

Badlands Conservation Alliance
Field Office
801 North 10 Street
Bismarck, ND 58501
701-255-4958 badlandsconservationalliance.org

RE: Testimony of the Badlands Conservation Alliance before the ND Public Service Commission regarding Case No. PU-11-696, Basin Electric Power Cooperative – 345kV transmission Line-Mercer, Dunn, McKenzie, Williams
Siting Application

Basin Electric requests the Commission waive procedures and time schedules set forth in North Dakota Century Code chapter 49-22 and North Dakota Administrative Code article 69-06 to allow for a single consolidated application for corridor certificate and route permit and to hold a combined hearing on the waiver request and the applications for corridor certificate and route permits.

September 4, 2013 at 10:30 AM CT
Killdeer City Hall, Killdeer, ND

Chairman Kalk, Commissioners Fedorchak and Christmann:

Badlands Conservation Alliance is here this morning to oppose the waiver request and to oppose a route permit for Basin Electric's proposed transmission line.

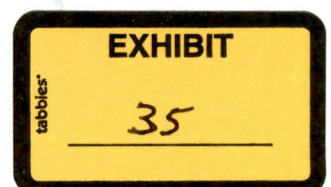
We oppose the waiver on the grounds that significant routing issues exist in this application. Additionally, Basin Electric is seeking funding from the USDA Rural Utilities Service and a range of reasonable alternatives as required by law under the National Environmental Policy Act process has been weakly applied and largely ignored. The ND PSC should refrain from further action until such attention to NEPA has been rectified. This proposed power line will have anything but minimal adverse impacts.

We oppose the certificate of corridor compatibility and route permit on the grounds that they will NOT produce minimal adverse effects on the environment and upon the welfare of the citizens of North Dakota, but rather diminish those qualities. This project largely reflects the ongoing exploitation of rural communities by industry, well outside the intent and spirit of a rural cooperative.

I am staff for the Badlands Conservation Alliance. I am also a native North Dakotan, 60 years of age. I have no doubt that every mile along this proposed power line is special to someone, if not to many. I know mine is to me, as is theirs to each neighbor.

However, there are sites that do qualify statewide and nationally as special places. In keeping with the mission statement of the Badlands Conservation Alliance, I will stick to public places, including Theodore Roosevelt National Park, the federally owned and managed US Forest Service roadless areas to the immediate south and east of Theodore Roosevelt National Park and public interests in the Killdeer Mountains, all areas on the newly released list that the ND Industrial Commission is reviewing as special places on the western ND landscape.

62 **PU-11-696** Filed: 10/14/2013 Pages: 16
Exhibit 35 of September 4, 5, and 12, 2013 formal hearing



The mega Basin Electric power line is proposed to thread the "eye of the needle" along HWY 85 between Long X Divide and Lone Butte, two significant areas in a citizen's proposal for Prairie Legacy Wilderness, and past the entrance to the North Unit of Theodore Roosevelt National Park. A National Park and a ND State Scenic Little Missouri River are put at risk. Of the one million acres in the publically owned Little Missouri National Grassland, the US Forest Service currently manages less than 40,000 acres in four unique parcels as suitable for wilderness. Long X Divide is one of those areas. Of equal concern is the Lone Butte roadless area immediately to the east. When taken as a single contiguous parcel, the Park unit, Long X Divide and Lone Butte offer perhaps the greatest potential for retention of wildlife habitat in the Bakken and represent a rare intact template for post-boom reclamation. Their integrity must be preserved.

This needle's eye area provides essential golden eagle, bighorn sheep, elk and mule deer habitat. As evident in the attached ND Game and Fish Department map of primary mule deer range, the Badlands pinch down at this point. Further disturbance and fragmentation of this corridor is unwarranted. We can't keep translocating animals by helicopter (photo attached) as has recently been done by the ND Game and Fish Department with bighorn sheep. Displacement options and habitat "over the next hill" are increasingly lost.

BCA visited with North Dakota Game and Fish Department bighorn sheep specialist Brett Wiedmann on August 27, 2013. He stated that Basin Electric approached the Department early in the process with what he recalled as @five alternative routes, asking for input and assuring the Department of Basin's interest in working together. Now and at that time Mr. Wiedmann identified the currently proposed route as having the most significant impacts to large game. The Department wrote a single generic letter (attached) to Burns and McDonnell in September of 2011. All other contact was undocumented (only two meetings were recalled by the Bismarck office) and no comments were made by the Department to the Rural Utilities Service NEPA process. This is not what BCA would expect or demand of North Dakota state government's wildlife professionals. Something is awry.

