (nearest 0.1 thousand tons)	FGD Unit Electrical Energy Consumption	Removal Efficiency (nearest 0.1% by weight)	Removal Efficiency (nearest 0.1% by weight)
LN			1		OP	8535	237	231											
OV			1		OP	8535	237	231											
OV			2		OP	6942	367	325											
ACI				1	OP	5427													37.5
ACI				2	OP	3934													48.7
EK	1			1B	OP	8535			.01	70.5	99.8	12-1974							
EK	2			2B	OP	6942			.01	69.4	99.5	12-1976							
SP		1		1C	OP	8535							70.5	97.7	08-2013	34.8	38446		
SP		2		2C	OP	6942							69.4	98.7	01-2013	55.7	58967		

SCHEDULE 8. PART C. AIR EMISSIONS CONTROL INFORMATION

Annual Operations																				
Environmental Equipment and/or Technology Type							NOx Emission Rate (lbs/MMBtu)		Particulate Matter Control				Sulfur Dioxide Control				Mercury Control	Acid Gas Control		
Types	PM Control ID	SO2 CONTROL ID	NOX Control ID	Mercury Control	Status	Hours in Service	Entire Year	May through September	Emission Rate (0.01 lb/MMBtu)	Removal Efficiency Rate at AOF	Tested Efficiency Particulate Removal (at 100% Load)	Test Date (MM-YYYY)	Removal Efficiency at AOF	Removal Efficiency (at 100% Load)	Test Date (MM-YYY)	Quantity of FGD Sorbent Used (nearest 0.1 thousand tons)	FGD Unit Electrical Energy Consumption	Removal Efficiency (nearest 0.1% by weight)	Removal Efficiency (nearest 0.1% by weight)	
Flue Gas Desulfurization Unit ID		Feed Materials and Chemicals			FGD Operation and Maintenance Expenditures During Year, Excluding Electricity (Thousand Dollars)								Maintenance, Material and All Other Costs				Total			
					Land and Supervision				Waste Disposal											
1					\$306				\$166				\$62				\$181		\$715	
2					\$435				\$337				\$70				\$1,607		\$2,449	

SCHEDULE 8. PART D. COOLING SYSTEM INFORMATION, MONTHLY OPERATIONS

Complete an individual Schedule 8, Part D for each thermoelectric power plant (organically fueled, nuclear and combined cycle) with a total steam capacity greater than, or equal to, 100 megawatts.

- Complete a separate schedule for each reporting month.
- Complete a separate row for each cooling system.
- If actual data are not available, provided an estimated value.
- If the source of cooling water is a well or municipal water system, do not complete the Cooling Water Temperature sections.

Cooling System ID	Cooling System Type	Cooling System Status	Service Per month	Annual Amt of Chlorine in added to Cooling Water (1000 lbs)	Average Monthly Rate of Cooling Water (to nearest 0.1 gallons per minute)				Cooling Water Temperature (degrees Fahrenheit)					Volume Cooling Water (to nearest 0.001 million gallons per month)				
					Div	Withdrawal	Discharge	Consumption	Method of Measure	Avg at Intake	Max at Intake	Avg at Discharge	Max at Discharge	Method of Measure	Div	Withdrawal	Discharge	Consumption
Report Month 1																		
1	ON	OP	744	0		71649	71649	0	4	37	41	60	67	1		3198.418	3198.418	0
Report Month 2																		
1	ON	OP	672	0		71642	71642	0	4	38	40	62	66	1		2888.607	2888.607	0
Report Month 3																		
1	ON	OP	683	0		70148	70148	0	4	40	46	57	71	1		2876.038	2876.038	0
Report Month 4																		
1	ON	OP	720	0		71845	71845	0	4	40	46	63	73	1		3103.722	3103.722	0
Report Month 5																		
1	ON	OP	744	0		71872	71872	0	4	51	59	72	81	1		3208.35	3208.35	0
Report Month 6																		
1	ON	OP	720	0		71736	71736	0	4	55	60	84	93	1		3098.984	3098.964	0

SCHEDULE 8. PART D. COOLING SYSTEM INFORMATION, MONTHLY OPERATIONS

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- Complete a separate schedule for each reporting month.
- Complete a separate row for each cooling system.
- If actual data are not available, provided an estimated value.
- If the source of cooling water is a well or municipal water system, do not complete the Cooling Water Temperature sections.

