November 2006
DOE/EA-1456

DEPARTMENT OF ENERGY
Western Area Power Administration
Finding of No Significant Impact
Cheyenne-Miracle Mile and Ault-Cheyenne Transmission Line Rebuild Project
Carbon, Albany and Laramie Counties, Wyoming and Weld County, Colorado

Summary - Western Area Power Administration (Western) is proposing to upgrade the existing Cheyenne-Miracle Mile (CH-MM) and Ault-Cheyenne (AU-CH) 115 kilovolt (115-kV) transmission lines to 230 kV. The proposed project consists of rebuilding these transmission lines and making modifications to Western's existing Miracle Mile, Cheyenne and Ault Substations to accommodate the 230-kV circuits. A new Snowy Range Substation would also be built near Laramie, Wyoming.

The environmental assessment (EA) Cheyenne-Miracle Mile (CH-MM) and Ault-Cheyenne (AU-CH) Transmission Line Rebuild Project (DOE/EA-1456) was distributed for pre-approval review on June 21, 2006. The EA was revised based on comments received, and the EA was approved on November 20, 2006. Based on the EA, Western has determined that the proposed Cheyenne-Miracle Mile and Ault-Cheyenne Transmission Line Rebuild Project would not result in significant impacts and the preparation of an environmental impact statement (EIS) will not be required. The basis for this determination is described in this Finding of No Significant Impact (FONSI).

Contact for Further Information:
Rodney Jones
Environmental Specialist, NEPA Document Manager
Western Area Power Administration
P.O. Box 3700
Loveland, Colorado
Phone: (970) 461-7371
Fax: (970) 461-7213
rjones@wapa.gov

Copies of the EA and FONSI are available from the person named above. For general information on DOE National Environmental Policy Act (NEPA) activities contact:

Carol M. Borgstrom
Director, Office of NEPA Policy and Compliance, GC-20
U.S. Department of Energy
1000 Independence Avenue SW
Washington, DC 20585-0103
Phone: (202) 586-4600 or (800) 472-2756

Purpose and Need -- The purpose of the CH-MM and AU-CH Transmission Line Rebuild Project is to ensure Western's ability to provide reliable and cost efficient electric power and to provide additional transfer capacity to Western's highly loaded TOT3 operations boundary. The

TOT3 boundary consists of six line sections along the border between Northeast Colorado and Southeast Wyoming: Sidney-Sterling 115-kV, Cheyenne-Rockport 115-kV, Archer-Ault 230-kV, Sidney-North Yuma 230-kV, Laramie River-Ault 345-kV and Laramie River-Story 345-kV transmission lines. The Cheyenne-Rockport 115-kV line section is part of the AU-CH 115-kV Line.

Project Description – Under the proposed action, Western proposes to upgrade the existing 146 miles of the CH-MM 115-kV transmission line which crosses Carbon, Albany, and Laramie Counties in Wyoming and 35 miles of the AU-CH transmission line which crosses portions of Laramie County, Wyoming and Weld County, Colorado. The upgrade would remove the existing 115-kV H-frame structures and replace them with new 230-kV H-frame structures and single pole steel structures. Western also proposes to widen the existing right-of-way (ROW), where necessary to allow adequate electrical clearances. The proposed project entails the following specific actions:

Cheyenne-Miracle Mile Transmission Line Rebuild (146 miles).

No structural changes would be made to the existing transmission line for the first 6.6 miles south of the Miracle Mile Substation. This portion of the CH-MM line was reconstructed with lattice steel 230-kV structures in 1992. The existing 954 ACSR conductor, currently operated at 115-kV voltage is sufficient for future 230-kV operation.

Approximately 140 miles of the existing CH-MM 115-kV transmission line, including transmission structures, conductors and hardware would be dismantled and removed. The existing line would be dismantled from approximately 6.6 miles south of the Miracle Mile Substation to the Cheyenne Substation in Wyoming.

Approximately 1,017 new 230-kV wood H-frame structures would be installed along 134.8 miles of Western's ROW, from approximately 6.6 miles south of Miracle Mile Substation to the vicinity of the Happy Jack Substation, approximately 5.0 miles from the Cheyenne Substation.

