U.S. DEPARTMENT OF ENERGY
WESTERN AREA POWER ADMINISTRATION
UPPER GREAT PLAINS CUSTOMER SERVICE REGION

FINDING OF NO SIGNIFICANT IMPACT

Killdeer to Mountain Transmission Project
Richland County, Montana
DOE/EA-1644

AGENCY: Western Area Power Administration, DOE

ACTION: Finding of No Significant Impact

SUMMARY: McKenzie Electric Cooperative (MEC), through Upper Missouri Generation and Transmission Electric Cooperative, Inc. (UMGT), has applied to the U.S. Department of Energy (DOE) Western Area Power Administration (Western) for a new electrical interconnection. This project would require the construction of temporary interconnection (Killdeer interconnection or interconnection) at Western's Killdeer Substation and a new 115-kilovolt (kV) transmission line which would extend about 13 miles northward from Western's Killdeer Substation to a new MEC Mountain Substation, all in Dunn County, North Dakota. The Killdeer Substation is scheduled for improvements by Western in approximately 2011/2012. These scheduled improvements would replace the temporary Killdeer interconnection with permanent facilities and would accommodate additional equipment should the load requirement for MEC continue to increase. However, these improvements were not considered in the environmental assessment (EA) since the timing and nature of those improvements remain uncertain.

Under its Open Access Transmission Service Tariff (Tariff), Western is required to respond to MEC's interconnection request. Western's Tariff conforms to Federal Energy Regulatory Commission's (FERC) Final Orders 888, 888A, 888B, and 888C, and provides for new interconnections to Western's transmission system by all eligible entities, consistent with Western requirements and subject to environmental review under the National Environmental Policy Act (NEPA) and other environmental regulations. Western must decide to approve or disapprove the interconnection of the Project with Western's transmission system. Western's approval of this interconnection would require execution of an interconnection agreement, and Western would need to construct, own, operate, and maintain the Killdeer interconnection at the existing Western Killdeer Substation. MEC would construct, own, operate, and maintain the Mountain Substation and interconnecting transmission line.

In accordance with applicable regulations, Western prepared an EA entitled *Killdeer to Mountain Transmission Project* (DOE/EA-1644). The EA identified and evaluated the potential environmental impacts associated with Western's decision on the interconnection request, the interconnection, and MEC's Proposed Project. In addition, the EA evaluated three alternatives for energizing the Mountain Substation, four route variations, including the Proposed Project route, for using Western's Killdeer Substation to energize the transmission line route, and a No Action Alternative. Mitigation measures to minimize environmental impacts were included as integral

parts of the proposed Project. The EA identified no potentially significant impacts that would occur to environmental resources.

The Pre-decisional EA was distributed to interested agencies, tribes, groups, and individuals on May 11, 2009. No comments were received during the 15-day public review and comment period; however, the U.S. Fish and Wildlife Service (USFWS) requested an extension to the comment period. The comment period was extended by 17 days to June 12, 2009. Following receipt of the USFWS response, concurring with the effect determinations for listed and candidate species, no changes were made to the Pre-decisional EA. The Pre-decisional EA as circulated for public and agency comment is Western's Final EA.

Based on the information contained in the EA, Western has determined that approval of the interconnection request and MEC's proposed Project does not constitute a major Federal action significantly affecting the quality of the human environment within the meaning of NEPA. Preparation of an environmental impact statement is not required, and Western is issuing this Finding of No Significant Impact (FONSI).

FOR FURTHER INFORMATION CONTACT: Additional information and copies of the EA and this FONSI are available to all interested parties and the public from the following contact:

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SUPPLEMENTARY INFORMATION: This FONSI was prepared in accordance with Council on Environmental Quality Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act, 40 CFR 1508.13, and the DOE NEPA Implementing Procedures, 10 CFR 1021.322.

The FONSI briefly presents the reasons why Western's proposal to approve an interconnection agreement for the Killdeer to Mountain Transmission Project, including the described impact mitigation measures outlined in the EA, would not have a significant impact on the human environment. Approval of the interconnection agreement would allow MEC to interconnect their proposed new 115-kV transmission line to Western's transmission system. In accordance with the regulations cited above, Western prepared an EA entitled *Killdeer to Mountain Transmission Project* (DOE/EA-1644), on Western's action and on MEC's Proposed Project. The EA identifies and evaluates the potential environmental impacts associated with Western's decision on the interconnection agreement and related interconnection at the Killdeer Substation, and of the proposed Project. The entire EA is incorporated by reference into this FONSI in accordance with 40 CFR 1508.13, which allows a summary discussion in this document.