The tourism industry and public enjoyment of these areas are already diminished by cumulative impacts of oil and gas development. I personally visited the North Unit of the Park the weekend of August 9-11, 2013. My family knows that I shun any work discussion when on such a respite. However, three times we were approached by out of state visitors (couples from PA, IL, and SC) who asked owners of ND license plates why the state of North Dakota was allowing desecration of THEIR National Park. Theodore Roosevelt National Park is a national treasure belonging to all Americans. North Dakota has a responsibility to honor that trust.

In March of 2013, BCA approached 877 individuals at the Fargo Sportsmen's Show, explaining in detail the concept and outcome of designating Prairie Legacy Wilderness on the Little Missouri National Grassland. Eight hundred and sixty of those people signed a survey supporting said Wilderness designation. Two declined in opposition. Fifteen had no opinion or did not wish to participate. North Dakotans care, and care specifically about this area.

The ND Industrial Commission is currently touring "special places" on the western North Dakota landscape to determine protective strategies for significant ND landmarks and habitats. This proposed power line is contrary to that effort.

The North Unit of Theodore Roosevelt National Park, Long X Divide and Lone Butte are on that Industrial Commission list. The mixed-ownership Killdeer Mountains are also on that list, and as pointedly relates to the proposed Basin Electric power line, the Killdeer Mountain Battlefield. Basin Electric's proposed route inappropriately crosses the entire Killdeer Mountain Battlefield east to west and includes construction of a substation. Private landowners have watched over this area for decades. NDSU is working under a grant from the National Park Service to further study and document the archeology, tribal cultural significance and history. Basin's route should be removed from consideration.

Basin Electric is seeking funding from the US Department of Agriculture's Rural Utilities Service to build the proposed project. This federal entity is required to follow the National Environmental Policy Act (NEPA) and is in the midst of that process. They are in the Draft Environmental Impact Statement stage. The ND PSC should not act prior to completion of that process.

BCA has repeatedly questioned whether proper NEPA is being followed since the very beginning of this proposal. NEPA requires a "range of reasonable alternatives" be considered, yet Basin Electric has had a presumed route since the first public scoping meeting in November of 2011.

The Rural Utilities Service Draft Environmental Impact statement (DEIS) cited three alternatives:

- No-action Alternative

- Alternative Route A - Basin's proposed route past the Park

- Alternative Route B - An eastern route extending north from Killdeer

Basin Electric has now announced they plan to build both routes to service the oil and gas industry in North Dakota, and the RUS will be doing a Supplemental Environmental Impact Statement on the additional 85-mile corridor north from Killdeer. It appears that NO "reasonable range of alternatives" remains.

In BCA's official comments on the Draft EIS, we asked for that reasonable range of alternatives - including use of natural gas currently flared and wasted by oil and gas development in the state of North Dakota (valued at as much as \$100 Million per month) to produce electricity in the near-vicinity of the needed power, thus eliminating need for this huge transmission line. We continue to ask for analysis of that scenario.

North Dakota had the opportunity to do a stellar job planning and allowing for execution of oil and gas development within our state - to the benefit of private and state coffers, the industry, public needs and interest in general, traditional North Dakota values and quality of life issues, our historical, cultural, agricultural and landscape heritage, and national energy security. Whether the absence of said comprehensive, strategic development is the simple result of monetary greed or evidence of scant faith held by state leadership in our people's and the state's identity and ingenuity to succeed into the future, foresight has been sorely lacking. This proposed power line is a continuation of that philosophy.

Badlands Conservation Alliance asks that we amend our ways; that full consideration be given to alternatives that respect our past, our present, and our future. As a result of the Bakken Boom in western North Dakota, we have the capacity to think bigger than ever before. We would hope that we also think wiser and better.

Basin Electric has a history as a generous participant in the ND community, sensitive to our quality of life. Western North Dakota can currently lay claim to some of the best engineering minds in the nation.

BCA insists that if this project moves forward as currently designed, transmission lines be bored from the high prairie adjacent to Lone Butte on the south (photo attached) to the high prairie north of the Badlands breaks as the lines cross the Little Missouri River Valley, placing them underground through the "eye of the needle" and therein diminishing impacts to Lone X Divide, Lone Butte and the North Unit of Theodore Roosevelt National Park. If industry is capable of boring two miles into the earth, and two miles and more horizontally once they get there, there is a capacity to put these lines underground in this superbly sensitive and nationally significant area.