Approximately 26 double circuit 115-kV/230-kV single pole steel structures would be installed for 5.0 miles through the City of Cheyenne, from the vicinity of the Happy Jack Substation to the Cheyenne Substation. Along this stretch of the proposed project, Western would remove both the existing CH-MM and HJ-MM H-frame structures. The new double circuit single pole steel structure would support both the proposed CH-MM 230-kV circuit and the existing HJ-MM 115-kV circuit. No widening of the existing ROW would be required along this stretch of the project.

Western would widen the existing CH-MM ROW for approximately 134.8 miles, from 6.6 miles south of the Miracle Mile Substation to the Happy Jack Substation, 5.0 miles west of the Cheyenne Substation. The ROW would be expanded to accommodate electrical clearances for the proposed 230-kV transmission line. ROW expansion requirements would vary, depending on the width of the existing ROW and whether the existing ROW overlaps with the HJ-MM transmission line ROW.

No major new access roads would be constructed. Existing access roads would be used and improved where required to control erosion. Some spur roads within the ROW would be constructed where necessary to access new structure sites.

Ault-Cheyenne Transmission Line Rebuild (35 miles)

The existing AU-CH 115-kV transmission line, including wood H-frame transmission structures, conductors and hardware would be dismantled and removed for approximately 32 miles, from the Cheyenne Substation to approximately 3 miles north of the Ault Substation.

Approximately 166 double circuit 115-kV/230-kV single pole steel structures would be installed along 32 miles of the AU-CH transmission line ROW. The new double circuit single pole steel structures would support both the proposed AU-CH 230-kV circuit and the existing115-kV circuit.

From approximately three miles north of the Ault Substation (MP 32.1 to MP 35), Western would locate the proposed 230-kV AU-CH transmission line on Western's existing Archer-Ault lattice structures. Along this segment, approximately 24 new wood H-frame structures would be constructed, east of the existing ROW, in order to relocate an existing 115-kV circuit currently occupying one position on the lattice structures.

Western would widen the existing AU-CH ROW for approximately 30 miles, from 5.2 miles south of the Cheyenne Substation to the Ault Substation. The ROW would be expanded to accommodate electrical clearances for the proposed 230-kV transmission line. ROW expansion requirements would vary, depending on the width of the existing ROW and transmission facilities proposed. No expansion of the ROW is proposed for 5.2 miles south of the Cheyenne Substation.

No major new access roads would be constructed. Existing access roads would be used and may be improved if necessary to control erosion. Spur roads would be constructed within the ROW where necessary to access new structure sites.

Proposed Snowy Range Substation and Modifications to the Miracle Mile, Cheyenne and Ault Substations

Western is proposing to construct a new 'Snowy Range Substation' near Laramie, Wyoming, to sectionalize the Cheyenne-Miracle Mile and Cheyenne-Happy Jack-Miracle Mile 115-kV transmission lines and to make several upgrades to the existing Miracle Mile, Cheyenne and Ault substations.

The proposed Snowy Range Substation would be a 115/230-kV sectionalizing substation, approximately 16 acres in size. Western is acquiring approximately 32 acres for the new substation site and transmission line approaches into the substation. The substation equipment would consist of a three breaker 230-kV ring bus, one 200 MVA, 115/230-kV transformer and a six-bay 115-kV main and transfer bus. Construction of the 115-kV facilities would occur in 2007 followed by construction of 230-kV facilities in 2009.

Western would modify the existing Miracle Mile, Cheyenne, and Ault Substations. All substation changes would be within the existing fenced substation facilities. The Miracle Mile Substation additions would include two 230-kV line bays and one 200 MVA, 115/230-kV transformer. The Cheyenne Substation additions would consist of a three-breaker 230-kV ring bus and one 200 MVA, 115/230-kV transformer. The Ault Substation would be modified to add one 230-kV line bay.

The EA also analyzes cumulative impacts of the project in conjunction with long-standing agricultural activities in the area, transportation infrastructure, local economics, operation of the Happy Jack-Miracle Mile transmission line, and reasonably foreseeable proposed wind turbines, natural resource development projects, pipelines, and commercial and residential projects in the area.