Prior to making a decision to approve the interconnection of MEC's Project, Western is required to prepare an EA to address NEPA and related environmental requirements. The EA examines the potential environmental impacts of approving the application for interconnection as well as the No Action Alternative. Under the No Action Alternative, Western would not approve the interconnection request, and would not construct the interconnection at the Killdeer Substation. For purposes of providing a no-project environmental baseline, the No Action Alternative also assumes that MEC's proposed Project would also not be constructed. The EA also analyzes the potential environmental impacts of constructing, operating, and maintaining the Killdeer to Mountain transmission line and Mountain Substation. In addition to MEC's proposed Project, the EA evaluated three alternative means of energizing the Mountain Substation and three alternate routes for the new 115-kV transmission line along with the No Action Alternative.

WESTERN'S ACTION: Western must decide whether to approve or disapprove MEC's interconnection request. Under its Tariff, Western is required to respond to an applicant's interconnection request, and offer access to capacity on its transmission system when capacity is available, and on a non-discriminatory basis. Western's Tariff conforms to FERC Final Orders 888, 888A, 888B, and 888C and provides for new interconnections to Western's transmission system by all eligible entities, consistent with Western requirements and subject to environmental review under NEPA and other environmental regulations.

Western also needs to ensure that by offering such capacity, existing transmission system reliability and service is not degraded by new interconnections. Transmission system studies are conducted to determine the effects on power flows in the event interconnection requests are approved. The applicant's objectives are also considered in Western's decision process. Western's decision is to approve or disapprove the interconnection of the Project with Western's transmission system. The FERC Orders direct that interconnection requests be approved unless the transmission system would be adversely affected by the interconnection. Western's approval of this interconnection would require execution of an interconnection agreement, and Western would need to construct, own, operate, and maintain the interconnection at the Killdeer Substation.

Western would design and construct the Killdeer interconnection at its existing Killdeer Substation. The interconnection would include a platform switch structure approximately 70 feet

east of the existing Western 115-kV structure "74/1." Structure 74/1 is located approximately 750 feet west of the existing Killdeer Substation in Section 26 of T145N R95W, within Western's existing right-of-way (ROW). The switch structure would be constructed about 25 feet south of the Western 115-kV centerline with temporary line taps to the existing transmission conductors, and would occupy 0.10 acre.

The temporary interconnection and any future permanent replacement, would be owned, operated, and maintained by Western. The new interconnection would include a temporary metering structure that would be used until Western completes additional Killdeer Substation upgrades, potentially as soon as 2011/2012, but possibly later, subject to need. If Western decides to design and construct permanent upgraded facilities at the Killdeer substation, including a permanent interconnection to replace this temporary interconnection, appropriate NEPA analysis will be conducted at that time.

The temporary interconnection would enable MEC's facilities to access power from Western's existing 115-kV transmission line. All grading, initial site preparation work, and construction at the Killdeer Substation would be completed by Western within their existing right-of-way (ROW) which is entirely characterized by short grasses.

PROJECT DESCRIPTION: MEC would construct, own, and operate a new 115-kV transmission line between the Killdeer Substation and the proposed Mountain Substation, approximately thirteen miles north of Killdeer, ND. The new Mountain Substation would provide a 115- to 24.9/14.4-kV service outlet to meet increased demand on the northern end of the proposed Killdeer to Mountain transmission line.

The proposed Mountain Substation site would be located in a 6.36-acre parcel which is currently used as a pasture. The Mountain Substation would permanently occupy an area approximately 165-feet by 235-feet-wide, or 0.9 acre, within the parcel. Access to the substation site would be from an existing private drive on the southwest portion of the parcel that would be shared for 0.2 mile by permanent access easement with the adjacent landowner. The access would then enter the MEC parcel and proceed north-northeast approximately 360 feet from the existing road into the substation facility. The new permanent access road would be about 20 feet wide and would impact about 0.2 acre. The temporary construction area required for the substation facility would be within an area approximate 300- by 300-foot-wide, or 2.1 [1] acres.

MEC is proposing to use single-pole wooden structures for the transmission line placed approximately 350 to 400 feet apart along most of the length of the transmission line. Two-pole wooden H-frame structures would be placed 600-800 feet apart at a crossing of an existing transmission line operated by Western; H-frame structures may also be used where longer spans are necessary to avoid environmentally sensitive areas. The proposed permanent ROW width would be 80 feet.