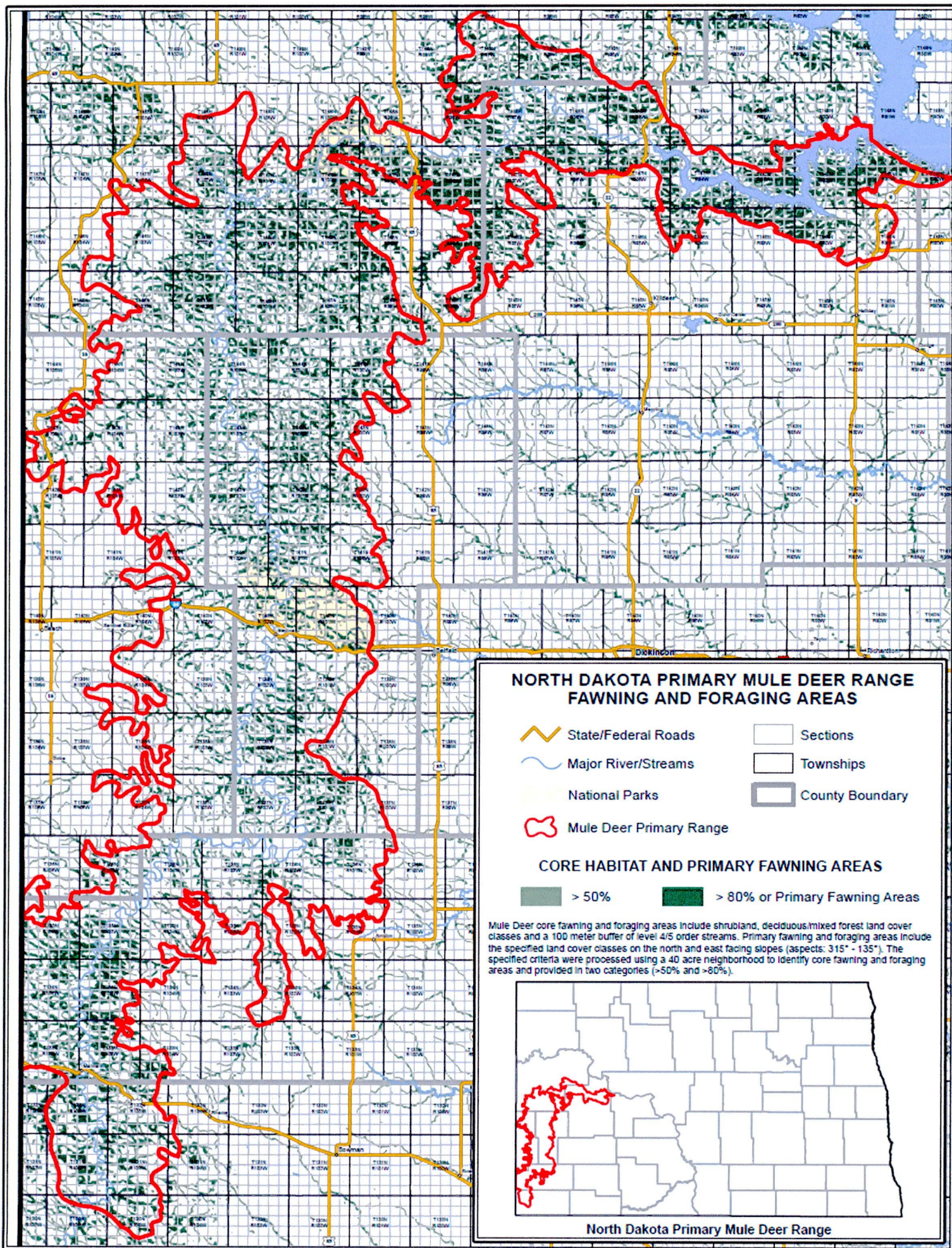
Badlands Conservation Alliance
Jan Swenson, ED
701-255-4958
bcajan@bis.midco.net

Also attached:

Reference sheet – Underground transmission.

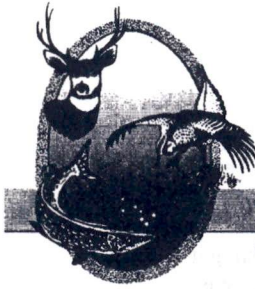
Including Page 36, Appendix A

BCA comments to Rural Utilities Service on the Draft Environmental Impact Statement, January 2013.





http://bismarcktribune.com/news/local/bighorn-sheep-moved-out-of-north-unit-of-park/article_4b8069b0-8a88-11e2-bebe-001a4bcf887a.html



"VARIETY IN HUNTING AND FISHING"

NORTH DAKOTA GAME AND FISH DEPARTMENT

100 NORTH BISMARCK EXPRESSWAY BISMARCK, NORTH DAKOTA 58501-5095 PHONE 701-328-6300 FAX 701-328-6352

September 19, 2011

John Dunham
Project Environmental Scientist
Burns & McDonnell
P.O. Box 419173
Kansas City, MO 64141

Dear Mr. Dunham:

RE: Antelope Valley Station to Neseet 345-kV Transmission Project
Basin Electric Power Cooperative

The North Dakota Game and Fish Department has reviewed this project for wildlife concerns. Our primary concern is the possible disturbance of native prairie and wetland areas during construction of the transmission line. We ask that work within these areas be avoided to the extent practicable, above-ground appurtenances not be placed in wetland areas, and any unavoidable destruction or degradation of wetland acres be mitigated in kind.