The Public Process -- To allow an early and open process for determining the scope of issues and concerns related to the proposed action (40 C.F.R. 1501.7), the public was notified of the project by Western. Western notified Federal and State agencies, county government, Native American tribes, and affected landowners of its determination to prepare an EA and invited comments. Notification letters were dated December 9, 2002 and August 18, 2004. Western received responses from the following agencies: Department of the Army, Corps of Engineers, U.S. Fish and Wildlife Service, (USFWS) Wyoming and Colorado Field Offices, State of Wyoming, Office of Federal Land Policy, Wyoming Department of Transportation, Wyoming Game and Fish Department, Wyoming Department of State Parks and Cultural Resources, Colorado State and Wyoming State Historic Preservation Offices (SHPO), Wyoming Office of State Lands and Investments, and Colorado Division of Wildlife (CDOW). All correspondence from State and Federal agencies and Tribal governments is available. Comments received on the EA have been incorporated and considered in this determination on whether or not to prepare an EIS.

Western completed consultation with the Colorado and Wyoming SHPO to meet its obligations under the National Historic Preservation Act (NHPA, 16US.C. 470 et seq., 2000). The Colorado SHPO concurred on August 25, 2005 and the Wyoming SHPO concurred on February 23, 2006.

Western has met its obligations under the Endangered Species Act (7 US.C. 136; 16 US.c. 460 et seq. 1973). The USFWS concurred with Western's determinations for threatened or endangered species on November 8, 2006.

Alternatives -- DOE's NEPA regulations require that an EA include a discussion of the proposed project and the no action alternative (10 C.F.R. 1021.321(c)). The EA identifies and analyzes the consequences of the proposed project and the no action alternative on the human and natural environment. The no action alternative provides a baseline against which the effects of the proposed action may be compared. The site-specific and direct impacts associated with the proposed CH-MM and AU-CH Transmission Line Rebuild Project would not occur in the project area if the project does not go forward. In addition to the proposed project, two transmission line routing alternatives are evaluated. Alternatives were identified to minimize impacts to land uses, visual resources, wetlands and soils. These alternatives include:

<u>CH-MM Alternative Route 1</u>

CH-MM Alternative Route 1 is approximately 16.2 miles long, located north and west of Laramie, Wyoming, and is divided into two parts, A and B. The alternative would diverge from the proposed project as follows:

Mile Post (MP) 40 to MP 91 – This segment includes the swap of the CH-MM and Happy Jack-Miracle Mile (HJ-MM) line sections near the Medicine Bow Tap (MP 47), to continue connection of the Medicine Bow Tap to the remaining HJ-MM 115-kV line. The existing HJ-MM line section is rerouted onto the original CH-MM ROW and the new CH-MM 230-kV line is rerouted onto the HJ-MM ROW.

MP 91 to MP 100 – This segment includes CH-MM Alternative Route 1, Part A and B. Part A is identified as the 230-kV wood H-frame structure rebuild north of Laramie from MP 91 to MP 100 on existing HJ-MM ROW. The remainder of CH-MM Alternative Route 1, Part B is the swap of the CH-MM and HJ-MM lines near MP 91 to construct the new 230-kV line on the HJ-MM ROW and to rebuild a portion of the HJ-MM line on the original CH-MM line section from MP 91 to the Laramie Substation. This portion of the line construction on the original CH-MM line section would consist of 115-kV single circuit wood H-frame, except from approximately MP 97 to MP 99 where single pole steel structure construction would occur.

CH-MM Alternative Route 1 allows Western to use the existing ROW of the HJ-MM 115-kV line section under Part A for the CH-MM transmission line rebuild, rather than incur the cost of new ROW in parallel with the existing line. The ROW would be widened. Rebuilding Part B from Snowy Range Substation to the west line split, allows Western to remove the existing line and to rebuild the new portion of the 115-kV HJ-MM transmission line, again using an existing ROW. The ROW would be widened. Pursuing CH-MM Alternative Route 1 allows Western to minimize transmission line outages during the construction of the line swaps at Medicine Bow Tap and at the West Split. Further, once the swaps have occurred, Western has the ability to deenergize nearly 100 miles of line from the Miracle Mile Substation to the Snowy Range substation to systematically remove and rebuild the transmission line on the existing ROW.

AU-CH Alternative Route 2

AU-CH Alternative Route 2 consists of localized realignments of the proposed project between MPs 17 and 32.5, where Western's AU-CH and Archer-Ault (ARH-AU) transmission lines are intermittently located east and west of rural homes and buildings, respectively. Under this alternative, the AU-CH line would be located adjacent and parallel to the existing ARH-AU transmission line.