During construction of single- or two-pole structures, each pole and anchor facility would typically involve up to 10,000 square feet, or about 0.2 acre, of temporary ground disturbance.

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[1] The permanent impact (0.9 acre) would be located within the acreage disturbed for construction.

The permanent impact would be approximately 100 square feet, or about 0.002 acre. The height of the new structures would vary from 60 to 90 feet above ground, depending on terrain and structure type. Based on structure type, the total permanent ground disturbance impact for pole and anchor placement for the entire project has been estimated to be about 0.4 acre.

Minimal clearing is expected because the transmission line would be primarily constructed in cultivated agriculture fields and pastures. In some isolated cases, grading may be necessary at structure locations to provide a level working area. The material required for construction of the transmission line would be delivered to the MEC maintenance yard.

PUBLIC INVOLVEMENT: Project notices were mailed to agencies and adjacent landowners on September 23, 2008. Western held a scoping meeting for the Proposed Project on October 7, 2008, in Killdeer, North Dakota at the American Legion Hall. The meeting was to inform landowners and other interested parties about the project. Western staff and MEC representatives were available to address questions and concerns. The meeting was advertised in the *Dunn County Herald* on September 26 and October 3, 2008. The scoping comment period for the Proposed Project ended on October 24, 2008. Most individuals that attended the meeting wanted information about the project as it relates to their property. A request was made that the route be moved west to the section line rather than the route shown at the scoping meeting. The Proposed Project route analyzed in the EA reflects the route shift as requested by the landowner.

COMMENTS RECEIVED ON THE PRE-DECISIONAL EA: The Pre-decisional EA was distributed to interested agencies, tribes, groups, and individuals on May 11, 2009, for review and comment, with the comment period beginning May 13, 2009. Notices for the EA were published in the *Dunn County Herald, Dickinson Press*, and *McKenzie County Farmer*. No comments were received during the public review and comment period; however, the USFWS requested an extension to the comment period. Western granted an extension of 17 days until June 12, 2009, as requested. During the extended comment period, USFWS concurred with the effect determinations for the listed and candidate species on June 15, 2009. Since no comments were received, and no changes have been made to the Pre-decisional EA, the Pre-decisional EA as circulated for public and agency comment is Western's Final EA.

ALTERNATIVES: MEC identified three system alternatives to energize the Mountain Substation and three alternate routes for the Killdeer to Mountain Transmission Line. These are discussed in detail in the EA in section 2.6. Potential alternatives were evaluated in terms of meeting the purpose and need for the Project, consistency with planned and anticipated system needs, meeting design and reliability standards, and impacts on environmentally-sensitive resources. In addition, alternatives needed to be reasonable, technically feasible, and economically viable.

Given the nature of the existing electrical system surrounding Killdeer, options to the Proposed Project for energizing the new Mountain Substation are limited. MEC identified the following sources as potential alternatives for energizing the new Mountain Substation: Montana Dakota Utility (MDU) Tap, Watford City Substation, and the Charlie Creek Substation. A tap with the existing Western Killdeer Substation (Proposed Project) was the only alternative for energizing

the new Mountain Substation that was reasonable and carried forward for further analysis in the EA.

Three routes plus the Proposed Project were considered for the transmission line route. Generally, the environmental impacts were similar between the route variations and the Proposed Project. Because the Proposed Project represents the route preferred by the landowners as it does not disturb their agricultural operations, and there were no notable or significant differences in environmental resource impacts, only the Proposed Project and the No-Action alternatives were carried forward for detailed analysis in the EA.

ENVIRONMENTAL IMPACTS OF WESTERN'S ACTION: Western's Federal action is to consider approval of MEC's interconnection application and, if approved, Western would be committed to construct, own, operate, and maintain the interconnection structure within their existing ROW. The interconnection would require 0.1 acre of permanent impact. All impacts to environmental resources from Western's Federal action would be restricted to the existing ROW.

Construction, operation, and maintenance of the interconnection would not affect recreation, geology and paleontology, environmental justice, or cultural resources.

Soil erosion impacts would be minimized by using "Best Management Practices" typical of Western construction activities. Vehicle emissions and fugitive dust would occur during construction of the interconnection, but would be short term and minimized by dust suppression measures as necessary. No surface water bodies or wetlands are found on the interconnection site, and soil erosion measures would prevent material from leaving area surrounding the interconnection and entering surface waters.