Cooling System ID	Cooling System Type	Cooling System Status	Service Per month	Annual Amt of Chlorine in added to Water (1000 lbs)	Average Monthly Rate of Cooling Water (to nearest 0.1 gallons per minute)			Cooling Water Temperature (degrees Fahrenheit)					Volume Cooling Water (to nearest 0.001 million gallons per month)					
					Div	Withdrawal	Discharge	Consumption	Method of Measure	Avg at Intake	Max at Intake	Avg at Discharge	Max at Discharge	Method of Measure	Div	Withdrawal	Discharge	Consumption
Report Month 7																		
1	ON	OP	744	0		71670	71670	0	4	54	63	78	92	1		3199.341	3199.341	0
Report Month 8																		
1	ON	OP	744	0		71673	71673	0	4	61	70	83	94	1		3199.482	3199.482	0
Report Month 9																		
1	ON	OP	720	0		70871	70871	0	4	63	66	83	95	1		3061.643	3061.643	0
Report Month 10																		
1	ON	OP	744	0		71711	71711	0	4	60	64	77	92	1		3201.157	3201.157	0
Report Month 11																		
1	ON	OP	720	0		71690	71690	0	4	52	59	71	87	1		3101.328	3101.328	0
Report Month 12																		
1	ON	OP	744	0		71604	71604	0	4	47	55	63	77	1		3196.397	3196.397	0

SCHEDULE 8. PART D. COOLING SYSTEM INFORMATION, MONTHLY OPERATIONS

Complete an individual Schedule 8, Part D for each thermoelectric power plant (organically fueled, nuclear and combined cycle) with a total steam capacity greater than, or equal to, 100 megawatts.

- Complete a separate schedule for each reporting month.
- Complete a separate row for each cooling system.
- If actual data are not available, provided an estimated value.
- If the source of cooling water is a well or municipal water system, do not complete the Cooling Water Temperature sections.

Cooling System ID	Cooling System Type	Cooling System Status	Service Per month	Annual Amt of Chlorine in added to Water (1000 lbs)	Average Monthly Rate of Cooling Water (to nearest 0.1 gallons per minute)			Method of Measure	Cooling Water Temperature (degrees Fahrenheit)				Method of Measure	Volume Cooling Water (to nearest 0.001 million gallons per month)				
					Div	Withdrawal	Discharge		Consumption	Avg at Intake	Max at Intake	Avg at Discharge		Max at Discharge	Div	Withdrawal	Discharge	Consumption
Report Month 1																		
2	ON	OP	744	0		149298	149298	0	4	37	41	66	78	1		6664.675	6664.675	0
Report Month 2																		
2	ON	OP	672	0		149284	149284	0	4	38	40	68	75	1		6019.134	6019.134	0
Report Month 3																		
2	ON	OP	743	0		149355	149355	0	4	40	46	68	82	1		6658.268	6658.268	0
Report Month 4																		
2	ON	OP	720	0		149691	149691	0	4	40	46	46	83	1		6466.644	6466.644	0
Report Month 5																		
2	ON	OP	86	0		86925	86925	0	4	51	59	74	52	1		450.465	450.465	0
Report Month 6																		
2	ON	OP	720	0		122862	122862	0	4	55	60	90	95	1		5307.642	5307.642	0

SCHEDULE 8. PART D. COOLING SYSTEM INFORMATION, MONTHLY OPERATIONS

Complete an individual Schedule 8, Part D for each thermoelectric power plant (organically fueled, nuclear and combined cycle) with a total steam capacity greater than, or equal to, 100 megawatts.

- Complete a separate schedule for each reporting month.
- Complete a separate row for each cooling system.
- If actual data are not available, provided an estimated value.
- If the source of cooling water is a well or municipal water system, do not complete the Cooling Water Temperature sections.