Environmental Impacts -- Western's conclusions about the proposed project's environmental impacts are based on information contained in the EA issued in June 2006. The EA is available upon request. In reaching conclusions about the proposed project's environmental impacts, Western has considered the proposed project, which explicitly incorporates Western's Standard Construction, Operation, and Maintenance Practices; and has developed a number of project-specific measures to address impact issues for the project Applicant-committed Mitigation Measures (collectively, environmental protection measures) to avoid and minimize impacts to the extent feasible.

The existing environment and potential environmental impacts were identified and evaluated for the following resources:

Air Quality
Geology, Soils, and Paleontology
Water resources
Floodplains and wetlands
Vegetation
Wildlife
Special Status and Sensitive Species
Cultural Resources
Land Use, Socioeconomics, Community Resources, and Transportation
Visual Resources

Based on the EA, Western has concluded that, with the environmental protection measures proposed for the project, the construction and operation of the proposed CH-MM and AU-CH Transmission Line Rebuild Project would not require mitigation beyond that already proposed by Western. Western prepared a Mitigation Action Plan, which will be made available upon written request.

The basis for Western's conclusions about the proposed CH-MM and AU-CH Transmission Line Rebuild Project impacts to these resources is summarized below.

Air Quality – The proposed project and alternatives would have very minor, local, short-term effects on air quality, limited primarily to short-term emissions from construction vehicles and fugitive dust generated by construction activity. The project would have no effect on climate. The project and alternatives would be in compliance with National Ambient Air Quality Standards and the State Implementation plans for both Wyoming and Colorado. There are no federal or state permitting requirements for this source type. Western has concluded that no direct, indirect, or cumulative significant impacts to air resources would occur from the construction and operation of the proposed CH-MM and AU-CH Transmission Line Rebuild Project.

Geology, Soils and Paleontology – There are no known geologic hazards (i.e. areas prone to liquefaction, active wind blown sand or landslides) within the project area, although numerous steep slopes are present in the northern part of the CH-MM ROW. The project area also crosses several fossil-bearing formations along the CH-MM route including the Cloverly (Jurassic), Sundance (Jurassic) and Morrison (Jurassic) Hanna (Paleocene). The proposed project and alternatives would result in surficial soil disturbances at localized areas within Western's ROW. Short-term impacts on soils would result where project construction activities cause the loss of vegetation cover. Along the proposed project transmission line ROWs, these areas would be limited to structure sites, and where Western's existing access road is improved with minor re-grading and where spur roads are built. No blasting would be required for structure hole excavations, which would typically be 6 to 10 feet deep. Soils disturbances would also occur at the new Snowy Range Substation site. Impacts to soils would be less than significant for the proposed project and alternatives due to the relatively minor amounts of surficial disturbances that would occur. In total, the proposed project or alternatives would result in the short-term disturbances of approximately 501 or 525 acres, respectively, for the transmission line rebuilds and 32 acres at the new Snowy Range Substation site. Long-term soil disturbance would be 0.9 acres for CH-MM, 0.1 acres for AU-CH, and 16 acres for the Snowy Range Substation. Western would implement a number of standard measures to control erosion and facilitate the re-growth of native vegetation in disturbed areas. Western has concluded that the proposed CH-MM and AU-CH Transmission Line Rebuild Project would not cause direct, indirect, or cumulative significant impacts to geology, soils, or paleontology with proposed mitigation measures implemented.

Water Resources – The project area is within the North Platte and South Platte River watersheds. The proposed project crosses 232 surface waters, with the largest surface waters being the Medicine Bow and Laramie Rivers in Wyoming. Water quality within the project area ranges from good to poor and surface water use is primarily for agriculture, livestock and wildlife ponds. The proposed project and alternatives would have minor, and less than significant impacts on surface waters and water quality since all surface waters would be spanned, and no surface water use is proposed. Western would also implement standard construction measures to ensure that the potential for accidental discharges or contamination are minimized during the construction of the project and during routine maintenance activities. Standard construction measures, including erosion control measures, would also be implemented to reduce the potential for sedimentation and water quality impacts.

The impacts of the alternatives would be similar to the proposed project. CH-MM Alternative Route 1, Part A would cross seven surface water bodies. CH-MM Alternative Route 1, Part B would also cross 7 surface water bodies. No surface waters are crossed by AU-CH Alternative Route 2.

