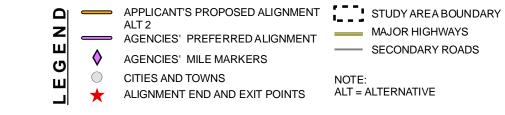




FIGURE 1.3-2 AGENCIES' PREFERRED ALIGNMENT MIDDLE



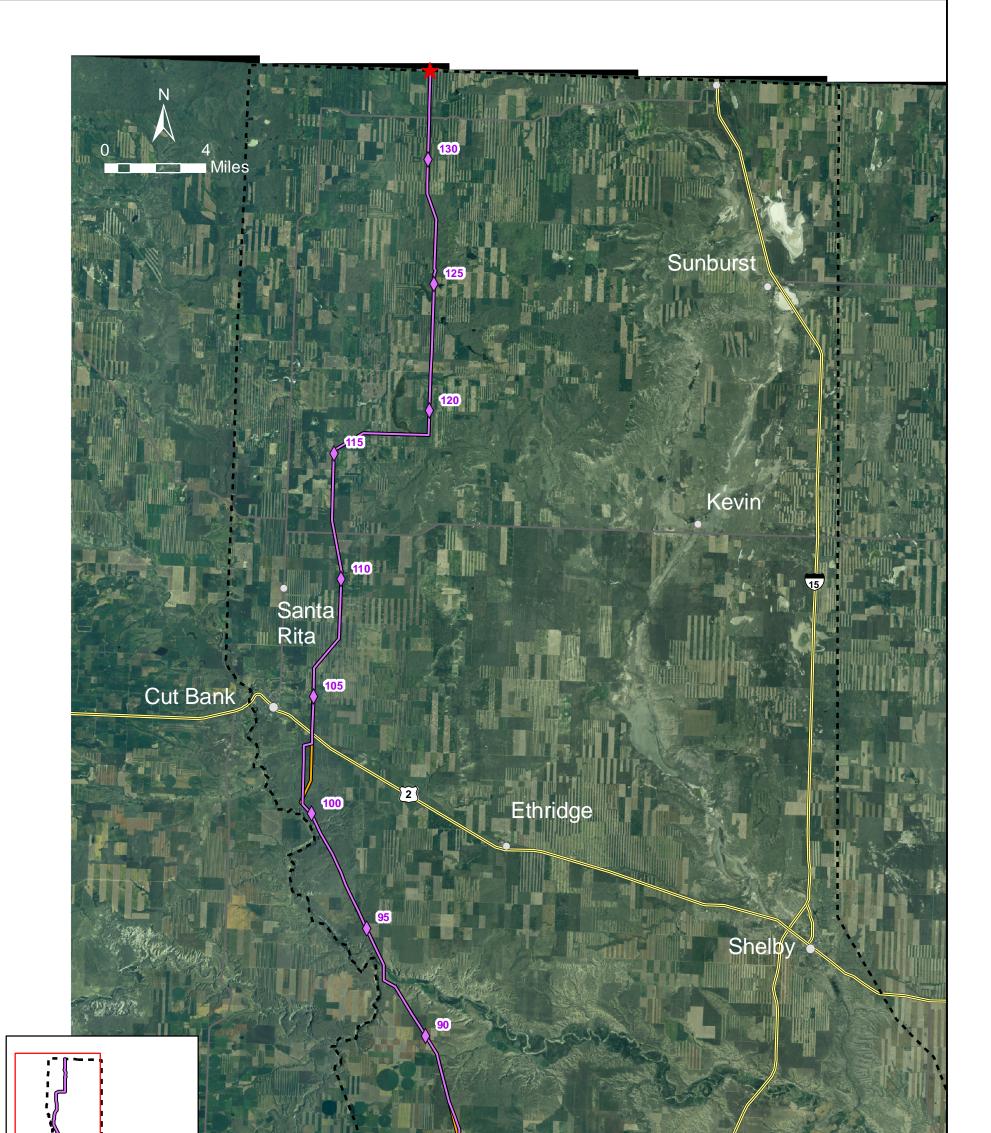




FIGURE 1.3-3 AGENCIES' PREFERRED ALIGNMENT NORTH

APPLICANT'S PROPOSED ALIGNMENT ALT 2 MAJOR HIGHWAYS Ζ MAJOR HIGHWAYS AGENCIES' PREFERRED ALIGNMENT ш - SECONDARY ROADS  $\diamond$ AGENCIES' MILE MARKERS Ċ NOTE: ALT = ALTERNATIVE CITIES AND TOWNS  $\bigcirc$ ш ALIGNMENT END AND EXIT POINTS