The vegetation immediately around the interconnection structure would be converted from non-native grasses. The area is already within existing ROW. Wildlife would be expected to relocate during the construction period, and return to the area following construction. Construction would not occur during the April 15 – June 15 bird nesting season. No federally listed species are found on the site, and the interconnection would not pose a hazard to migrating whooping cranes. None of the habitat types for Species of Conservation Priority (SoCP) identified by the NDGF are present at the interconnection site.

Construction of the interconnection would result in a small, temporary, positive impact on socioeconomics. Land use on the site would not change as it is within the existing transmission line ROW. The interconnection would be visible from Highway 200 but would not appear much different to passing motorists from the existing Western transmission line. Temporary noise would be generated during construction of the interconnection, but as the interconnection would be located along an existing State highway the amount of noise would not exceed existing noise levels. The interconnection would generate a low level of noise when in operation, but would be no different from the existing transmission line. No residences are located near the interconnection.

Health and safety issues during construction would be managed by compliance with applicable worker safety laws and regulations. As with all construction activities, there would still be a risk of worker injuries, but the risk should be low. Health and safety issues for local residents include

electrocution hazards, stray voltages, electric and magnetic fields, and intentional destructive acts. Electrocution hazards would be minimized by compliance with utility industry standards for clearances and grounding. Severe weather could cause damage to the transmission line, and allow conductors to reach the ground. Grounding would cause substation relays to trip, de-energizing the line and rendering it safe. Stray voltages, induced currents, and nuisance contact shocks are well understood and would be avoided by proper grounding of the transmission line and of large metallic objects near the transmission line, such as fences. The possible effects of electric and magnetic fields have been debated by researchers for over 30 years, and as yet no cause/effect relationship has been demonstrated. Field levels would drop to background levels within 100 feet of the interconnection, and there are no residences nearby. Intentional destructive acts would likely be confined to random vandalism, such as equipment damage or theft of metals. To date, little vandalism has occurred on any of the existing electric transmission and distribution infrastructure. The effects of an outage would be localized, and would not result in major system disruptions. None of the health and safety issues would be of concern providing applicable laws and standard utility practices are followed.

Summary: The EA identified no direct, indirect, or cumulative significant impacts to the human environment that would result from the construction, operation, and maintenance of Western's proposed interconnection.

ENVIRONMENTAL IMPACTS OF MEC'S PROJECT: The EA evaluated the potential for MEC's Project to impact environmental resources found in the study area. MEC incorporated mitigation measures and best management practices in the description of its Proposed Project. The analysis of environmental impacts identified no potential impacts that would be considered significant, and no mitigation measures that should be implemented additional to those already embedded within the Project description. The principal reasons for the lack of significant environmental impact was the avoidance of sensitive resources during siting of the transmission line and substation, the minor amount of disturbance at structure locations, and MEC's efforts to work cooperatively with affected landowners.

Recreation: MEC's Project would not affect hunting or snowmobiling, the predominant recreational activities in the study area.

Geology and Paleontology: There are no areas of geologic instability in the study area, and risk of seismic activity is low. A review of existing information revealed no known paleontological resources that could be affected.

Soils: Soils in the study area consist of loams, silt loams, and clay loams. The Proposed Project would permanently disturb a small amount of soil, 0.4 acre for the transmission line and 0.9 acre for Mountain Substation. With implementation of the BMPs, soil erosion would be prevented and contained. Typical construction BMPs for minimizing erosion (e.g., silt fencing, straw bales, mulching, re-seeding, etc.) would be employed to reduce disturbance impacts. The amount of land permanently impacted by the Project is very small. No substantive impacts to soil are expected.

Air Resources: Air resources would be temporarily impacted by vehicle and equipment emissions and fugitive dust during construction activities. Neither National nor State Ambient Air Quality Standards would be exceeded. Emission and dust levels would be low, and any impact minor and temporary.

Water Resources and Water Quality: Nine streams would be spanned by the transmission line. Sixteen wetlands are found within the ROW, mostly associated with streams. They are typically seasonally flooded, and some are created or modified by earthen dams to create livestock ponds. Many of these have been affected by agricultural practices, or by cattle grazing and trampling. MEC's Project would span or avoid surface water features in the ROW. The actual poles would be placed outside of the stream crossings by 50 to 150 feet and wetlands by 20 to 100 feet. One stream crossing would be 30 feet from the creek tributary but the tributary appeared to be dry frequently. BMPs as described under Soils would prevent or minimize erosion, and any deposition in surface waters. Refueling would not occur near surface waters, and spill kits would be available for any accidental spills. The Project would not affect groundwater.