Floodplains and Wetlands – The proposed project would cross or intersect floodplains at 16 locations on the CH-MM transmission line ROW and at two locations on the AU-CH transmission line ROW. The largest floodplains are at the Little Laramie River/Brown's Creek confluence northwest of Laramie and at the Rock Creek/Three Mile Creek/Coal Bank Creek confluence southwest of Rock River. The proposed project would also intersect or cross an estimated 54 potential wetlands. No floodplains or wetlands occur at or adjacent to the Snowy Range Substation, with the closest water way being approximately 0.5 miles away. The impacts of the proposed project would be low, and less than significant where floodplains and wetlands would be spanned. The floodplains and wetlands crossed at the Rock Creek/Three Mile Creek/Coal Bank Creek and the Little Laramie River cannot be spanned, however, because of the width, thus some direct disturbance in these wetlands and floodplains would occur. Disturbances would be limited to the installation of up to two structures (approx. 0.3 acre during construction). Long-term disturbance would be limited to the footprint of up to two structures (less than 0.001 acre). Western would implement a number of standard construction practices and mitigation measures to minimize erosion and sedimentation. Western would also implement a Spill Response Plan to control and clean up any accidental spills.

The alternatives would have similar potential impacts to wetlands and floodplains. CH-MM Alternative Route 1, Part A would cross one floodplain at the Laramie River, where two structures would also be required in the floodplain due to its width at this location. For Part B of CH-MM Alternative Route 1 (the rebuild of the HJ-MM 115-kV transmission line on the existing CH-MM 115-kV transmission line ROW), the floodplain at the Laramie River would also be crossed. AU-CH Alternative Route 2 does not cross any floodplains or wetlands and thus would not impact these resources.

Vegetation – The proposed project and alternatives would result in the short-term disturbance of 501 or 525 acres, respectively, of predominantly native vegetation along the transmission line ROWs. An additional 32 acres would be disturbed temporarily at the new Snowy Range Substation. Predominant vegetation types affected include mixed grass prairie, short grass prairie, Wyoming big sagebrush steppe and dry land and irrigated cropland. The vast majority of area affected during construction would be reclaimed following construction. Approximately 1.0 acre would be disturbed long-term within the ROWs for the proposed project or alternatives, and an additional 16 acres would be disturbed long-term at the new substation. Impacts to vegetation would not be significant due to the relatively small amount of area disturbed long-term and the short-term nature of construction disturbances. Western would also use standard construction practices to minimize the introduction and/or spread of invasive species or weeds.

Wildlife – The project area supports habitat for a number of wildlife species, including big game (pronghorn, elk), smaller mammals, raptors, upland game birds (greater sage-grouse, Columbian sharp-tailed grouse), other birds (passerines, waterfowl, shorebirds, waders) and fisheries. The proposed project would have the potential to impact critical winter range of pronghorn or elk, as well as result in the direct mortality of small, less mobile mammals within the corridor, or disturb active raptor nests. The potential for these types of impacts occurring would be minimized below a level of significance with Western's standard construction practices and mitigation measures. Construction would not occur between November 15th and April 30th, unless an exception is

granted by BLM, and Western would conduct raptor nest inventories prior to construction to implement appropriate mitigation to prevent the project from disrupting active nests. Western would also implement standard construction and design mitigation practices to eliminate the potential for raptor electrocution. Risks of collision would be similar to the existing conditions, since the existing transmission facilities have been a part of the landscape since the 1930's. The impacts of the alternatives would be the same or similar to those of the proposed project.

Special Status and Sensitive Species – The following federally threatened, endangered, proposed and candidate species (TEP&C) and their critical habitats are known to occur within the proposed project area: Preble's meadow jumping mouse (threatened, recently recommended for de-listing), bald eagle (threatened), Colorado butterfly plant (threatened), and Ute ladies tresses (threatened). Western would minimize the potential to impact these species through pre-construction surveys and a variety of avoidance measures. Avoidance and mitigation measures for TEP&C species are incorporated in Western's standard construction and mitigation measures. The downstream Platte River species could be affected if water is used for soil compaction during construction of the Snowy Range Substation, but mitigation would not be required because the U.S. Forest Service and the USFWS have provided funds to the Fish and Wildlife Foundation account for the purposes of offsetting the adverse effect of Federal agency actions resulting in minor water depletions, such as the CH-MM and AU-CH project. The impacts of the alternatives would be the same as the proposed project.