Cooling System ID	Cooling System Type	Cooling System Status	Annual Amt of Hours Chlorine in added to Service Per Water monthe(1000 lbs)	Average Monthly Rate of Cooling Water (to nearest 0.1 gallons per minute)				Cooling Water Temperature (degrees Fahrenheit)					Volume Cooling Water (to nearest 0.001 million gallons per month)			
				Div	Withdrawal	Discharge	Consumption	Method of Measure	Avg at Intake	Max at Intake	Avg at Discharg	Max at Discharg	Method of Measure	Div	Withdrawal	Discharge
Report Month 7																
2	ON	OP	744	0	149034	149034	0	4	54	63	78	93	1	6652.873	6652.873	0
Report Month 8																
2	ON	OP	744	0	125176	125176	0	4	61	70	90	104	1	5587.854	5587.854	0
Report Month 9																
2	ON	OP	720	0	146862	146862	0	4	63	66	87	102	1	6344.438	6344.438	0
Report Month 10																
2	ON	OP	744	0	129883	129883	0	4	60	64	85	99	1	5797.979	5797.979	0
Report Month 11																
2	ON	OP	720	0	149381	149381	0	4	52	59	76	91	1	6462.216	6462.216	0
Report Month 12																
2	ON	OP	744	0	148999	148999	0	4	47	55	69	88	1	6651.298	6651.298	0

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Energy Information Administration
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SCHEDULE 9. COMMENTS
(Instructions for SCHEDULE 9. are on page 20.)

Schedule Part Item

Comments

Generator Id **Retirement Month** **Retirement Year** **Generator Retirement Dates**
Comments
Changes in Ownership (Provide name of purchaser and date sold.)

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ERRORS

Purchase Type	Fuel	Schedule	Prime Mover	Equipment ID	Rpt Month	Supplier	Error Number & Description	Ranges	Override Comment
		8A					805 Revenue for FGD by-products (Part 14) was reported on Schedule 8B, but the quantity of FGD by-products sold has not been reported on Schedule 8A. Please enter the required data for Schedule 8A or provide an explanation		Corrected
		8B					835 Sales of fly and bottom ash (Line 1, 2, 3, 4, and 5) were reported on Schedule 8, Part A. Please enter the revenue (Part 13) in units of thousand dollars from those sales on Schedule 8B, if applicable. If the fly and bottom ash sold were not sold intermingled, please comment.		Corrected
		8C		2:SP			851 The Removal Efficiency at 100% or tested load for sulfur dioxide is outside the expected range. Expected range is within 50%-99%. If correct, enter a comment to explain data out of typical range.		It's a pretty new scrubber. I've verified the number
		8D		2	5		878 Reported average monthly temperature at discharge is greater than reported maximum monthly temperature at discharge. Please review the data and correct.		Corrected
		8D		2	5		1803 Average temperature at intake point should not be greater than the average temperature at discharge point. Please review reported data.		Corrected a transposition error

EXHIBIT 2

Summer/Winter Loads

Basin Electric Member Loads by State

Note: Historical 1995-2015 and Forecasted 2016-2025

SUMMER Peak Demand (MW)