Vegetation: Since the Proposed Project would be constructed along a portion of Highway 200 and along section and quarter section lines, minimal impacts to agricultural vegetation would be anticipated. No sensitive vegetation communities were identified during field surveys that would be affected by the Proposed Project. The Proposed Project would limit impacts to existing vegetation primarily to the locations where poles are located. Areas disturbed due to construction activities would be restored to pre-construction contours and, if acceptable to the affected landowner, would be reseeded with weed-free regionally native seed mixes recommended by local land management agencies. A small 1.9 acre native prairie remnant would be spanned as would a small wooded swale.

Wildlife: Wildlife present in the study area includes mammals, songbirds, raptors, waterfowl, and upland game birds common to the upper Great Plains. However, the lands the proposed Project would affect are nearly entirely devoted to active agriculture or pasture and are not high-quality wildlife habitat, and the amount of land permanently removed from production is small. Temporary disturbance would generally be limited to no more than a year with the BMPs in place. Construction activities would displace individuals temporarily, but they would be of very short duration in any given location, and wildlife would return to the area soon after construction was completed. Nesting birds would be avoided by delaying construction until after the April 15 to June 15 nesting season. There would be no impact on nesting birds. No discernable impacts to wildlife habitat are therefore expected.

Avian collisions and electrocution could occur after the transmission line is constructed. MEC plans to install bird flight diverters across potential migratory waterfowl flyways (e.g., drainage-ways) crossed by the route. MEC has prepared an Avian Protection Plan (APP) for the Proposed Project that describes the measures, including the bird flight diverters, that MEC would use to reduce the bird collision potential. Based on these measures, impacts to avian species would not be expected to be significant or affect populations. MEC's transmission line would meet Avian Power Line Interaction Committee guidelines to minimize electrocution risk to birds. Perches like fence posts and distribution line poles are already available, and any incremental effect from the

proposed transmission line would be localized and negligible. Under the APP, MEC will report all transmission line avian mortalities to the USFWS once a year.

Special Status Species: The USFWS identified 6 federally listed threatened or endangered species that could occur in the study area, including: pallid sturgeon, interior least tern, piping plover (and piping plover critical habitat), whooping crane, black-footed ferret, and gray wolf. The Dakota skipper is listed as a candidate species but no suitable habitat was found in the study area. Pallid sturgeon, and interior least tern are associated with river habitat, and no suitable habitat was identified near the study area. Designated critical habitat for the piping plover occurs along the Missouri River in Dunn County, but outside of the study area. No prairie dog towns were found in the study area; therefore, no suitable black-footed ferret habitat is present. Gray wolves have only been observed near the Turtle Mountains, approximately 250 miles from the study area; therefore, the Proposed Project would have no effect on gray wolves. MEC's proposed Project would have no effect on these 4 species.

Although there were no piping plovers observed in the study area, they are opportunistic breeders and will nest at different sites at different years. Suitable alkali wetlands do occur in the project area and there may be scattered unidentified nesting sites as well. However, due to the distance of the proposed action from the known nesting areas on the Missouri River and the agreement of MEC to mark their lines near wetlands, Western has determined the proposed action may affect but would not likely adversely affect the piping plover.

The proposed Project is located within the 200-mile wide migration corridor for the whooping crane. Whooping cranes are frequently seen throughout the State during spring or fall migration. Crane collisions with overhead lines have been reported particularly during low level flights between feeding and roosting areas. Although there are some wetlands along the project route, they consist of deeply incised creeks, creeks bordered by heavy brush and trees, or degraded dug-out livestock watering developments near farmsteads. All of these were found to be generally unsuitable for crane roosting or feeding habitat. Overall, there is little feeding and roosting habitat in the area, and none within one mile of the project. There is a chance that a whooping crane could collide with shield wires or the transmission line as they migrate through the area.

Although there are some wetlands and native grasslands that occur in the area, there have been only three whooping cranes sighted in Dunn County since 2000. Western has determined that due to the small numbers of whooping cranes utilizing the project area, the lack of suitable feeding and roosting habitat within one mile of the project, and the agreement with MEC to mark the static lines near wetlands with the best currently available technology to alert birds to the presence of an obstacle in the flight path, the proposed action may affect but is unlikely to adversely affect the whooping crane.

