Gateway West Transmission Line Project
Addendum to August POD Supplement
Use of Baja Road and Disturbance Calculations

On August 7, 2014 PacifiCorp, doing business as Rocky Mountain Power (RMP), and Idaho Power Company's (IPC) collectively the Companies submitted to Bureau of Land Management (BLM) a Plan of Development Supplement for the Gateway West Transmission Line (Project or Gateway West). This addendum to the supplement describes use of the Baja Road and disturbance during construction and operation.

1.0 BAJA ROAD

Baja Road is the access road used for construction and maintenance of the existing 138-kV transmission lines. These lines would be removed and reconfigured onto a double-circuit 500/138-kV structure series for approximately 26.5miles of which, 18.3 miles is in the SRBOP and adjacent to Baja Road as part of the Baja Road-Murphy Flat South alternative identified by the Boise District Resource Advisory Council (RAC) and adopted by the Companies as part of the Segment 9 Proposed Route. The Companies intend to utilize the existing road with "no improvement". Project-wide, existing roads requiring "no Improvement" include existing maintained paved or all-weather surfaced roads that are able to be used in their current condition (PacifiCorp and Idaho Power, 2013). The Companies' construction standards will be met, including the use of a minimum travel surface width of 14 feet wide and requiring a travel surface width of up to 20 feet depending on the radius of curves. The use of the term 'no improvement' is intended to signify that no additional new disturbance will be created outside of the established disturbed area. As such, the existing roads requiring "no improvement" for access could include regular maintenance to make the road passable for construction. Regular maintenance could include but is not limited to minor blading activities, repair of washed out areas, wash boarded areas, depressions requiring graveling, approach installation, and other minor improvements within the established disturbed area.

The Baja Road meets the criteria for "no improvement". **Figure 1-1** shows the typical condition of the Baja Road adjacent to the existing 138-kv line. The view is looking south and the proposed location of the new double-circuit 500/138-kV line is on the right side of the road.

Figure 1-1. Current Condition of the Baja Road

Based on aerial imagery and field reconnaissance, the road has a 14 feet wide travel surface and the total established disturbed area or width is approximately 40 feet. The road is generally in excellent condition having been recently restored. There may be a few washboard areas, but the width and gravel surface should be sufficient without any additional improvements outside of the current travel way. The construction concept for installation of the planned 500/138-kV line would involve in most cases a stub road extending from the edge of the existing Baja Road to an approximately 1.4 acre construction pad (**Figure 1-2**). The centerline of the Proposed Route is approximately 140 feet off of the road centerline. The terrain is mostly flat, so overland travel to access the construction pads or structures for operation and maintenance would stay within the Project-wide travel way (14 foot wide during construction and 8 feet wide during operations). **Figure 1-1** and **Figure 1-3** illustrate the terrain and construction pad features.

Figure 1.2. Conceptual Stub Road Configuration from Baja Road.

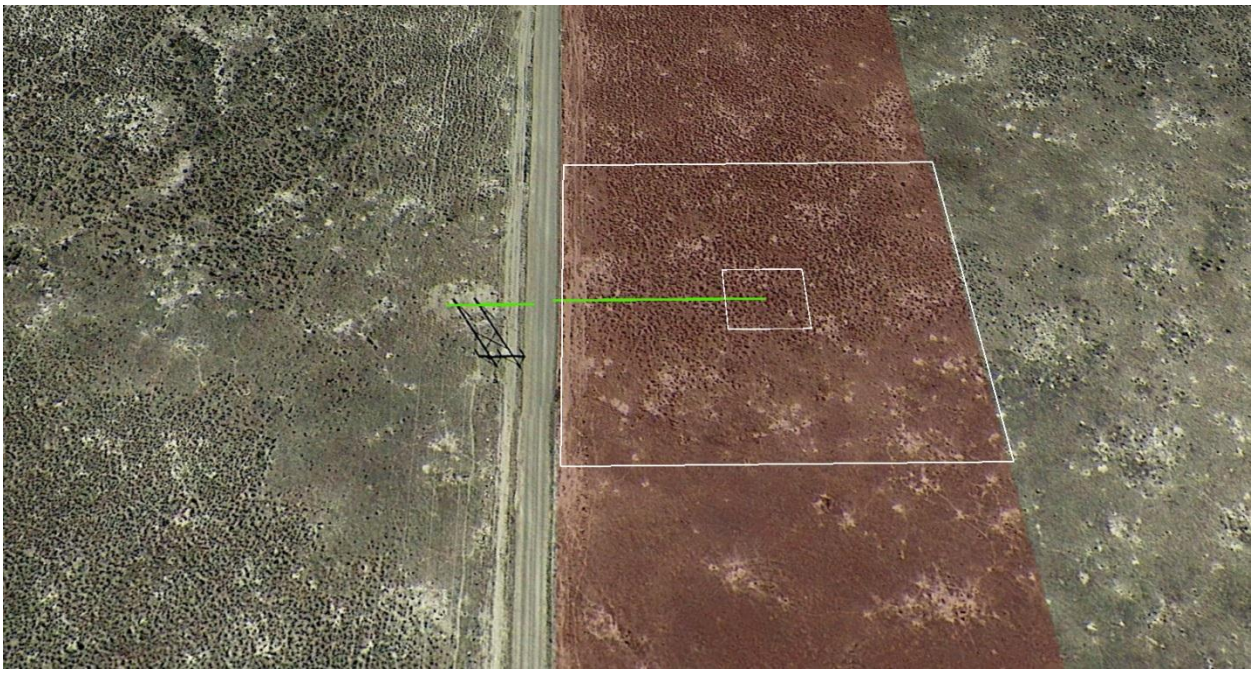

Figure 1-3. Conceptual Construction Work Area (large white box).