The Department manages several Wildlife Management Areas (WMA's) in or adjacent to the proposed study area. A special use permit would be required to cross these lands. Information regarding WMA locations is available in various formats at <http://gf.nd.gov/maps/>. Mr. Kent Luttschwager, Wildlife Resource Management Supervisor, can be contacted at 701-774-4320 for additional information on permit requirements.

The project study area includes the range of several bighorn sheep herds. As North Dakota is on the eastern edge of the bighorn's range, these populations are very sensitive to disturbance. We recommend that the project be routed to avoid bighorn sheep habitat. If this is not possible, timing restrictions should be implemented to minimize adverse effects to bighorn sheep.

There are a variety of classified fisheries within the study area, including the Missouri, Little Missouri, Yellowstone, Knife, White Earth, and Little Muddy Rivers; and Brush, Spring, Cherry, Tobacco Garden, and Beaver Creeks. Riparian corridors provide important wildlife habitat in addition to the fisheries resource. Any necessary construction activity should not take place within these waterways between April 15 and June 1.

We recommend that overhead lines be marked when placed over perennial streams or sited in close proximity to large wetland complexes to minimize possible avian impacts. The publication "Mitigating Bird Collisions with Power Lines: the State of the Art in 1994" provides a range of management options which can be used to reduce avian collisions.

Additionally, the Department recommends that the transmission line be sited in existing utility corridors where feasible, and disturbed areas be reclaimed to pre-project conditions. We appreciate the opportunity to provide comments, and would like to be kept informed as this project progresses.

Sincerely,



Greg Link
Chief
Conservation & Communication Division

js

Before



After



COPYRIGHT © 2012 BURNS & McDONNELL ENGINEERING COMPANY, INC.

Description of Photo Location:

Lone Butte
Looking West



Visual Simulation 2
AVS 345-kV Transmission Line
Basin Electric

Source: Trinity Animation, Inc.
Structure placements as shown are for photo simulation purposes only. Actual structure placement will be determined during detailed design and engineering of the route selected and approved.

DEIS / Vol. I / Nov. 2012 Pg 414

Underground Transmission Lines

Burns and McDonnell

[http://www.burnsmcd.com/Resource /PageResource/Electrical-Transmission-Distribution/TD-Qualifications/UndergroundTransmission.pdf](http://www.burnsmcd.com/Resource/PageResource/Electrical-Transmission-Distribution/TD-Qualifications/UndergroundTransmission.pdf)

Page 1:

Burns & McDonnell combines top-flight engineering and construction services to take your high voltage transmission line underground. By providing turnkey solutions, we can help you provide power to the people who need it **while preserving the beauty and history of your parks**, beaches and downtown business districts.

Page 8:

NORTHEAST UTILITIES SERVICE COMPANY MIDDLETOWN TO NORWALK

The project scope includes nearly 70 miles of **new 345kV transmission line of which 24 miles will be cross-linked poly ethylene (XLPE) underground cable.**

Underground vs. Overhead Transmission and Distribution

June 9, 2009

<http://www.puc.nh.gov/2008IceStorm/ST&E%20Presentations/NEI%20Underground%20Presentation%2006-09-09.pdf>

Page 10:

A typical 345,000V transmission line will be able to deliver no power when the line becomes about 26 miles long.

The longest underground circuits at 230,000 or 345,000V are 20 miles long.

Page 12:

Currently underground AC transmission is primarily used only where nothing else will do.

River Crossings

In dense urban areas

Large road crossings

Where aesthetic issues are paramount (national parks)

Aspen, Colorado: Special tariffs were imposed on customers.

ABB joint winner of engineering award for the world's longest underground power line

<http://www.abb.us/cawp/seitp202/16d509d20fbbe407c1256d95002776dd.aspx>

Zurich, Switzerland, September 2, 2003 – The Murraylink Transmission Company, which comprises ABB, KBR and PIHA Australia, has won a second prestigious award for the Murraylink interconnector in Australia, the world's longest underground power transmission line.

The **Engineering South Australia Award 2003** was handed to the Murraylink Transmission Company in Adelaide, Australia, at the end of August.