	ND	%	SD	%	MN	%	IA	%	NE	%	MT	%	CO	%	WY	%	BEPC TOTAL
1995	223.9	22.3%	235.9	23.5%	38.9	3.9%	71.6	7.1%	186.2	18.5%	21.2	2.1%	77.9	7.8%	148.9	14.8%	1004.5
1996	222.1	22.6%	220.2	22.4%	38.4	3.9%	67.0	6.8%	170.2	17.3%	27.8	2.8%	78.2	7.9%	160.7	16.3%	984.7
1997	244.0	22.6%	239.0	22.2%	41.3	3.8%	77.6	7.2%	195.5	18.1%	26.8	2.5%	82.3	7.6%	171.6	15.9%	1078.1
1998	248.7	21.8%	273.0	24.0%	47.1	4.1%	83.2	7.3%	211.3	18.6%	28.1	2.5%	84.3	7.4%	162.8	14.3%	1138.4
1999	267.9	22.4%	288.5	24.2%	52.5	4.4%	102.2	8.6%	197.4	16.5%	28.3	2.4%	83.9	7.0%	173.8	14.6%	1194.5
2000	292.6	23.0%	301.7	23.7%	53.9	4.2%	98.7	7.8%	214.9	16.9%	28.9	2.3%	82.4	6.5%	199.9	15.7%	1273.0
2001	306.5	22.2%	342.5	24.8%	58.0	4.2%	116.0	8.4%	227.3	16.5%	30.3	2.2%	81.9	5.9%	217.9	15.8%	1380.4
2002	315.3	21.3%	351.9	23.8%	57.7	3.9%	127.1	8.6%	253.5	17.1%	43.9	3.0%	94.6	6.4%	235.5	15.9%	1479.6
2003	353.0	22.9%	345.5	22.4%	57.8	3.8%	121.4	7.9%	239.1	15.5%	55.9	3.6%	114.0	7.4%	253.9	16.5%	1540.6
2004	328.8	21.2%	353.9	22.8%	55.4	3.6%	119.0	7.7%	233.4	15.0%	61.8	4.0%	130.1	8.4%	271.3	17.5%	1553.6
2005	356.6	20.7%	400.1	23.2%	62.0	3.6%	131.1	7.6%	269.7	15.7%	74.2	4.3%	131.6	7.6%	296.4	17.2%	1721.6
2006	400.0	20.5%	440.4	22.6%	71.4	3.7%	187.9	9.7%	272.9	14.0%	82.0	4.2%	134.3	6.9%	358.0	18.4%	1946.9
2007	451.9	21.9%	460.8	22.3%	91.6	4.4%	186.1	9.0%	261.6	12.7%	86.4	4.2%	135.2	6.6%	388.9	18.9%	2062.5
2008	464.6	22.5%	420.7	20.4%	87.5	4.2%	177.0	8.6%	270.1	13.1%	73.8	3.6%	142.2	6.9%	426.4	20.7%	2062.3
2009	448.3	21.4%	437.5	20.9%	101.6	4.9%	201.0	9.6%	231.5	11.1%	64.8	3.1%	145.4	7.0%	400.1	19.1%	2090.1
2010	509.1	20.5%	472.3	19.0%	181.0	7.3%	459.1	18.5%	237.9	9.6%	69.6	2.8%	145.4	5.9%	407.1	16.4%	2481.5
2011	543.4	20.8%	548.4	21.0%	169.2	6.5%	460.4	17.7%	280.3	10.8%	69.3	2.7%	139.6	5.4%	396.3	15.2%	2606.9
2012	693.0	23.1%	595.9	19.9%	206.5	6.9%	476.1	15.9%	333.4	11.1%	104.4	3.5%	207.8	6.9%	377.2	12.6%	2994.2
2013	812.2	26.5%	571.6	18.7%	223.5	7.3%	459.6	15.0%	298.9	9.8%	147.0	4.8%	179.7	5.9%	370.0	12.1%	3062.6
2014	873.7	28.8%	527.4	17.4%	163.5	5.4%	427.0	14.1%	308.8	10.2%	176.9	5.8%	185.9	6.1%	362.6	12.0%	3029.3
2015	1106.3	32.3%	575.3	16.8%	169.5	5.0%	443.2	13.0%	262.4	7.7%	224.9	6.6%	183.7	5.4%	340.8	10.0%	3420.7
2016	1112.1	31.8%	578.7	16.5%	223.0	6.4%	474.5	13.6%	318.4	9.1%	225.3	6.4%	187.8	5.4%	324.4	9.3%	3498.8
2017	1197.0	33.0%	597.7	16.5%	246.5	6.8%	473.9	13.1%	320.8	8.9%	229.1	6.3%	187.8	5.2%	312.2	8.6%	3623.1
2018	1235.4	32.8%	621.8	16.5%	259.4	6.9%	479.4	12.7%	324.3	8.6%	233.7	6.2%	187.8	5.0%	367.4	9.7%	3770.6
2019	1273.5	33.2%	635.3	16.6%	268.5	7.0%	484.5	12.6%	327.2	8.5%	237.5	6.2%	187.8	4.9%	359.5	9.4%	3836.9
2020	1307.7	33.8%	644.8	16.6%	273.2	7.1%	488.1	12.6%	330.7	8.5%	240.0	6.2%	187.8	4.8%	338.6	8.7%	3874.2
2021	1332.8	34.0%	656.8	16.7%	280.7	7.2%	492.2	12.5%	334.4	8.5%	243.3	6.2%	187.8	4.8%	331.2	8.4%	3923.7
2022	1356.2	34.1%	671.0	16.9%	289.3	7.3%	496.5	12.5%	338.3	8.5%	246.8	6.2%	187.8	4.7%	326.1	8.2%	3977.2
2023	1378.2	34.2%	685.5	17.0%	298.4	7.4%	501.0	12.4%	342.3	8.5%	249.9	6.2%	187.8	4.7%	318.8	7.9%	4027.2
2024	1399.3	34.3%	700.4	17.2%	307.7	7.5%	505.6	12.4%	345.0	8.5%	253.1	6.2%	187.8	4.6%	315.0	7.7%	4079.5
2025	1420.5	34.4%	715.8	17.3%	319.0	7.7%	512.0	12.4%	347.1	8.4%	256.1	6.2%	187.8	4.5%	308.9	7.5%	4133.1