2.0 CONSTRUCTION AND OPERATION DISTURBANCE

The amount of land disturbed during construction and operation is a function of length, extent of facility improvements and location. **Table 2-1** shows the length, extent of new, rebuild and removed facilities and ownership associated with the proposed routes for Segment 8 (Summer Lake Option 1) and Segment 9 (Baja Road-Murphy Flat South).

Table 2-1. Segments 8 and 9 Proposed Route Features

Feature	Segment 8 - Summer Lake Option 1 (miles)	Segment 9 - Baja Road-Murphy Flat South (miles)
Total Length	38.3 (1.1 rebuild)	89.3 (20.9 removal)
Ownership		
Bureau of Land Management	27.1 (0.8)	75.3 (17.6)
Bureau of Reclamation	2.7	0.1
Private	6.2 (0.2)	5.1 (0.2)
State	2.0	8.5 (3.1)
Land Use		
BOPNCA	23.1 (1.1)	73.7 (20.9)
Orchard Combat Training Center	0.5	--
Adjacent to Existing Transmission Lines	30.7	55.0 (20.9)

Land disturbance as described in **Table 2-2** is the estimated amount of land that would be disturbed during construction or required to be permanently converted to operational uses. Estimates for construction disturbances are based on best professional judgment and experience with this type of project following the process described in Section 3.1 of the Gateway West EIS. Estimates were made of disturbance areas resulting from each construction activity involving structure placement, access roads, contractor and material staging areas, and new and expanded substations. For each route, the amount of disturbance reflects use of existing access roads meeting the definition of "no improvement" as described above. **Table 2-3** describes the dimensions of the structure construction pads and area permanently occupied by structures after restoration.

Table 2-2. Summary of Transmission Line Land Disturbance Resulting from Construction and Operations [(1)(2)]

Segment/Project Component	Land Affected During Construction (acres)	Land Affected During Operations (acres)
Segment 8		
Access - Existing Road, Improved	136	43
Access New Road	21	10
Deadend Pulling - 500-kV (1-SC)	121	-
Fly Yard	112	-
Pad - 500-kV	245	10
Pulling-Tensioning - 500-kV (1-SC)	17	-
Regeneration Site	-	-
Staging Area	40	-
Subtotal - Segment 8	**693**	**63**
Segment 9		

Table 2-2. Summary of Transmission Line Land Disturbance Resulting from Construction and Operations [(1)(2)]

Segment/Project Component	Land Affected During Construction (acres)	Land Affected During Operations (acres)
Access - Existing Road, Improved	195	60
Access - New Road	76	32
Deadend Pulling - 138-kV (1-SC)	21	
Deadend Pulling - 500/138-kV (1-DC)	96	-
Deadend Pulling - 500-kV (1-SC)	163	-
Fly Yard	212	-
Pad - 138-kV	1	0.2
Pad - 138-kV (Removal)	49	-
Pad - 500/138-kV (1-DC)	255	10
Pad - 500-kV	268	11
Pulling-Tensioning - 138-kV (1-SC)	1	-
Pulling-Tensioning - 500/138-kV (1-DC)	14	-
Pulling-Tensioning - 500kV (1-SC)	15	-
Regeneration Site (3)	1	0.5
Staging Area	60	-
Subtotal - Segment 9	**1428**	**114**
Total	**2121**	**177**

1/ The exact land requirements would depend on the final detailed design of the transmission line, which is influenced by the terrain, land use, and economics. Alignment options may also slightly increase or decrease these values.

2/ Acreages in table are rounded to the nearest acre; columns therefore may not sum exactly.

3/ Values are given in 0.5-acre increments because regeneration sites are typically 0.5 acre each.

Assumptions/Notes:

1. ROW width for the 500-kV single circuit and 500/138-kV double circuit segments are 250 feet.
2. The staging areas would serve as field offices, reporting locations for workers, parking space for vehicles and equipment, sites for material storage, fabrication assembly and stations for equipment maintenance, and concrete batch plants.
3. Staging/material storage yards/batch plants would be approximately 20 acres for single-circuit 500-kVand double-circuit 500/138-kV lines. They would be located at each end of a segment, and every 20 to 30 miles along the line.
4. Fly yards would be 10 to 15 acres located approximately every 5 miles. Values in table assume helicopter construction for all single-circuit 500-kV and double-circuit 500/138-kV construction. The construction contractor may choose to construct using ground-based techniques, therefore not utilizing fly yards.
5. For 500 kV, wiring pulling/splicing sites would be the ROW width x 600 feet located approximately every 3 miles; for 138-kV, ROW width x 400 feet located every 9,300 feet. Typically, only sites that would be off of the ROW would be at large angle dead-ends. It is estimated that one in four sites would be off of the ROW.

Table 2-3. Summary of Transmission Line Land Disturbance Resulting from Construction and Operations

Segment	Transmission Line Length (miles)	Structure Type	Typical Height (feet)	No. of Structures	Average Distance Between (feet)	Temporary Disturbance Area per structure (sq. feet.)	Permanent Disturbance Area per structure (sq. feet.)
8, 9	54.6	500-kV Single-Circuit Lattice Tower	145–180	358	1,200–1,300	ROW Width 250 feet x 250 feet = 1.42 acres	ROW Width 50 feet x 50 feet = 0.06 acre
9	0.5	500/138-kV Double-Circuit Lattice Tower	145–180	178	900-1,200	ROW Width 250 feet x 250 feet = 1.43 acres	ROW Width 50 feet x 50 feet = 0.06 acre

3.0 REFERENCES

IPC and RMP (Idaho Power Company and Rocky Mountain Power). 2013. Gateway West Transmission Line Project Plan of Development. August.