By following these mitigation measures, Western determined that the Proposed Project would not affect pallid sturgeon, interior least tern, piping plover critical habitat, black-footed ferret, or gray wolf, but may affect, but is not likely to adversely affect, whooping cranes and piping plovers. USFWS concurred with Westerns determination on June 15, 2009.

North Dakota Game and Fish indicated that there are several Species of Critical Concern that have been documented in the Missouri Slope geographic region, within Dunn County. Surveys for native prairie, rock outcrops, wetlands, and suitable grasslands were conducted. Biological surveys of the project area found none of these species, or any species specific suitable habitat. It is unlikely that any of these state listed species would be affected by the Proposed Project.

Socioeconomics: The transmission line and substation would not impact any community facilities in Killdeer or the county. No residences or agricultural buildings in the county would be displaced. Socioeconomic impacts resulting from the Proposed Project would be primarily positive. There is a one-time influx of money into the study area for purchase of the transmission line easements and of proposed Mountain Substation site. Land owners would see a one-time economic benefit from ROW easements. Over the long term, the additional power that would be supplied to the area would allow oil extraction activities to continue to grow, resulting in new job opportunities.

Environmental Justice: There are no low-income, minority, or subsistence populations in or around the study area that would be disproportionately affected by the Proposed Project. The proposed transmission line has been routed to avoid placing the line within 500 feet of occupied residences.

Land Use: The Project area would be located in rolling hills, cropland, and pasture typical of west central North Dakota. Land use in the area is predominantly agricultural and grassland. A number of pasture tracts as well as an elk farm are also found in the study area. Oil wells and oil infrastructure have become common in the past 10 years, and are found throughout the area. Wetlands, coulees, woodlands, and native prairie are also found scattered in the landscape, although these habitats occupy a very small percentage of the land area.

Temporary and short-term impacts would occur from construction activities due to removal of existing agricultural land from crop or forage production. During construction, temporary impacts such as soil compaction and crop damage are likely within the working ROW and along any temporary work space such as access roads and material storage areas. MEC would compensate landowners for crop damages that may occur as the result of the Proposed Project. This compensation may be by either providing financial compensation to landowners, or by using contractors to chisel plow the disturbed area.

Permanent impacts to cropland would be localized to pole placement with 0.002 acre of impact per pole structure. The total impact would be minimal with 1.5 acres of permanent impact associated with the transmission line and substation compared to 4,171 acres of agricultural land within a quarter mile of the transmission line. The proposed route segments minimize impacts to farmland by paralleling existing road section lines, quarter section lines, and property lines wherever possible. The route for the transmission line was identified based on landowner preference to minimize loss of farmland and ensure access to the land near the poles.

Visual: During construction there would be temporary visual impacts associated with seeing equipment and construction crews along the transmission line and at the substation. However, these crews would only be at a particular location along the transmission line for a few days at a

time, while poles are being delivered, set, or strung with wire. The crews would be at the proposed Mountain Substation for a longer period of time. Minimal clearing of trees or grasslands would be needed and the landscape and the vegetation would be reseeded upon completion of the transmission line minimizing visual changes in the landscape. The equipment in the area and amount of vegetation clearing would be comparable to or less than that resulting from oil and gas drilling activities in the area.

The proposed Mountain Substation would be located in an old pasture area, and would consist of a fenced, graveled area with a control house, transformer, regulator, and re-closer, and would be located adjacent to Highway 22. One residence would be located approximately 800 feet from the new substation, but would be separated by an existing windbreak. The proposed 115-kV transmission line structures would consist of single poles, set approximately 350-400 feet apart. The transmission line would pass through primarily agricultural land and by a few rural residences, all which are located farther than 500 feet from the transmission line. Views would be blocked by shelterbelts surrounding the residences and the rolling topography, however the Proposed Project may be visible to those traveling on highways and county and township roads. For most of the route, the visual impact from the proposed transmission line would be negligible or only incremental compared to existing conditions. The background views of the Killdeer Mountains would remain unchanged and the views for which the Killdeer Mountain Four Bears Scenic Byway (Highway 22) was designated would not be compromised by the Proposed Project. Overall the Proposed Project would not dominate the viewshed or visual resources in the area.