WINTER Peak Demand (MW)

	ND	%	SD	%	MN	%	IA	%	NE	%	MT	%	CO	%	WY	%	BEPC TOTAL
95/96	325.8	29.4%	309.0	27.9%	51.2	4.6%	88.9	8.0%	33.3	3.0%	31.6	2.9%	77.4	7.0%	189.9	17.2%	1107.0
96/97	334.5	29.3%	302.7	26.6%	47.9	4.2%	98.5	8.6%	35.7	3.1%	30.2	2.6%	79.8	7.0%	210.7	18.5%	1140.0
97/98	324.0	30.5%	263.3	24.8%	42.2	4.0%	77.5	7.3%	35.8	3.4%	29.3	2.8%	83.5	7.9%	207.9	19.6%	1063.4
98/99	331.3	29.2%	291.8	25.8%	47.8	4.2%	109.2	9.6%	37.0	3.3%	30.4	2.7%	84.3	7.4%	201.2	17.8%	1133.1
99/00	312.3	28.8%	269.3	24.8%	47.9	4.4%	102.3	9.4%	31.0	2.9%	28.0	2.6%	83.9	7.7%	209.0	19.3%	1083.8
00/01	342.1	27.4%	328.0	26.2%	57.4	4.6%	124.6	10.0%	42.5	3.4%	33.6	2.7%	83.2	6.7%	238.7	19.1%	1250.0
01/02	312.5	26.2%	300.4	25.2%	47.1	3.9%	108.4	9.1%	37.4	3.1%	34.9	2.9%	82.4	6.9%	270.3	22.6%	1193.4
02/03	376.7	27.7%	342.3	25.1%	54.0	4.0%	127.8	9.4%	35.7	2.6%	55.0	4.0%	103.1	7.6%	267.5	19.6%	1362.2
03/04	416.9	27.5%	393.8	25.9%	59.7	3.9%	134.2	8.8%	35.6	2.3%	62.4	4.1%	122.5	8.1%	293.2	19.3%	1518.4
04/05	437.9	27.4%	416.6	26.1%	62.7	3.9%	138.7	8.7%	43.5	2.7%	64.0	4.0%	121.2	7.6%	314.4	19.7%	1598.9
05/06	462.6	26.8%	414.7	24.0%	65.8	3.8%	186.6	10.8%	48.4	2.8%	72.2	4.2%	120.8	7.0%	353.4	20.5%	1724.6
06/07	494.6	25.4%	484.4	24.9%	111.0	5.7%	211.5	10.9%	50.0	2.6%	70.6	3.6%	121.8	6.3%	402.6	20.7%	1946.4
07/08	562.7	26.3%	524.3	24.5%	113.3	5.3%	231.7	10.8%	50.0	2.3%	80.7	3.8%	123.5	5.8%	454.0	21.2%	2140.2
08/09	622.7	25.7%	633.9	26.2%	133.3	5.5%	276.1	11.4%	56.5	2.3%	78.3	3.2%	137.8	5.7%	481.0	19.9%	2419.5
09/10	627.3	23.5%	618.6	23.2%	169.0	6.3%	517.7	19.4%	58.8	2.2%	73.6	2.8%	137.2	5.1%	468.4	17.5%	2670.6
10/11	678.7	25.2%	621.6	23.0%	197.7	7.3%	468.3	17.4%	54.5	2.0%	55.5	2.1%	144.9	5.4%	476.7	17.7%	2697.7
11/12	834.7	29.5%	599.9	21.2%	180.5	6.4%	442.5	15.6%	49.3	1.7%	91.5	3.2%	179.9	6.4%	449.7	15.9%	2828.1