Cultural Resources – Class I and Class III cultural resource surveys have been conducted for the proposed project and alternatives. Significant cultural resources are defined as those listed on, or eligible for listing on, the National Register of Historic Places (NRHP). Fifteen eligible or recommended as eligible sites were recorded on the CH-MM transmission line ROW and 5 eligible or recommended as eligible sites were recorded on the AU-CH transmission line ROW. Western's Standard Construction and Mitigation Practices would be implemented to minimize the impacts on cultural resources, which include avoiding direct impacts to sites where feasible through careful pole placements, removing existing structures by cutting structures at ground surface, and avoidance of sites during construction. If avoidance of all eligible sites is not feasible, a mitigation plan would be implemented prior to construction. Impacts from the alternatives would be the same or similar to those of the proposed project. Three significant sites lie along CH-MM Alternative Route 1, Part A, however, the segments of these eligible resources within the project area are considered non-contributing portions.

Land Use, Socioeconomics, Community Resources, and Transportation – The land use of the project area is predominantly open space land area, with Western's existing transmission lines and ROWs being established land uses since the 1930's. Large ranches, rangeland, dryland farming and irrigated fields are the predominant uses within and adjacent to the project ROWs. Developed park and recreation areas are limited in the project area to the vicinity of the Miracle-Mile Substation, where recreation use occurs at the Seminoe State Park and Reservoir. The Bennett Mountains Wilderness Study Area (WSA) is also located immediately adjacent to the ROW near Seminoe State Park and Reservoir. Developed community areas are also adjacent to the CH-MM ROW where the transmission line crosses through portions of Laramie, Wyoming and Cheyenne, Wyoming, and where the AU-CH ROW similarly crosses through parts of Cheyenne, Wyoming and developing residential communities in Southern Wyoming. Two interstate highways (I-80 and I-25) and six US and State highways serve the area, including US 287/30 andUS85).

The proposed project and alternatives would result in minor, short-term impacts to quality of recreational experiences at the state park, reservoir and WSA due to the intermittent and

temporary presence of construction crews, equipment, and related noise, dust, and visual effects. Long-term, land use impacts would be very minor, since the proposed project and alternatives replace existing transmission lines along the same ROW. Overall, the proposed project would likely result in fewer structures being located on private properties and public lands due to the greater span length of the 230-kV structures. Due to the open space character of much of the project area, increased land use restrictions, potentially resulting from the wider ROW are unlikely to affect existing or planned land uses.

Through the developed community area of Cheyenne, Western is not proposing to widen the ROW. Consequently, land use impacts and ROW restrictions would not change over the existing conditions. However in the Laramie area, the ROW would increase from 50 to 105 feet wherever there is 230-kV H-Frame construction, for the proposed project and/or Alternative Route 1, Part A. This would extend from MP 91 to MP 100 for the proposed project and from the west split to Snowy Range Substation at MP 9, along the stretch of the existing HJ-MM ROW for Alternative Route 1, Part A. For Alternative Route 1, Part B, the ROW for the 115-kV construction (wood H-frame and single pole steel) would also increase from 50 feet to 70 feet in Laramie. This would occur from MP 91 to MP 100 at the Snowy Range Substation. These increases in ROW width in the more developed area around Laramie would not change existing land uses or interfere with current land use activities.

The proposed project would also result in less frequent maintenance activities being necessary during the life of the project. Consequently, the proposed project and/or alternatives would have long-term beneficial effects to land uses that may be sensitive to noise or dust impacts from periodic maintenance activities.

The CH-MM Alternative Route 1, Parts A and B would not change the existing land uses. Part B would have a slightly beneficial impact on land uses between MP 97 and MP 99 where the HJ-MM 115-kV transmission line would be rerouted along the existing CH-MM ROW. Within this area, the wood H-frame structures would be replaced by single circuit single pole steel structures. The increased span of the single pole steel structures would reduce the number of structures located within this agricultural and industrial area, which could positively impact land uses. Replacement of the wood H-frames in this area would also reduce the potential impact on wetlands, since the single pole steel structures would likely require less maintenance.

The AU-CH Alternative Route 2 would result in reduced long-term impact to land uses compared to the proposed project. The AU-CH Alternative Route 2 would reduce on-going land use impacts to several landowners and irrigated agricultural fields, by co-locating Western's existing ROWs adjacent to one another. Land use impacts of the proposed Snowy Range Substation site is similar and minor, since the site is an open space with no known proposed uses.