## 1.4 Agency Permitting Actions and Authorities

Together, DEQ, DOE, and BLM are responsible for the preparation of this EIS. DEQ administers MFSA, MEPA, the Montana Hazardous Waste Act, the Montana Water Quality Act, and the Clean Air Act of Montana. After a certificate is issued, MFSA (75-20-401[1], MCA) would preempt all other state and local laws except those pertaining to air quality, water quality, worker health and safety, noxious weed control, and instances where the state has a property right such as on state-owned land.

The location of the proposed MATL transmission line will conform to applicable state and local laws and regulations, except where the DEQ may refuse to apply any local law or regulation if it finds that the law or regulation is unreasonably restrictive in view of existing technology, of factors of cost or economics, or of the needs of consumers, whether located inside or outside the directly affected government subdivisions.

In addition to DEQ, DOE, and BLM, other local, state, and Federal agencies have jurisdiction over certain aspects of MATL's proposed Project. **Table 1.4-1** provides a comprehensive listing of agencies and their respective permit/authorizing responsibilities with respect to the proposed Project.

The initial step in the Montana regulatory process is filing of <u>an</u> application <u>for a</u> <u>certificate under MFSA pursuant to Title 75</u>, Chapter 20, MCA. MATL submitted its MFSA application in December 2005. For DOE, the initial step was MATL's submission of its application for a Presidential permit on October 7, 2005 (70 FR 65891, November 1, 2005). For BLM, MATL must submit an application for Transportation and Utility Systems and Facilities on Federal Land prior to beginning construction of the transmission line.

### Electricity Export Authorization

Exports of electricity from the United States to a foreign country are regulated by DOE pursuant to sections 301(b) and 402(f) of the Department of Energy Organization Act (42 U.S.C. 7151(b), 7172(f)) and require authorization under section 202(e) of the Federal Power Act (FPA) (16 U.S.C.824a(e)). However, in its application to DOE for a Presidential permit, MATL indicated that it intends to operate the proposed merchant transmission line as an "open access" transmission facility, as that term is defined by the U.S. Federal Energy Regulatory Commission, and that MATL would not export electric energy to Canada on its own account. Therefore, MATL does not intend to seek, nor does it require an electricity export authorization. However, any other entity exporting electricity to Canada using the MATL facilities, if authorized, would require an electricity export authorization issued by DOE.

TABLE 1.4-1 PERMITS AND OTHER REQUIREMENTS FOR THE PROJECT						
Permit <sup>a</sup>	Agency	Description	Authority			
	STATE					
Certificate of Compliance	Montana Department of Environmental Quality	Reviews project application, conducts reviews of project impacts, approves and coordinates other permit activities, and monitors project to determine compliance with terms of certificate.	Montana Major Facility Siting Act			
Section 401 Certification	Montana Department of Environmental Quality	Provides review of potential adverse water quality impacts from discharges associated with dredged or fill materials in wetlands and other Waters of the U.S.	Montana Water Quality Act			
318 Authorization	Montana Department of Environmental Quality	Provides for a temporary narrative water quality standard for turbidity due to construction.	Montana Water Quality Act			
Land Use License (DS-432)	Montana Department of Natural Resources and Conservation	Licensing structures and improvements on state lands and across navigable water bodies.	Title 77, MCA			
Pre-construction Authorization	Montana Department of Natural Resources and Conservation	Authorizes construction prior to easement grant by the Board of Land Commissioners	85-2-402 and 85-2- 407, MCA			
Utility Crossing Consultation and Occupancy Permit	Montana Department of Transportation	Jurisdictional authority for issuing encroachment and occupancy permits; issuing approach permits; and review and approval of modification to Federal-aid eligible highways.	60-6-111, MCA; Title 75, Chap. 20, Sec. 103 and 401			
FEDERAL						
Presidential Permit	U.S. Department of Energy	Issuance of a permit must be found to be consistent with the public interest and DOE must obtain concurrence of the Secretary of State and Secretary of Defense before permit can be issued.	Executive Orders 10485 and 12038			
Section 404	U.S. Army Corps of Engineers	Controls discharge of dredged or fill materials in wetlands and other Waters of the U.S.	Section 404 of the Clean Water Act (33 CFR 323.1, 330)			
Notice of Proposed Construction/ Alteration	Federal Aviation Administration	Structure location, height, lighting, and documentation relative to air traffic corridors.	14 CFR Part 77, Objects Affecting Navigable Airspace			

