Keystone XL Project – Montana Major Facility Siting Act Application

Pump Station Number	County	Kilovolt	Approximate Length (miles)	Typical Pole/Tower Spacing (feet)
PS 09	Phillips	115	57.0	500 to 600
PS 10	Valley	115	51.0	500 to 600
PS 11	McCone	115	11.9	500 to 600
PS 12	McCone	69	3.3	300 to 400
PS 13	Prairie	115	9.6	500 to 600
PS 14	Fallon	115	5.1	500 to 600
PS 15	Fallon	115	42.1	500 to 600

 Table 1-6
 Location and Size of Proposed Electrical Power Lines in Montana

1.3.6 Communication Facilities (ARM 17.20.1509(11))

Keystone will use satellite as the primary form of communication and hard telephone line (telco) and microwave radio as back-up. Where feasible, microwave radio communication towers may be located at pump stations and valve sites. Location of these facilities will be determined during detailed design. All remotely operated valve sites and pump stations will have SCADA, which uses the above primary and back-up communication methods. The Project will not install fiberoptic cable.

1.3.7 Opportunities and Constraints on Sharing ROWs (ARM 17.20.1509(12))

The preferred route is co-located with the Northern Border pipeline ROW for most of the first 24 miles in Montana, before diverting southeastward, away from Northern Border. One of the original alternative routes examined for the Project was to co-locate with Northern Border to eastern North Dakota before meeting up with the Keystone Pipeline Project ROW and co-locating with it, southward to Steele City, Nebraska. However, that alternative route would have been approximately 120 miles longer and would have increased the environmental footprint and cost an additional \$295,000,000 to construct. With the exception of Northern Border, there are no other co-location opportunities in eastern Montana that proceed in a northwest to southeast direction. It is not feasible from an engineering or economic perspective for a large-diameter pipeline to attempt to follow road ROWs while proceeding in a northwest to southeast direction.

Figure 1-5 is a typical construction ROW with the 25-foot minimum offset needed during construction on a shared ROW.

1.4 Construction Description (ARM 17.20.1511(1))

1.4.1 Overview

Keystone proposes to begin construction of the Steele City Segment in 2011. Construction is expected to be complete in 2012. Keystone expects to commence service on the Steele City Segment in 2012. There will be four construction spreads in Montana. The spreads are expected to range in length from 80 to 120 miles. Actual equipment used will depend upon construction equipment owned by selected contractors. The following



(1) ALTERNATE TOPSOIL PLACEMENT LOCATIONS

(2) TOPSOIL STRIPPING AREA MAY VARY AT RIVER CROSSINGS AND STEEP SLOPES

Figure 1-5 Typical Construction ROW with 25-foot Minimum Offset