The project has already won the 2002 Case EARTH Award for Environmental Excellence for best practice and innovation in the environmental management of civil construction projects. Murraylink, which was commissioned in October 2002, minimizes environmental, aesthetic and land impact.

The **177-kilometer transmission line** uses ABB's unique HVDC Light technology to increase the capacity and reliability of South Australia's electricity supply system.

Overview of the Potential for Undergrounding the Electricity Networks in Europe

ICF Consulting Ltd

28 February 2003

http://ec.europa.eu/energy/gas_electricity/studies/doc/electricity/2003_02_underground_cables_icf.pdf

Page 5:

The technology has now been developed commercially from hundreds of metres of cable to several kilometres and over 100 km of 400kV XLPE cable systems are currently being installed in Europe with the **longest individual cable in Europe (Copenhagen) now over 20km**. This technology is being used in urban centres as well as **rural areas in a sensitive environment**.

Page 19:

The longest installation is a 40 km synthetic insulated **500kV cable** in Tokyo (The Shin Keiyo Toyusu Line) that was put **into operation in 2000**. This technology has also been installed in a few places in Europe.

XLPE cables at lower voltages were used in Denmark in the 1980s but they have since installed two **400kV XLPE underground cables of 22 km and 14 km** in length in and around Copenhagen;

Page 36:

Appendix A Overview of the existing underground cables across the EU, Norway and Switzerland
(This page is attached as it did not maintain its integrity when copied – BCA.)

Appendix A Overview of the existing underground cables across the EU, Norway and Switzerland

There are over 104,000 km of 380/400kV overhead lines in the Member States of the European Union, Norway and Switzerland plus over 121,000 lines at voltages between 220 and 300kV. There are approximately 5,300 km of underground cables at voltages above 150kV of which 3,200 km are on land.

Voltages of 150 –400kV

Voltage kV	400		220-300		150	land cable as percent of total network		
	land	sea	land	sea	land	400 kV	220 kV	150 kV
Amounts in km								
Austria	56	-	5	-	-	2.3	0.1	-
Belgium	-	-	-	-	225	-	-	5.7
Denmark	134	16	-	152	5	9.0	-	1.3
Finland	34	99	-	-	-	0.9	-	-
France	11	-	828	-	-	0.1	3.1	-
Germany	62	423	35	-	-	0.3	0.2	-
Greece	-	-	-	-	170	-	-	2.1
Ireland	-	-	75	-	-	-	4.5	2.3
Italy	53	316	165	-	222	1.7	1.3	0.7
Luxembourg	-	-	6	-	-	-	2.5	-
Netherlands	-	-	6	-	220	-	0.9	3.7
Norway	36	-	-	64	-	1.2	-	-
Portugal	-	-	11	-	-	-	0.5	-
Spain	-	15	92	-	-	-	0.6	-
Sweden	4	319	-	87	7	0.4	-	0.1
Switzerland	-	-	22	-	-	-	-	-
UK	132	327	755	150	-	1.3	5.6	-
Total	522	1,515	2,000	453	849	1.0	2.3	-

Source: UCTE, Nordel and direct contact with TSOs

Low, medium and high voltages

Voltage	60-150kV		MV		LV	
	Overhead	Under ground	Overhead	Under ground	Overhead	Under ground
km						
Austria			34,200	22,800	55,250	9,750
Belgium	4,777	395	9,750	55,250	60,480	47,520
Denmark	10,256	1,902	32,450	22,550	32,200	59,800
France	50,111	1,896	393,190	180,810	463,888	168,112
Germany	71,609	4,740	190,000	285,000	231,500	694,000
Italy	36,228	449	215,801	115,380	498,960	210,327
Netherlands	6,011	3,655	-	101,900	350	145,000
Norway	19,001	624	63,480	28,520	114,700	70,300
Portugal	8,953	358	48,720	9,280	90,720	21,280
Spain	37,639	559	96,448	26,025	241,102	40,141
Sweden	15,000		93,440	52,560		
UK	21,836	3,789	204,600	167,400	71,360	305,370

Source: Europacable and Sycabel and direct contact with TSOs

BADLANDS CONSERVATION ALLIANCE
A VOICE FOR WILD NORTH DAKOTA PLACES

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801 North 10 Street
Bismarck, ND 58501
701-255-4958 badlandsconservationalliance.org

January 21, 2013

Mr. Dennis Rankin
Environmental Protection Specialist
USDA, Rural Utilities Service
1400 Independence Avenue SW, Stop 1571
Washington, DC 20250-1571

Copy

RE: Proposed Antelope Valley Station to Naset 345-kV Transmission Project Draft Environmental Impact Statement (DEIS)

Dear Mr. Rankin:

Badlands Conservation Alliance (BCA) is a western North Dakota based non-profit organization focused on public lands and public natural resources in western North Dakota, particularly Theodore Roosevelt National Park and the Little Missouri National Grassland. The majority of our members, and certainly the charter members, live in or originated in the small communities and rural landscapes surrounding these public lands. Members hold significant familiarity with these lands and value them for a host of ecological, heritage and personal reasons, frequently through multiple generations.