TABLE 1.4-1 PERMITS AND OTHER REQUIREMENTS FOR THE PROJECT					
Permit <sup>a</sup>	Agency	Description	Authority		
Safety Plan	Occupational Safety & Health Administration	Provides guidance to on-site construction worker safety along with emergency contacts, hospital routes, etc.	29 CFR 1910		
Tariff Review and Approval	Federal Energy Regulatory Commission	Approval of rates for transmission in interstate commerce for jurisdictional utilities, power marketers, power pools, power exchanges and independent system operators.	Title 18 CFR		
Review Authority	U.S. Department of Defense/U.S. Air Force	Review of construction plans for power pole placement for potential disturbance of buried cables for Minuteman missile silos.	Consultation and concurrence		
Consultation	U.S. Department of Defense Homeland Security	Presently required by U.S. security policy.	Consultation and concurrence		
Utility Permit for Interstate Crossing	U.S. Federal Highways Administration	Review and approval of Montana Department of Transportation permit for transmission lines in the Interstate Highway System right-of-way.	23 CFR Part 645		
Section 7 Consultation	U.S. Fish and Wildlife Service	Identifies any species and its habitat listed as endangered or threatened that may be impacted by the project.	Federal Endangered Species Act of 1973		
A Biological Opinion or Concurrence with the Biological Assessment	U.S. Fish and Wildlife Service	USFWS must concur with the Biological Assessment or prepare a Biological Opinion.	Federal Endangered Species Act of 1973		
Section 106 Consultation	Advisory Council on Historic Preservation and Montana State Historic Preservation Office	Consultation between project applicants and Federal agencies regarding impacts on cultural resources that are either listed or eligible for listing on the NRHP.	Section 110 and 106 of the National Historic Preservation Act		
Rights of Way on Federal Land	U.S. Bureau of Land Management	Easement on Federal land crossed by the project.	Federal Land Policy Management Act Subchapter V		
Compatibility Review	U.S. Department of Agriculture, Farm Service Agency	Facility siting on CRP contracted land requires a compatibility review to determine a facility's potential impact to the CRP status of the affected property.	Food Security Act of 1985		

TABLE 1.4-1 PERMITS AND OTHER REQUIREMENTS FOR THE PROJECT						
Permit <sup>a</sup>	Agency	Description	Authority			
LOCAL/COUNTY/OTHER						
Noxious Weed Management Plan	County Weed Control Districts	Provides containment, suppression, and eradication of noxious weeds.	Title 7, MCA			
Easement Grants and Road Crossing Permits	Boards of County Commissioners	Consider issuance of right-of-way easement grants and road-crossing permits for county property and roadways.	County Commissioners			
Line Rating	Western Electricity Coordinating Council	Three phases of line rating approval.	National Electricity Coordinating Council Energy Policy Act of 2005			

Notes:

<sup>a</sup> Refers to permit, notice, review authority, certificate, license, consultation or law.

CFR Code of Federal Regulations

MCA Montana Code Annotated

USC United States Code

#### Eminent Domain

Eminent domain is the process by which the state can acquire private property for public use. The state is limited in that "just compensation to the full extent of the loss" will be paid to the property owner when exercising eminent domain (Montana Legislative Services 2005). Different property types and land uses have been identified by the legislature as appropriate public uses of eminent domain. <u>Electrical energy lines are included as a public use under 70-30-10,(37), MCA.</u> Before acquiring property through the use of eminent domain, the state will prove that public interest requires taking the property based on several criteria and then proceed through the legal process (Evans 2001). It is through eminent domain that states have the power to provide transportation corridors and other infrastructure needs for their citizens.

