



Before the Public Service Commission of
The State of North Dakota

In the Matter of the Application of
BASIN ELECTRIC POWER COOPERATIVE
For a Waiver of Procedures and Time Schedules
and a Consolidated Certificate of Corridor Compatibility
and Route Permit for the
North Killdeer Loop Phase I 345-kV Transmission Project

Case No. PU-14-813

Pre-filed Testimony
of
Amanda Wangler

23 **PU-14-813** Filed: 3/17/2015 Pages: 10
Exhibit 1

Basin Electric Power Cooperative

- 1 Q. **Ms. Wangler, please give us your name, business address and your**
2 **occupation?**
3
- 4 A. My name is Amanda Wangler. I am employed as a Project Manager for Basin
5 Electric Power Cooperative, 1717 East Interstate Avenue, Bismarck, North Dakota.
6
- 7 Q. **Please state your educational background.**
8
- 9 A. I received a bachelor's degree in Electrical Engineering from North Dakota State
10 University in 2003 and a Master of Business Administration from the University of
11 Mary in 2011.
12
- 13 Q. **What is your employment history and work experience with Basin Electric?**
14
- 15 A. I have been employed with Basin Electric for 10 years.
16
- 17 Q. **What have been your responsibilities in connection with the North Killdeer**
18 **Loop 345 kV Phase I Transmission Project?**
19
- 20 A. I am the Project Manager. As Project Manager, I am responsible for coordination of
21 all aspects of the Project including: budgeting, scheduling, routing, right-of-way
22 acquisition, engineering, permitting and construction.
23
- 24 Q. **Ms. Wangler, before we discuss the proposed Project, would you please**
25 **describe Basin Electric?**
26
- 27 A. Basin Electric is a regional wholesale electric generation and transmission
28 cooperative organized under the laws of the State of North Dakota, and
29 headquartered in Bismarck, North Dakota. Basin Electric provides power to 137
30 member cooperatives serving more than 2.8 million consumers.
31
- 32 Q. **What areas do Basin Electric members serve?**
33

1 A. Basin Electric has members in nine states; North Dakota, South Dakota, Nebraska,
2 Montana, Minnesota, Iowa, Colorado, Wyoming and New Mexico. Their service
3 territory comprises 540,000 square miles. Basin Electric has two Class A members
4 that serve Western ND and Eastern MT. Those cooperatives are Central Power
5 Electric Cooperative, headquartered in Minot, ND and Upper Missouri G&T,
6 headquartered in Sidney, MT.

7

8 Q. **Who controls Basin Electric?**

9

10 A. Basin Electric and its member systems are owned by the members at the end of the
11 line. Each of our Class A members has one seat on our eleven member Board of
12 Directors.

13

14 Q. **What are the business principles on which Basin Electric operates?**

15

16 A. Like most cooperatives, Basin Electric operates on a basis of setting rates equal to
17 our cost of service, plus a margin. When deemed appropriate by the Board of
18 Directors, that margin is returned to the members.

19

20 Q. **Please provide a general description of the proposed North Killdeer Loop
21 345 kV Phase I Transmission Project.**

22

23 A. The proposed Project consists of approximately twenty-eight miles of 345 kV electric
24 transmission line connecting two new substations: Patent Gate and Kummer Ridge.
25 Additionally, approximately one mile of that twenty-eight mile total will be double
26 circuited on existing AVS-Neset right-of-way.

27

28 Q. **Can you please describe the general location of the proposed Project?**

29

30 A. The proposed Project commences at the Patent Gate Substation, northeast of
31 Alexander and extends approximately 28 miles east to the Kummer Ridge Substation,
32 located east of Watford City.

33

1 Q. **Why has the North Killdeer Loop Project been segmented into Phase I and**
2 **Phase II?**

3

4 A. Initially, we had planned on permitting and constructing both segments at the same
5 time; however, we had greater difficulties routing the segment from Kummer Ridge to
6 Patent Gate, so we made the decision to separate the segments from a permitting
7 perspective. We plan to submit an Application to the PSC later this year for Phase II.
8 Both segments need to be in service by October 2016.

9

10 Q. **Would you please tell the Commission about the various people or groups of**
11 **people that are assisting with the Project?**

12

13 A. Basin Electric has assigned team leads in engineering, environmental/permitting,
14 right-of-way, legal, procurement, communications and construction management. In
15 addition, we have used environmental, right-of-way and engineering consultants for
16 the Project.

17

18 Q. **Will the Project be owned by Basin Electric?**

19

20 A. Yes.

21

22 Q. **Did Basin Electric file structure locations for the proposed Project?**

23

24 A. Yes. Those were filed with the PSC on March 6, 2015.

25

26 Q. **Can you please discuss the significance of this filing?**

27

28 A. This document details the exact placement of each of the structures for the entire
29 Project. If there are any deviations at all to these structure placements, Basin Electric
30 must seek Commission approval.