12/13	972.6	32.3%	626.7	20.8%	193.8	6.4%	457.0	15.2%	52.4	1.7%	100.6	3.3%	182.8	6.1%	428.3	14.2%	3014.2
13/14	1090.9	30.7%	688.1	19.3%	220.0	6.2%	505.8	14.2%	59.5	1.7%	169.1	4.8%	184.5	5.2%	422.3	11.9%	3558.9
14/15	1329.9	36.4%	700.2	19.2%	232.1	6.4%	496.0	13.6%	56.6	1.6%	219.8	6.0%	183.7	5.0%	433.0	11.9%	3651.3
15/16	1301.3	36.2%	694.7	19.3%	252.4	7.0%	510.4	14.2%	60.5	1.7%	225.9	6.3%	182.8	5.1%	365.8	10.2%	3593.8
16/17	1420.5	37.0%	711.5	18.5%	263.0	6.8%	511.5	13.3%	61.6	1.6%	230.2	6.0%	182.8	4.8%	351.7	9.2%	3839.5
17/18	1468.7	36.5%	742.0	18.4%	290.9	7.2%	518.2	12.9%	62.0	1.5%	235.2	5.8%	182.8	4.5%	415.0	10.3%	4027.0
18/19	1514.8	36.8%	757.9	18.4%	299.9	7.3%	524.6	12.7%	62.9	1.5%	239.2	5.8%	182.8	4.4%	406.5	9.9%	4121.0
19/20	1550.5	36.9%	768.3	18.3%	303.9	7.2%	528.8	12.6%	63.2	1.5%	241.5	5.7%	182.8	4.3%	383.8	9.1%	4203.8
20/21	1586.6	37.4%	781.9	18.4%	311.1	7.3%	533.9	12.6%	63.4	1.5%	244.9	5.8%	182.8	4.3%	375.2	8.8%	4245.2
21/22	1614.9	37.5%	798.1	18.5%	319.8	7.4%	539.1	12.5%	64.1	1.5%	248.4	5.8%	182.8	4.2%	369.7	8.6%	4304.3
22/23	1641.0	37.6%	814.6	18.7%	328.9	7.5%	544.7	12.5%	65.0	1.5%	251.5	5.8%	182.8	4.2%	361.6	8.3%	4367.8
23/24	1666.4	37.7%	831.7	18.8%	338.3	7.6%	550.4	12.4%	66.1	1.5%	254.6	5.8%	182.8	4.1%	357.5	8.1%	4425.9
24/25	1912.4	42.6%	819.6	18.3%	334.7	7.5%	547.7	12.2%	66.6	1.5%	255.5	5.7%	187.8	4.2%	363.4	8.1%	4487.7

EXHIBIT 3

Eastern System Summer/Winter Load Resources

SUMMER SEASON

	<u>Members' Load Projections</u>	<u>Contracted Sales to Others</u>	<u>Losses, Diversity, and Reserves</u>	<u>Total Responsibility</u>
2016	2,620	136	380	3,135
2017	2,732	147	388	3,267
2018	2,800	147	402	3,349
2019	2,864	154	414	3,432
2020	2,917	154	419	3,490
2021	2,965	164	427	3,556
2022	3,013	164	430	3,607
2023	3,060	164	437	3,661
2024	3,106	164	444	3,714
2025	3,154	164	451	3,770