Any Presidential permit that DOE may issue <u>would</u> not convey any rights of eminent domain.

### 1.5 Public Participation and Issues of Concern

The scoping process is used to identify all issues relevant to the Project as proposed by the applicant and to develop alternatives to the proposed Project. Members of the public, the agencies, and the interdisciplinary EIS team all helped to define the issues for the scope of analysis. Information related to consultation and coordination among public and government entities can be found in Chapter 5.

### 1.5.1 Opportunities for Public and Agency Input

DOE issued a "Notice of Intent to Prepare an Environmental Assessment and to Conduct Public Scoping Meetings and Notice of Floodplain and Wetlands Involvement; Montana Alberta Tie, Ltd." in the *Federal Register* on November 18, 2005 (70 FR 69962). In addition, DOE mailed a copy of the notice, using Montana land ownership records, to each owner of land on the MATL-proposed corridor.

DEQ and DOE hosted public meetings in December 2005. In addition, DEQ hosted a public meeting in June 2006 because MATL changed its proposed alignment north of Cut Bank. During the meetings, the public was asked to identify issues and concerns to be addressed during the review. During each meeting, MATL and DEQ representatives presented briefings. Maps and other information were available for review, and representatives from each agency were available to discuss the project, answer questions, and receive public comments.

Meeting dates and locations are listed below:

- Conrad on Monday, December 5, 2005, at Norley Hall,
- Great Falls on Tuesday, December 6, 2005, at the Great Falls Civic Center,
- Cut Bank on Wednesday, December 7, 2005, at the Glacier County Voting Center, and
- Cut Bank on Monday, June 26, 2006, at the Cut Bank Civic Center.

Additionally, throughout the scoping process, stakeholders expressed their concerns via letters, phone calls, and emails.

A Draft EIS/EA was released for public review in March 2007. Three public hearings were held to receive public comments:

- Conrad on Tuesday, March 27, 2007, at Norley Hall,
- Cut Bank on Wednesday, March 28, 2007, at the Glacier County Voting Center, and
- Great Falls on Thursday, March 29, 2007, at the Great Falls Civic Center.

On June 7, 2007, DOE published in the *Federal Register* (72 FR 31569) a Notice of Intent to Prepare an EIS and to Conduct Scoping and invited additional comments for a 30-day period.

Following publication <u>and notice of availability</u> of <u>the Draft EIS in the Federal Register on</u> <u>February 15, 2008 (73 FR 8869)</u>, the agencies <u>held</u> a 45-day comment period <u>that ended</u> <u>on March 31, 2008</u>. During th<u>e comment period</u>, the agencies host<u>ed three</u> public hearings allowing the public to submit <u>oral and written</u> comments<u>. The agencies held</u> <u>public hearings in:</u>

- Great Falls on Tuesday, March 11, 2008
- Cut Bank on Wednesday, March 12, 2008
- <u>Conrad on Thursday, March 13, 2008.</u>

The agencies also accepted written comments from the public throughout the comment period.

Other agencies having interest or responsibility in the project approval process include: FWP, Montana State Historic Preservation Office (SHPO), DNRC, MDT, DOR, MPSC, U.S. Department of Agriculture (USDA) Farm Service Agency, BLM, and U.S. Fish and Wildlife Service (FWS).

### 1.5.2 Issues of Concern

Based on comments received from participating agencies and the public before and after the issuance of the March 2007 document, ten issues and concerns were identified and are briefly described below.

(1) Impacts on farming, ranching, and other land uses:

Concerns were expressed regarding potential difficulties and hindrances of farming around the transmission line structures, potential for interference with Differential Global Positioning System (DGPS)-guided farm equipment, potential for noxious weed growth, interference with existing and future pivot or mechanical irrigation systems, and additional fencing needs. One commenter noted that when the original NWE 115-kV Great Falls to Cut Bank line was constructed in the mid-1960s, farmers on the west side of the Golden Triangle expressed concern over the H-frame structures, especially the difficulty of farming around them. With cultivation toolbars and sprayers today ranging up to 120 feet in length, an additional diagonal transmission line presents obstacles to farmers. Requests were made for evaluation of a monopole line that follows (where possible) existing roads, property or section lines, or field boundaries. Realignments of the proposed line could be made at turning points located on land historically used for grazing or placed in CRP. Some stakeholders commented that the proposed line should connect to the WAPA 230-kV line at Shelby, negating the need for a new line that would cross diagonally through cropland all the way to Great Falls.