31

32 Q. **Can you describe the schedule for the Project?**

33

1 A. Basin Electric is planning to start construction on Phase 1 of the North Killdeer Loop
2 in May 2015 and complete the work by October 31, 2016.

3

4 Q. **What is the estimated cost of the Project?**

5

6 A. The total cost of the Project is estimated to be about \$104.5 million.

7

8 Q. **Would you describe the construction procedures and work force required for
9 the construction of the proposed Project?**

10

11 A. The construction is done in a sequential manner, consisting of a series of small crews
12 spread out over the length of the line. As one crew completes work in an area, the
13 next crew enters, and proceeds with the next construction activity.

14

15 The construction activities for installation of the transmission line include:

- 16 ➤ Structure staking
- 17 ➤ Gate installation
- 18 ➤ Foundation installation
- 19 ➤ Structure hauling
- 20 ➤ Structure framing
- 21 ➤ Structure erection
- 22 ➤ Conductor installation by helicopter
- 23 ➤ Conductor clipping
- 24 ➤ Reclamation

25

26 The various crews will include approximately a total of 40 - 50 workers. The actual
27 manpower needs vary from project to project, depending on time constraints,
28 contractor procedures, terrain, seasonal conditions and other factors.

29

30 After construction is complete Basin Electric will complete a final inspection of the
31 right-of-way, identifying items which require corrective action. When corrections have
32 been verified, the contractor will be released from further responsibility.

33

1 Basin Electric's Right-of-Way Division will oversee the reclamation work as needed. A
2 contractor specializing in right-of-way reclamation will break-up compacted areas, fill-
3 in ruts, and seed grasses in order to return the area to the original condition.

4
5 **Q. Who will be performing the construction?**

6
7 A. Construction will be performed by qualified, licensed contractors. Basin Electric will
8 oversee construction at all times.

9
10 **Q. What housing provisions are required for this type of work force?**

11
12 A. Most workers usually stay in commercial accommodations near their work location. A
13 few workers may bring travel trailers and place them in trailer parks in towns along
14 the route, where these facilities are available.

15
16 **Q. You mentioned that the installation of gates is a part of the construction
17 process, where are these installed?**

18
19 A. When crossing existing fence lines, Basin Electric will install barb wire gap gates with
20 a 16 foot opening. If required by property owner or tenants, gates will be locked.
21 Basin Electric consults landowners to determine the most appropriate place for the
22 needed gates.

23
24 **Q. How is the clearing of trees on the right-of-way carried out?**

25
26 A. Stumps will be finished off with a level cut at an elevation not more than three inches
27 above the ground line. If requested by the landowner, trees will be cut to lengths and
28 delivered to the landowner for his or her use. Material not wanted by the landowner
29 will be disposed of at an approved disposal area.

30
31 **Q. What is done with the spoil from any excavation which is required during
32 construction?**

33

- 1 A. Unused spoils from all excavations will be spread at the structure site if approved by
2 the landowner; otherwise, it will be removed from the right-of-way.
3
- 4 Q. **What steps has Basin Electric taken or will take in order to be prepared for an
5 emergency situation that may arise, either during or after construction?**
6
- 7 A. The line route is submitted to local emergency agencies prior to any construction
8 activity taking place. Thus, the responder will have GPS coordinates to facilitate
9 prompt navigation to the site.
10
- 11 Q. **What efforts has Basin Electric undertaken or will undertake to ensure the
12 workforce constructing the Project are safe?**
13
- 14 A. Basin Electric has a safety program for all contractors that work for the Cooperative.
15 The program states requirements for contractors and the contractor's employees.
16 All potential contractors will be evaluated against the safety program and only
17 contractors that meet the requirements will be allowed to bid on the proposed Project.
18
- 19 Q. **I would now like to ask you a series of questions relating to the North Dakota
20 Public Service Commission's Transmission Facility Corridor and Route Policy
21 Criteria. What is Basin Electric's policy with respect to maximizing potential
22 benefits through location and design of its facilities?**
23
- 24 A. Basin Electric performs comprehensive transmission studies to identify facilities that
25 are needed to ensure a reliable transmission system. The location and voltage of
26 these facilities is determined by transmission planning experts to maximize the
27 benefits of these lines.
28
- 29 Q. **What is Basin Electric's policy concerning the training and use of available
30 labor in North Dakota for the general and specialized skills required?**
31
- 32 A. Basin Electric has a long standing policy of recruiting and training workers from North
33 Dakota. We have developed a partnership with Bismarck State College to provide

1 the coursework for our apprenticeship programs in both our Transmission System
2 Maintenance Division and power plant maintenance areas.