The proposed project and alternatives would have no long-term adverse impacts to socioeconomic conditions, community resources, or transportation systems. Short-term impacts would be beneficial economic activity in the project area.

Visual Resources – Visual resources in the project area include the Seminoe State Park and Reservoir, Bennett Mountain Wilderness Study Area in Wyoming; major travel routes in Wyoming and Colorado, including I-25, I-80, US 287/30, US 85, a number of Wyoming and Colorado State routes and residential areas and communities of Wyoming including portions of the incorporated communities of Laramie and Cheyenne, and unincorporated residential areas and recently developing subdivisions in southern Wyoming.

Visual impacts would occur during the short-term construction phase of the project, due to the presence of construction equipment, crews, and related dust. Long-term visual changes would result from the presence of the new transmission structures, hardware and conductors. Along the majority of the proposed project, Western would replace existing 115-kV wood H-frame structures, hardware and conductors with slightly taller and heavier structures and hardware that would be very similar in line, form, color and texture to the 115-kV facilities that would be removed. Consequently, the perceived visual changes would be very weak. Visual changes would also be minor and only slightly adverse along the vast majority of the project area, since there are few viewers along much of the project area.

The visual changes brought about by the proposed project would be more noticeable where Western is proposing to install the 115-kV/230-kV single pole steel structures through urbanizing areas of southern Wyoming. West of the Cheyenne Substation, the visual impacts of the project would range from slightly adverse to beneficial depending on viewer perception. In this area, Western would replace both the CH-MM and HJ-MM 115-kV H-frame structures with one set of single pole steel structures. Overall, beneficial visual impacts would result since there would be fewer structures and the single pole steel design is visually more compatible with urban design features. The proposed project would be more visually noticeable, however, since it would be approximately twice as tall as the 115-kV H-frame structures that would be replaced. South of the Cheyenne Substation, Western would also install the taller single pole steel structures through developing residential areas of southern Wyoming. Overall, the visual impacts to area residents, resulting from the increased height of these structures would be adverse, but less than significant. While the structure heights would be noticeably taller than the 115-kV wood H-frame structures, the spacing of the 230-kV structures would be greater, thus resulting in a reduction in the total number of structures seen.

The types of visual changes associated with CH-MM Alternative Route 1 would be similar in degree to the proposed project. The CH-MM Alternative Route 1, Part A, would result in slightly adverse long-term visual impacts, since the new 230-kV wood H-frame structures would be approximately 70 feet tall compared to the existing HJ-MM 115-kV structures, which have average heights of 52 feet. Overall, Part A of CH-MM Alternative Route 1 would result in weak visual contrasts in structure design and height compared to the existing setting.

CH-MM Alternative Route 1, Part B would cause long-term visual changes to the existing visual environment between MPs 97 and 99. From MP 91 to 97, the new 115-kV structures would be the same in design, height and material as the existing 115-kV structures which would be removed. The new structures would be wood H-frame in design and have typical heights of 52 feet. Consequently, no long-term visual effects would occur along this segment of the alternative. From MP 97 to 99, new single pole steel 115-kV structures would replace the existing H-frame wood structures. The proposed single pole steel structures would be approximately 82 feet tall, compared to the existing H-frames that have a typical height of 52 feet. This change in height would occur in industrial and agricultural areas west of Laramie primarily. Visual impacts from the increased height of the single pole steel structures would be mitigated or offset by both the single pole design and the reduction in the total number of structures. Consequently, on balance, this alternative would result in similar or less visual effects than currently occur from the existing 115-kV structures and lines.

The AU-CH Alternative Route 2 would result in similar minor and less than significant visual impacts as described for the proposed project and would improve the visual conditions for the residences affected by the alternative reroutes.

Determination – Based on the analysis in the EA, Western has determined that mitigation measures would reduce the potential for significant environmental impacts. The implementation of these measures is addressed in a Mitigation Action Plan (MAP) issued concurrently with the EA. The analyses contained in EA, along with the mitigation commitments in the MAP, indicate that the proposed action and alternative routes are not a major Federal action significantly affecting the quality of the human environment. Western has determined that preparation of an EIS is not required.

Issued: NOV 20 2006

Joel K. Bladow
Regional Manager