(2) Impacts on protected, threatened, endangered, and sensitive animal and plant species and their critical habitats:

Concerns were expressed about increased perch opportunities for birds of prey and resulting effects on sharp-tailed grouse populations and special status wildlife. There was concern over disturbance of rare plant species that may occur within the project area. Concerns were also expressed regarding interference with migratory and feeding flight paths of waterfowl, bird strike, and potential impacts on critical wildlife habitats.

(3) Impacts on floodplains and wetlands:

Concerns were expressed about the size and degree of impacts on known and delineated floodplains, wetlands, waters of the U.S., and other special aquatic sites.

(4) Avian mortality:

Concerns were expressed regarding bird mortality and suggestions were made for the use of bird strike mitigation practices currently implemented at the FWS Benton Lake National Wildlife Refuge and other applicable sites in the northern Great Plains.

(5) Impacts on cultural and historic resources:

Concerns were expressed regarding potential disturbance of Native American settlements and religious sites in the alignments.

(6) Impacts on human health and safety:

Concerns were expressed regarding specific voltage and current specifications, minimum ground clearance of the line, corona effects (including audible noise and radio and television interference), and other electromagnetic field effects from the operation of the 230-kV transmission line on human health and safety.

# Chapter 1

(7) Impacts on air, soil, and water:

Concerns were expressed regarding highly erodible soils, such as soil erosion and resultant sedimentation to surface water; mass movement and unstable geologic materials and soils; reclamation constraints; and potential increased soil erosion and impacts on existing air quality.

(8) Visual impacts:

Concerns were expressed regarding visual impacts to homes, historic homesteads, and tribal landscapes.

(9) Socioeconomic impacts:

Concerns were expressed regarding potential impacts to taxes and disturbance of residential property in Cascade, Teton, Chouteau, Pondera, Toole, and Glacier counties from the construction and operation of the line. Farmers expressed concerns regarding socioeconomic impacts associated with the costs of farming around transmission structures.

(10) Impact from development of wind generation projects:

Concerns were expressed regarding the potential wind energy and other electrical generation development, or limitations of that development that may be associated with the new Montana Alberta Tie 230-kV Transmission Line as "reasonable and foreseeable" development.

During the 45-day comment period following publication of the Draft EIS in February 2008, 352 individuals and organizations submitted comments in it, either orally at public hearings or in writing. Based on comments received, the agencies identified the following topics as common themes or major issues and concerns:

- Avian and Wildlife Issues, including the quality of field surveys for wildlife, potential impacts on bird and wildlife habitat, potential impacts of birds from collisions with the transmission line, effects on flyways, and impacts of potential wind farms;
- Economic Issues, including the distribution of benefits and costs of the line and the line's effect on the cost of electric power;
- Farming Issues, including the issues farmers would face in having to farm around structures and how they would be compensated for their costs and inconvenience;
- Legal and Regulatory Issues related to NEPA, MEPA, Montana's MFSA, eminent domain, and other State and Federal requirements;

- Line Capacity Issues, including possible future increases in capacity and the ability of power to be shipeed past the termination points of the MATL line;
- Line Issues, including its location, types of support structures, easement width, and the need for substations;
- Safety Issues related to clearance under the proposed transmission line and the safety of farming activities under and around the line;
- Socioeconomic Issues, including the expected impacts of the proposed Project and potential wind farms on local school enrollment, wages, and property tax revenues;
- Soils Issues, including concerns about potential compaction and erosion due to transmission line construction;
- Tax Issues. Including questions about the taxation status of the proposed transmission line and affected farmland;
- Vegetation, Wetland and Weed Issues, including the potential for disturbance of wetlands and riparian areas, the potential for introduction of weeds, and the impacts of weed control;
- Visual Issues, including the effects of the transmission line and potential wind farms on views in and near Glacier National Park and the Rocky Mountain front;
- Wind Farm Issues, including potential impacts of bird and bat collisions, the effects of wind farms on views, and the potential for mitigation of wind farm impacts.