BCA attended the Killdeer open house for this project in Killdeer, ND on November 16, 2011 and submitted comments during the scoping period. We again had representation at the public hearing in Killdeer, ND on January 15, 2013.

At both Killdeer events, BCA members reported that informal conversation with presenters pointed to an early and pre-determined preference for the alternative route along HWY 85 and impacting the North Unit of Theodore Roosevelt National Park. We find this unacceptable.

BCA recommends that the Rural Utilities Service consider and fully analyze an additional alternative to satisfy the future needs for electrical generation for communities and industry in western North Dakota, and in particular northwestern North Dakota, which this project attempts to address. Distributed generation from natural gas fired power facilities near to the areas of need would completely eliminate a requirement for large new transmission lines.

A long line of legal cases has affirmed the concept that an EIS, to be adequate, must consider every reasonable alternative. In fact, an EIS is rendered inadequate by the existence of a viable, but unexamined alternative. BCA respectfully submits that the electric-generation situation has changed dramatically just within the past couple of years, and that failure to consider this opportunity located near to the areas of defined electric need, will render this EIS process invalid.

The oil and gas industry in North Dakota currently flares 30% of its produced natural gas. This is an abhorrently wasteful practice that threatens to continue due to the scope, scale and speed of ever expanding production.

ND's legislatively-authorized EmPower Commission has recommended that the state's oil and gas research council give special attention to the study of value-added uses of natural gas, as a means of encouraging the reduction of flaring. Using natural gas for electric generation would be a 'win-win-win' situation for North Dakota: it would substantially reduce the incidence of flaring which is good for the environment, the value-added use for natural gas which would contribute to local economic development, and it would eliminate the need for a monstrous transmission line crossing the environmentally sensitive badlands of western North Dakota.

By April, 2012, natural gas fired electric generation represented 32 percent of electric generation nationwide, a significant increase from just a few years ago. In the meantime, coal-fired electric generation has declined nationwide to 32 percent, which is a steep decline over the past several years as old power plants go offline rather than invest in expensive upgrades to meet new and anticipated air-quality standards. (<http://www.eia.gov/todayinenergy/detail.cfm?id=9450>)

The North Dakota Transmission Authority recently contracted a study of future needs with Kadrmas, Lee & Jackson Inc., which was published as *Power Forecast 2012*. The Executive Summary may be found at <http://www.nd.gov/ndic/ic-press/PowerES.pdf> with the full report available at <http://www.nd.gov/ndic/ic-press/Power2012.pdf>. This report supports BCA's position that an alternative for distributed generation through use of currently wasted natural gas is a far better option than the coal generated energy in the DEIS proposed alternatives.

The alternative does not weaken Basin Electric's lead in this development. Recent Basin Electric projects including the Lonesome Creek Station and Pioneer Generating Station illustrate Basin Electric's interest and potential capabilities for natural gas production. Considering the global impacts of climate change, it is our estimation that Basin should be pursuing this transition to a cleaner, if not perfect, fuel source that is currently wasted within the Bakken field. They would be addressing electrical generation forecasts without the need for the large transmission infrastructure in either action alternative presented in the DEIS while making constructive use of a fuel source currently wasted.

The USDA Rural Utilities Service (RUS) website indicates that its utility loan and grant programs "connect rural residents to the global economy by . . . 6. Capitalizing on climate change opportunities." Presumably what they really mean is capitalizing on opportunities to reduce the incidence of climate change, to the extent that climate change may be caused by human activities. Offering a loan or grant for the purpose of developing a significant natural gas to electricity presence in ND would be a step in the right direction, in that the identified increased demand for electricity would not increase demand for more coal mining.

Proponents of the project may argue that this proposal would substantially increase costs because ND coal-fired power plants have excess capacity. However, North Dakotans are not used to including externalities into their benefit/cost ratios because ND law does not allow its Public Service Commission to take externalities into account. As a federal agency, the USDA RUS can and should take into account the damage to the natural environment of the proposed transmission line, the degradation of visitor experience to the Park if Alternative A were chosen, the diminution of the integrity of the Blue Buttes American Indian Traditional Use Area if Alternative B were selected, and for either corridor, the cumulative negative effect on wildlife habitat of adding yet another layer of disruption, and the negative aesthetic impact for all who live in, or visit, the area.