3
4 We also work with the University of North Dakota, North Dakota State University,
5 University of Mary, Bismarck State College and North Dakota State College of
6 Science to fill internships and full time vocational/technical and professional positions.

7
8 It is Basin Electric's practice to hire qualified North Dakota workers. Basin Electric
9 includes qualified North Dakota companies on its bidders lists for materials and
10 construction work. The actual labor force used on our construction projects is hired
11 by the contractors. The construction personnel are highly trained in this very
12 specialized area of construction; however, certain portions of the construction
13 sequence do not require specialized training. We anticipate that for these tasks, the
14 contractor will likely employ local people.

15
16 **Q. What efforts has Basin Electric made to economize the costs of construction
17 and operation of this Project?**

18
19 **A.** Basin Electric has an obligation to its member cooperatives to construct facilities at
20 the least cost while maintaining reliability and safety. All materials and services are
21 competitively bid by qualified suppliers. Basin Electric will combine purchases with
22 other projects to take advantage of volume pricing. Basin Electric maintains its own
23 facilities, minimizing the cost of contracted services.

24
25 **Q. Has Basin Electric involved local government entities and citizens in the
26 planning process?**

27
28 **A.** Basin Electric initiates and maintains close contact with all pertinent federal, state,
29 and local agencies prior to construction of a facility. For this Project, we have met
30 with county commissions, zoning boards, and city organizations. We involve the
31 public by conducting public scoping meetings, mailing information, and visiting
32 landowners.

33

1 Q. **Would you please tell the Commission what type of commitment Basin Electric**
2 **has to North Dakota consumers regarding their electric power supply?**

3

4 A. Basin Electric is contractually committed to meet all of the additional power
5 requirements, above their allocation from Western Area Power Administration, for the
6 North Dakota rural electric cooperatives that are our members.

7

8 Q. **What is Basin Electric's policy regarding labor relations?**

9

10 A. Basin Electric management has always maintained an equitable, fair, and
11 harmonious relationship with labor. Basin Electric uses both union and non-union
12 contractors.

13

14 Q. **What is Basin Electric's policy and what efforts has the Cooperative made in**
15 **the coordination of facilities?**

16

17 A. Basin Electric works closely with Western Area Power Administration, Montana
18 Dakota Utilities, other utility companies and our member systems to share facilities
19 and avoid duplication. For the past year, Basin Electric has initiated conference calls
20 every two weeks with our member cooperatives serving the Bakken to ensure that we
21 are coordinating the planning of transmission and generation facilities.

22

23 Q. **What is Basin Electric's position on the monitoring of environmental impacts?**

24

25 A. Basin Electric's policy is that environmental impacts should be monitored and steps
26 taken to mitigate and alleviate those impacts which have adverse effects. The
27 Environmental Impact Statement discusses expected impacts and mitigation
28 measures proposed for the Project. Basin Electric is committed to following all
29 mitigation measures.

30

31 Q. **What is the policy of Basin Electric regarding the use of existing and proposed**
32 **rights-of-way and other existing or proposed transmission facilities?**

33

1 A. Basin Electric strives to avoid duplication in transmission facilities. We have
2 agreements with Montana-Dakota Utilities and Western Area Power Administration
3 which enable us to use facilities jointly. These agreements have resulted in economic
4 savings to consumers and the avoidance of unnecessary duplication of transmission
5 lines and substations. There are reliability concerns in some instances when double
6 circuiting occurs, but it is always evaluated if proposed by a landowner or an agency
7 as there are benefits to doing so.

8
9 **Q. Ms. Wangler, based on your knowledge of the North Killdeer Loop**
10 **Transmission Line Project do you believe the location, construction and**
11 **operation of the proposed facilities produce minimal adverse effects on the**
12 **environment and upon the welfare of the citizens of North Dakota?**

13
14 A. Yes.

15
16 **Q. Will the proposed facility locations minimize adverse human and environmental**
17 **impact while ensuring continuing system reliability and integrity and ensuring**
18 **that energy needs are met and fulfilled in an orderly and timely fashion?**

19
20 A. Yes.

21
22 **Q. Is it appropriate for the Commission to waive Procedures and Time Schedules**
23 **as requested, including the request for a single consolidated Application and**
24 **hearing for a Corridor Certificate and Route Permit?**

25
26 A. Yes. Due to the need for the proposed facilities, Basin Electric believes the reduction
27 of time achieved by the processing of a consolidated Application and hearing is
28 appropriate. Further, Basin Electric has purchased approximately 80% of the
29 easements needed for the proposed Project from impacted landowners, so it makes
30 sense to have a consolidated corridor and route Application and hearing.

31
32 **Q. Does this complete your testimony?**

33
34 A. Yes.