These issues are discussed in the Consolidated Responses section of Volume 2.

## 1.6 Definition of Terms

All technical terms, regulatory language and acronyms used in this document are defined in Chapter 7. Terms that are used to identify an area of study and common electrical power transmission units are defined as follows:

- The **facility location**, also referred to as the **alignment**, is the 500-foot-wide swath encompassing each alternative. It is defined as 250 feet on either side from a reference centerline; however, unless otherwise stated, a pole may be placed anywhere within the alignment. The alignments for the proposed Project and alternatives are shown in maps.
- The **study area** is a 2,260-square-mile area that includes the proposed and alternative alignments and areas where roads may be built or improved. The study area was defined by MATL in its MFSA application to DEQ.
- The **safety zone** coincides with the 105-foot-wide right-of-way centered on the transmission line within the alignment for each alternative.
- The **analysis area** is the area evaluated for each resource. Different resources have different analysis areas. For some resources, the analysis area includes the area directly affected. On the other hand, because impacts to water resources can be realized downstream from ground disturbance, the analysis area for water resources is the entire study area.
- If an alternative is selected and the line permitted, MATL proposes to negotiate a 105foot-wide **right-of-way** with each landowner. It would fall within one of the alternative alignments evaluated in the environmental analysis.
- **Megawatt** (MW) is a unit used to measure the amount of electrical power transmitted through a transmission line. One megawatt equals 1,000,000 watts.
- **Kilovolt** (kV) is a unit used to measure the voltage at which a transmission line is operated. One kilovolt equals 1,000 volts.

# 2.0 Description of Alternatives

## 2.1 Development of Alternatives

This environmental analysis evaluates the proposed MATL 230-kV transmission line (the Project) and three alternatives and several <u>Local Routing Options</u> to the Project. MFSA requires DEQ to find that the facility as proposed, or as modified, minimizes adverse environmental impacts, considering the state of available technology and the nature and economics of the alternatives. NEPA and MEPA require DOE and DEQ to evaluate the proposed Project, reasonable alternatives to the proposed Project that would fulfill its purpose and need, and the No Action alternative.

The No Action alternative reflects the status quo and serves as a benchmark against which the Project and other alternative actions can be evaluated. The No Action alternative is Alternative 1. The proposed Action is Alternative 2. Alternatives 3 and 4 describe two additional alignments that were developed based on comments and issues raised during the scoping process. In addition, 11 possible Local Routing Options were developed that could be included in the proposed Project (Alternative 2). These Local Routing Options were based on landowner or MATL input and comments on the March 2007 document and are discussed in Section 2.6. Four minor variations to Local Routing Options and a slight variation to Alternative 2 were identified since publication of the Draft EIS. These minor variations were evaluated in response to specific concerns brought to the agencies' attention by affected landowners and MATL. Alternatives that were eliminated from further study are discussed in Section 2.7.

### **Development of Alternatives**

The development of alternatives was based on scoping comments, baseline information in the MATL MFSA application (MATL 2006b), technical analysis of the baseline information and issues, and mandates of the laws, rules, and regulations administered by the agencies. MATL developed three possible transmission line alignments for the MFSA application. This environmental review analyzes two of those MFSA alignments: MATL A - the proposed Project (Alternative 2), and MATL B - an alignment generally following the NWE 115-kV transmission line from Great Falls to Cut Bank (Alternative 3). The third alignment developed by MATL (MATL C) was not analyzed in detail because it did not address scoping comments as well as other alternatives.

### Issue-Driven Modifications to the Proposed Project

Issues raised during scoping are summarized in Chapter 1. In response to concerns about diagonal crossings of farmed fields, land use and right-of-way issues, pole construction types and their relationship to land use issues, visual impacts, and wildlife,

the agencies began developing Alternative 4 by looking at eight local realignments to the alignment in Alternative 2. Local realignments could resolve site specific issues.