The cost of electricity from coal-fired power plants will necessarily increase over the next 20 years as new environmental controls come online, especially if carbon capture and sequestration is added to the mix. The cost of natural gas, on the other hand, is expected to remain flat over at least the next 10 years according to the US Department of Energy. (<http://www.powerincooperation.com/EN/Pages/affordable.html>)

We draw special attention to *Figure 7: Electrical Load Forecast 2032* on page 10 of the *PF12 Executive Summary* and *Figure 15: Electric Load Forecast 2032* on page 32 of the full *PF12* to illustrate that projected needs largely remain north of the Little Missouri River, allowing distributed natural gas electrical generation facilities to AVOID ANY CROSSING of that North Dakota State Scenic River with the negative impacts of the proposed mega transmission line.

One of the many benefits of natural gas powered electric generating facilities is that they can be planned, permitted, built, and operational within about two years, so there is no need for attempting to size a transmission line for an assumed regional need which is still 20 years into the future.

Should currently un-contracted coal generation capabilities at Basin Electric's Antelope Valley Station be a partial motivation for this proposed project, BCA suggests that those lesser transmission needs in southwestern North Dakota as expressed in the *PF12* map references above may offer opportunity without increased mining, and without trespass of the rough terrain, and human/wildlife significance of the Little Missouri River Badlands.

The environmental footprint of distributed natural gas generation facilities sited in targeted areas of specific need would be far less than the extensive disturbance of the proposed transmission line and its associated infrastructure. The associated construction disturbance and permanent right-of way of approximately 200 miles of transmission across agricultural lands, as well as the majority of water body crossings, would not be required.

Natural gas is considered to be significantly more environmentally friendly in terms of emissions than are coal-fired power plants. Even if natural gas is more expensive up front than available coal, when considering the externalities of reduced air pollution, the balance may shift. Although North Dakota law prevents the ND Public Service Commission from considering such externalities, the federal partners in this proposed project should still consider them in making their decisions about reasonable alternatives.

Furthermore, rapidly advancing technology for well site production of electricity may dramatically alter the development scenario in the Bakken field as a whole, requiring far less transmission from afar than currently estimated. If and when that should occur, the proposed transmission line may prove over-built, leaving an under-used and intrusive infrastructure across the face of western North Dakota.

Natural gas fired power plants can be built near to the area where additional electrical demand is needed, such that short-distance transmission lines can be sited as needed. Such plants can also be individually sized to meet a particularized need. For example, natural gas can be used to power an individual well site which would never have to be connected to the electric grid. Oil companies and related service companies, as well as state and university research organizations have been considering the economics of small-scale distributed generation for remote well sites. This point brings up a flaw in the methodology of the studies that have been completed by Basin Electric and the State of North Dakota. It does not appear that either study has made any effort to quantify the amount of electric demand which may be satisfied by off-grid generation. They did not consider the very real possibility that many of the wells to be drilled may be serviced by the natural gas coming off nearby wells, and that a significant portion of the anticipated need for electricity may never translate to a need for long distance transmission.

BCA would suggest that the continued disuse and wasteful flaring of natural gas in the Bakken field of North Dakota threatens to impose financial and reputational risks on investors in any and all aspects of development. Continuing to ignore and excuse such financial and environmental deficiencies threatens the oil and gas industry's license to operate, and invites federal regulation that will be potentially punitive to the economy of North Dakota and the energy security of the nation as a whole. We offer here an alternative for your serious consideration that addresses a solution that satisfies both waste and need.

At the present time, there is a large-scale national study underway, as part of federal stimulus funding, which is analyzing the national electric transmission grid and forecasting demand nationwide. (<http://naruc.org/Grants/>) BCA recommends putting the EIS process for the new transmission line on hold until the major national study is completed, projected at the end of 2013, so that consideration can be given to lessons learned.

Our recommendation for a natural gas alternative having been firmly stated, we find we must also state the following. It is BCA's strongly held position that the DEIS Alternative A should be dropped from consideration for this project. Development of the Bakken shale formation in North Dakota has been hugely transformative for communities, landscapes and quality of life issues in western North Dakota. What our citizens have experienced thus far is only the tip of the iceberg when measured against the industrialization we can expect in the next 20 years. That is not to say the State and its citizens have not also seen benefits of development, but it is to emphasize the rights our current and future residents have to respectful protection of our natural landscape as recognized in Theodore Roosevelt National Park and those remaining unroaded areas of our once intact Little Missouri National Grassland.

A fully developed Bakken field is estimated to cover 15,000 square miles of western North Dakota with anywhere from 30,000 to 50,000 wells. This does not include the additional figures that will come with oil and gas development in the expanded Tyler, Spearfish and Three Forks formations.