WINTER SEASON

	<u>Members' Load Projections</u>	<u>Contracted Sales to Others</u>	<u>Losses, Diversity, and Reserves</u>	<u>Total Responsibility</u>
2016/17	2,830	136	428	3,394
2017/18	2,926	147	400	3,473
2018/19	3,014	147	413	3,574
2019/20	3,094	154	425	3,673
2020/21	3,153	154	428	3,735
2021/22	3,211	164	438	3,812
2022/23	3,268	164	440	3,872
2023/24	3,323	164	447	3,935
2024/25	3,378	164	455	3,997
2025/26	3,437	164	463	4,064

2016 East Resources

Summer Season		LRS	AVS	NEAL 4	WS	Wisdom 1	DAEC	SMS	Groton	Culbertson	Deer Creek	Pioneer	Lonesome Creek	Wisdom 2	Madison	City	Webster	Estherville	Pocahontas	Spencer	Wind	Heat	Purchases
Year	LOS																						
2016	667	48	900	104	71	36	60	99	153	91	290	120	120	71	10	20.7	13	0	0	10	112.3	35.1	550
2017	667	48	900	104	71	36	60	99	153	91	290	232	200	71	10	20.7	13	0	0	10	190.6	35.1	600
2018	667	48	900	104	71	36	60	99	153	91	290	232	200	71	10	20.7	13	0	0	10	190.6	35.1	750
2019	667	48	900	104	71	36	60	99	153	91	290	232	200	71	10	20.7	13	0	0	10	190.6	35.1	626
2020	667	48	900	104	71	36	60	99	153	91	290	232	200	71	10	20.7	13	0	0	10	190.6	35.1	476
2021	667	48	900	104	71	36	60	99	153	91	290	232	200	71	10	20.7	13	0	0	10	190.6	35.1	475
2022	667	48	900	104	71	36	60	99	153	91	290	232	200	71	10	20.7	13	0	0	10	190.6	35.1	325
2023	667	48	900	104	71	36	60	99	153	91	290	232	200	71	10	20.7	13	0	0	10	190.6	35.1	150
2024	667	48	900	104	71	36	60	99	153	91	290	232	200	71	10	20.7	13	0	0	10	190.6	35.1	0
2025	667	48	900	104	71	36	60	99	153	91	290	232	200	71	10	20.7	13	0	0	10	190.6	35.1	0

Winter Season		LRS	AVS	NEAL 4	WS	Wisdom 1	DAEC	SMS	Groton	Culbertson	Deer Creek	Pioneer	Lonesome Creek	Wisdom 2	Madison	City	Webster	Estherville	Pocahontas	Spencer	Wind	Heat	Purchases
Year	LOS																						
2016/17	667	48	900	104	72	37	62	119	196	96	300	247	225	75	10	25	13	0	0	10	488.7	39.5	350
2017/18	667	48	900	104	72	37	62	119	196	96	300	247	225	75	10	25	13	0	0	10	488.7	39.5	650
2018/19	667	48	900	104	72	37	62	119	196	96	300	247	225	75	10	25	13	0	0	10	488.7	39.5	551
2019/20	667	48	900	104	72	37	62	119	196	96	300	247	225	75	10	25	13	0	0	10	488.7	39.5	626
2020/21	667	48	900	104	72	37	62	119	196	96	300	247	225	75	10	25	13	0	0	10	488.7	39.5	476
2021/22	667	48	900	104	72	37	62	119	196	96	300	247	225	75	10	25	13	0	0	10	488.7	39.5	475
2022/23	667	48	900	104	72	37	62	119	196	96	300	247	225	75	10	25	13	0	0	10	488.7	39.5	325
2023/24	667	48	900	104	72	37	62	119	196	96	300	247	225	75	10	25	13	0	0	10	488.7	39.5	0
2024/25	667	48	900	104	72	37	62	119	196	96	300	247	225	75	10	25	13	0	0	10	488.7	39.5	0
2025/26	667	48	900	104	72	37	62	119	196	96	300	247	225	75	10	25	13	0	0	10	488.7	39.5	0