The local realignment segments are described in detail in **Appendix A**. Since some of the local realignment segments overlapped, DEQ and DOE met to compare potential effects and evaluate the tradeoffs among the local realignments. They selected five of the eight segments and combined them with portions of Alternative 2 to make Alternative 4. Alternatives and local realignment segments that were eliminated from further consideration are identified in **Section 2.7** and in **Appendix A**. These remaining segments represent a balance among resource impacts, MFSA criteria for approval listed in 75-20-301(1)(c) and (h), MCA, and the following location criteria for electric transmission lines listed in section 3.1.1 of Circular MFSA-2:

- Where there is the greatest potential for general local acceptance,
- Where the alignment uses or parallels existing utility and transportation corridors,
- In nonresidential areas,
- On rangeland rather than cropland,
- On non-irrigated or flood irrigated land rather than mechanically irrigated land,
- In geologically stable areas with non-erodible soils in flat or gently rolling terrain,
- In roaded areas where existing roads can be used for access to the facility during construction and maintenance,
- So that structures need not be located on a floodplain,
- Where the facility would create the least visual impact,
- At a safe distance from residences and other areas of human concentration, and
- In accordance with applicable local, state, or Federal management plans when public lands are crossed.

## 2.2 Alternative 1 — No Action

Under Alternative 1, the proposed Project would not be approved by DEQ, DOE or the BLM and, therefore, could not be built by MATL. Existing electrical transmission service in southern Alberta and north-central Montana would be maintained and operated at its current level. In addition, only limited wind development of wind generation resources along the proposed alignment in the Cut Bank area would occur due to limitations of the current transmission system. Selection of Alternative 1 would likely preclude the construction of the proposed facility in Canada as well.

## 2.3 Alternative 2 — Proposed Project (MATL A)<sup>4</sup>

Alternative 2 is the proposed Project. Alternative 2 is further defined by the alignment, right-of-way, pole design, access roads, construction and operation stages, and environmental protection measures included in MATL's application to DEQ (MATL 2006b as amended) and other commitments made to DEQ (Williams 2008a). MATL's commitments stated in its application would become part of DEQ's MFSA Certificate of Compliance unless otherwise conditioned by DEQ. The following description is based on MATL's application to DEQ. The study area for which MATL provided baseline information is shown on **Figure 1.1-1**.

### **Description of Alignment**

The Alternative 2 alignment is 129.9 miles long and is shown in **Figure 2.3-1**. **Figure 2.3-2** shows the southern portion of the alignment in more detail, **Figure 2.3-3** shows the middle part, and **Figure 2.3-4** shows the northern part. The proposed alignment is dominated by agriculture (90.1 percent) interspersed with patches of non-farmland, mostly grasslands. Except for grazing land near the Marias and Teton rivers, and coulees and drainages, the alignment would cross mostly non-irrigated farmland.

The U.S. portion of the alignment would begin at the 230-kV Great Falls Switchyard north of Great Falls. For almost 2 miles the alignment would go directly north following an existing NWE transmission line. The alignment then would turn directly west for 1 mile using FWP land on the south side of the Great Falls Shooting Sports Complex (Complex), then north again, passing along the hills on FWP land on the west side of the Complex. The alignment would parallel the east side of Highway 87, cross the highway at milepost 5, and continue northwest along Black Horse Lake Flat (the south side of Black Horse Lake), then go north over dry cropland interspersed with some pasture through a low point in the bluffs above Black Horse Lake Flat. At milepost 8 the alignment would turn slightly to the west, diagonally traversing dry cropland east of Benton Lake National Wildlife Refuge. At milepost 14 the alignment would extend west for approximately 9 miles, turn north for about 2 miles, and then northwest for about 3 miles, crossing farmland and the following coulees (from south to north): headwaters of Huntley, unnamed (2), Timber, unnamed, Kinsey, and Hunt Coulee. From the Great Falls Switchyard to this point about 4 miles of State of Montana land would be crossed. The alignment would pass over the eastern end of Teton Ridge.

<sup>&</sup>lt;sup>4</sup> The proposed Federal action is for DOE to issue a Presidential permit for the proposed transmission line described in MATL's Presidential permit application. In this EIS this action is defined as Alternative 2, the proposed Project. DOE would normally label this as the Proposed Action. However, because this document is both a Federal and State of Montana EIS, DOE will be adopting the nomenclature used by DEQ and refer to the Proposed Action as the "proposed Project."