The three units of Theodore Roosevelt National Park in total make up less than two-tenths of one-percent of the State of North Dakota. They are a precious and significant part of the State's identity and inherent wealth, and contribute equally to the identity and wealth of the Nation. Absolute protection should come without saying.

Similarly, North Dakota is home to the Nation's largest National Grassland. Managed by the US Forest Service under its multiple-use directive, 95% of the Little Missouri National Grassland is open to oil and gas development. In the early 1970s, approximately half of its 1.1 million acres was undeveloped. By the late 1970s that acreage had been cut in half. Currently, the Forest Service manages less than 40,000 acres under what the 2002 Land and Resource Management Plan identifies as "suitable for wilderness."

Badlands Conservation Alliance and its coalition partners advocate permanent protection for those parcels and citizen additions which equal a total of less than 60,000 acres in five separate parcels on the 1.1 million acre Little Missouri National Grassland. Alternative A threatens to diminish the quality of two of those areas adjacent to the Park. Given the extreme value represented in this acreage and the irreversible loss a transmission line of the proposed size and magnitude would cause, we oppose further consideration of this route.

Furthermore, the North Unit of Theodore Roosevelt National Park is oriented in such manner that it looks southeast into Long X Divide roadless area and Lone Butte roadless area on the National Grassland. Historically, visitors to the Park have not recognized the boundaries and limited size of the 24,070-acre North Unit. Current oil and gas development is shrinking that perception and increasingly isolating the Park.

Both Long X Divide and Lone Butte offer some level of protection for the Park viewshed. Of particular note is their wild undeveloped status that provides unfragmented wildlife habitat and wildlife corridors. Lone Butte is known for its elk, mule deer, bighorn sheep, golden eagle and even mountain lion populations, all of which are put at risk by Alternative A. The few remaining undeveloped parcels that exist are essential as havens within the broader oil field that will be western North Dakota. The Nation owes us that much for our energy contributions.

The recently reconstructed Western Area Power Authority lines have degraded the scenic integrity of the HWY 85 corridor, diminishing the character of the approach to the Park and the above mentioned roadless areas. The proposed Basin Electric line (*Table 2-2, page 2-12, DEIS*) will exceed the height of the WAPA structures again by half to nearly double. This is unacceptable.

The Scenic Integrity Classification *Figure 3-10* on page 3-18 of the *DEIS* clearly shows the route of Alternative A surrounded by a landscape of high classification. No level of mitigation is sufficient to make this acceptable.

In *Appendix C* of the *DEIS*, *Visual Simulation 2* looks to the western horizon and the proposed route of Alternative A as seen from just below the southern face of Lone Butte itself. While we agree that this is outside the boundaries of the Lone Butte management area, and while we appreciate that the *DEIS* has moved this proposed route outside non-motorized boundaries, we cannot express deeply enough the harm that will be experienced by users of this rare parcel of undisturbed public land. We find it particularly disingenuous that this photo was taken from the southern edge of the management area and without the added effort of ascending the namesake butte to fully assess both the area's beauty and its potential for degradation.

Additionally, the life expectancy of the Bakken oil field according to the ND Department of Mineral Resources is now estimated to surpass 70 years. That is equivalent to or exceeds three human generations. Wildlife populations will need some small haven of suitable habitat to maintain even the most limited resource for re-population once oil and gas production is abated. Without the pre-development template the Park and associated areas represent, we will have only a forgotten landscape, unequal to the task of reclamation. Wildlife habitat maps recently developed by the North Dakota Game and Fish Department should be consulted to verify the significance of the area in question. The majority of these maps are unavailable to the general public due to the sensitivity of wildlife populations, but are readily available upon agency and/or project-specific consultation.

A few short years ago, one could have stood in the North Unit of Theodore Roosevelt National Park and admired a seemingly unbounded view of a wild natural landscape. This is no longer true. The cumulative impacts of industrialization this proposed project exemplifies and encourages would not be acceptable were we speaking of the Grand Canyon or Glacier or Yellowstone or the Tetons. It is equally unacceptable here.

BCA maintains the sanctity of Theodore Roosevelt National Park and the significance that the USFS-managed, unroaded areas Lone Butte and Long X Divide bring to that Park's future, to our wildlife populations, and to the historic and future quality of life issues reflected. We urge the Rural Utilities Service to pursue an alternative to the proposed transmission line on that basis and with solidarity that a solution satisfactory to all interests may be developed.

Respectfully,

Jan Swenson, ED
Badlands Conservation Alliance

Cc: Jay Frederick, McKenzie District Ranger, Dakota Prairie Grasslands