Noise: Peak ambient noise levels in the study area are typically in the 40 to 55 decibel range on the A-weighted scale, or dBA. Wind noise and associated vegetation rustling vegetation is the largest component, with contributions from farm equipment, road traffic, and birds. There are no sensitive noise receptors within 500 feet of the proposed transmission line, the nearest receptor to the proposed 115-kV line would be a gas station directly adjacent to the line and right off Highway 200. However, gas stations are not usually considered sensitive noise receptors due to the presence of vehicles coming and going. The proposed Mountain Substation would consist of one 115-24.9-kV transformer. The nearest receptor, which is a residence, is approximately 800 feet from the proposed Mountain Substation. This receptor would be further blocked from the substation by an adjacent shelterbelt. Substation noise would likely be inaudible at the nearest residence. Construction noise would be temporary, occurring over a few months during daylight hours. Noise impacts are expected to be negligible.

Health and Safety: Health and safety issues include construction-related injury risks, electrocution hazards, stray voltages, electric and magnetic fields, and intentional destructive acts. Potential construction injuries would be minimized by the construction contractor complying with applicable Federal and State worker safety laws. Electrocution hazards would be minimized by fencing and signage around the substations and compliance with utility industry standards for clearances and grounding. Severe weather could cause damage to the transmission line, and allow conductors to reach the ground. Grounding would cause substation relays to trip, de-energizing the line and rendering it safe. Stray voltages, induced currents, and nuisance contact shocks are well understood and would be avoided by proper grounding of the transmission line and of large metallic objects near the transmission line, such as fences.

The possible effects of electric and magnetic fields have been debated by researchers for over 30 years, and as yet no cause/effect relationship has been demonstrated. The issue is moot in this case as there are no residences within 300 feet of the transmission line or substation, and field levels would drop to background levels within that distance. Intentional destructive acts would likely be confined to random vandalism, such as shooting at insulators, or theft of metals from substations. The substations would be fenced, but there is little that can be done to completely protect the facilities from determined thieves and vandals. The effects of an outage on the line would be localized, and would not result in major system disruptions. None of the health and safety issues would be of concern providing applicable laws and standard utility practices are followed.

Cultural Resources: Records searches and a Class III intensive pedestrian survey was conducted within the Area of Potential Effect (APE), including within a 150-foot-wide corridor centered on the transmission line, within 150 feet the proposed Mountain Substation and within a 100-foot-wide corridor centered along the temporary access roads. Seven archaeological sites and eight isolated finds were identified. No historic resources were found during the field surveys, only pre-historic archaeological sites. No historic structures survey was completed, because no buildings or structures are located within the APE. The Proposed Project would not result in an adverse impact to these resources as only two of the identified sites are within the ROW. These two sites would be flagged and avoided during construction, and spanned by the transmission line.

Eight Native American Tribes or Communities have historical affiliation to the general study area. Consultations with these tribes were initiated by Western in September 2008. Based on these consultations, no traditional cultural properties were identified within the APE. No Native American Religious Concerns were identified.

Cumulative Impacts: Oil and gas development of the Bakken field are anticipated to continue occurring in proximity to the Proposed Project, but exact locations and scope of these future developments are not known. This sort of information is generally confidential and proprietary, is still being defined, or is subject to further analysis. Oil and gas development is closely tied to prices, and it is anticipated that low or fluctuating prices would result in comparatively less development. However, Dunn County is located in a prime location in the Bakken field, and the number of permits for wells remains steady. Wells require power for the pumps, so distribution feeds to well sites would be required as wells are developed. In general, the agricultural, low population character of the area would be slightly changed by the yet-to-be-determined level of oil and gas development. The changes are not expected to be significant in a cumulative sense.

Summary: The EA identified no direct, indirect, or cumulative significant impacts to the human environment that would result from the construction, operation, and maintenance of MEC's proposed Killdeer to Mountain Transmission Project.

DETERMINATION: Based on the information contained in the EA, Western has determined that its action to approve the interconnection request, and MEC's Proposed Project, would not constitute a major Federal action significantly affecting the quality of the human environment within the meaning of NEPA. Therefore, considering the impact

mitigation measures and BMPs as described in the EA that are to be implemented over the course of the Project, preparation of an environmental impact statement is not required, and Western is issuing this FONSI.

Issued at Billings, Montana, on 6/17, 2009.

Robert J. Harris
Regional Manager
Upper Great Plains Region

6/17