Date: December 30, 2009

To: Walt George

From: Todd Adams, Idaho Power Company
Pam Anderson, Rocky Mountain Power

Subject: Analysis of revised Gateway West Transmission Line Project routing: new and revised routes submitted in response to September 4, 2009 deadline.

On September 4, 2009, the extended period given to cooperating and coordinating agencies and their constituent publics for formulation of new alternatives for the Gateway West Transmission Line Project ended. During July and August Idaho Power Company and Rocky Mountain Power (the Companies) and the Bureau of Land Management (BLM) closely cooperated in a series of community meetings and task forces to designate and refine alternatives to the route we proposed prior to the circulation of the administrative draft Environmental Impact Statement (ADEIS).

This memo presents the results of the transmission line routing and substation siting analyses completed by the Companies for the Gateway West Transmission Line Project (Project) newly proposed or revised alternatives. The Companies completed the analyses with input from Bureau of Land Management (BLM), U.S. Forest Service (USFS), other agencies, and other stakeholders.

This memo and its attached figures and table are provided as a second supplement to the Companies' September 2008 Gateway West Transmission Line Siting Study and October 22, 2008 first supplement. The evaluation approach follows the same methodology described in Section 2.0 of the September, 2008 siting study. The routes and alternatives presented are current, up to December 7, 2009.

This memo is organized by Segment.

- For each segment new or revised routes are identified as proposed by the Companies, recommended as a Feasible Alternative or recommended for elimination.
- For each comparison, the presentation begins with a description of the proposed or alternative route.
- Bulleted lists of differences between each route are included.
- The comparison of the proposed route and the alternative routes concludes by displaying a table that shows quantitative comparisons of sets of route alternatives, using the attributes from Table 2-1 of the September 2008 siting study that are significant for each set of routes. The tables present the extent to which the centerline of each route crosses each attribute. Attributes avoided by the centerline of the proposed corridor are not listed in the comparative tables. The tables are arranged such that within each particular portion of a given comparison, the proposed route is presented first, followed by the associated alternative route(s), if applicable.

Table 1 summarizes the route comparisons, map and figure locations and Companies' recommendations.

Table 1. Route Comparison Information, by Segment, and Recommendations

Segment	Comparison No.	Figure No.	Table No.	Alternative Route	Alternative Route Recommendations
1	1	1	2	1E-1	**Eliminate**
	2	1	2	1E-2	**Retain for Analysis**
	3	1	2	1E-3	**Eliminate**
	4	1	2	1W-1	**Eliminate**
2	1	2	3	2-1	**Retain for Analysis**
4	1	3	4	4-1	**Retain for Analysis**
5	1	4	5	5-1	**Retain for Analysis**
	2	4	5	5-2	**Eliminate**
7	1	5	6	7-1	**Eliminate**
	2	5	6	7-2	**Retain for Analysis**
	3	5	6	7-3	**Retain for Analysis**
8	1	6	7	8-1	**Retain for Analysis**
	2	6	7	8-2	**Retain for Analysis**
	3	6	7	8-3	**Retain for Analysis**
9	1	7	8	9-1	**Retain for Analysis**
	2	7	8	9-2	**Retain for Analysis**
	3	7	8	9-3	**Retain for Analysis**
	4	7	8	9-4	**Retain for Analysis**

SEGMENT 1

The four comparisons for Segments 1E and 1W(a) are presented below. Each comparison route is described followed by a bulleted list comparing the advantages and disadvantages of the routes. Table 2 presents a summary of constraints and opportunities for each Segment 1E and 1W route. Figure 1 displays Segment 1E and 1W routes.

Segment 1E Comparison 1

The alternative route east of the Laramie Mountains was initially considered by the Proponents as a way of avoiding the steeper portions of the Laramie Mountains. It is compared with the currently proposed much shorter route.

Segment 1E - Proposed Route (*1, 1Ed, 1Ee, 1Ef, 1Eg, 1Ei, 1Ek, 2****)***

The proposed 100.5-mile transmission line route (Route 1E) begins at the planned Windstar Substation, located just north of existing Dave Johnston Power Plant, approximately 3.5 miles east of Glenrock, Wyoming in Converse County. From Windstar, the proposed 230kV line would proceed west for approximately 6 miles, crossing the Burlington Northern Railroad, then the North Platte River, then Chicago and Northwestern Railroad and Wyoming Highway 20. At mile 6.2, the route would turn to the southwest, crossing Interstate 25 and several 69kV, 115kV and 230kV power lines on a route approximately two miles north and west of Deer Creek.

At mile 15.6, the route would turn south passing into the Laramie Mountains following the 1W routes described in the September 2008 siting study. This portion of the route would pass through several miles of sage grouse core area and crucial big game winter range, crossing into Natrona County at mile 23.1. Continuing to the south southwest, the route would pass through portions of the Medicine Bow National Forest (mile 30.2 to 36.6), and the Bate's Hole Management Area (mile 31 to 33.7). The Casper RMP states that no new utility corridors will be designated in Bate's Hole, except within already existing corridors. Approximately 1.7 miles of the route will be outside the WWE Corridor in this area, which may necessitate a change to the Casper RMP.

At mile 31.3 (point 1Ef) the route would turn to the southeast, re-entering Converse County at mile 36.1, and staying just north of the sage grouse core area. The route would enter Albany County at mile 43.8, and continue to the southeast for an additional 14 miles.

At mile 57.2 (point 1Eg), the proposed route would turn south into the sage grouse core area and follow a portion of the original proposed Route 1E, before leaving the original route and turning southwest at mile 65. Beginning at mile 79, the route would be located within big game crucial winter range, as well as near a proposed wind farm area. At mile 85, the route enters Carbon County and turns west, passing through several miles of big game crucial winter range, intercepting several raptor nest buffers, and one sage grouse buffer.

At mile 95.8 (point 1Ek) the route would again follow the original proposed 1E route, passing just north of the Medicine Bow River, and into Aeolus substation.

Alternative 1E-1 (1, 1Eh, 1Ej, 1Ek, 2)

This alternative is 149 miles long and is located at the east edge of the Laramie Mountains. From Windstar Substation, this route would proceed southeast, crossing the Burlington Northern Railroad tracks, the North Platte River, and Interstate 25. Immediately south of Interstate 25, the route parallels to the north of 230kV and 115kV transmission lines, going into and out of big game crucial winter range. At mile 33.4, the route becomes predominantly southerly, staying just west of the Platte County border, crossing into Albany County and the Medicine Bow National Forest at mile 44.4, then out of the National Forest and into Platte County at mile 47.4. The

route continues in and out of big game crucial winter range, turning slightly southeast at mile 56.1, crossing in and out of the Medicine Bow National Forest. The route turns west southwest at mile 82.3, entering Albany County at mile 88.0, and turning west to northwest at mile 90.2 near Red Mountain. Continuous big game crucial range is present between mileposts 78.1 and 96.1. The route passes just north of Wheatland Reservoir No. 2, and crosses the Laramie River at mile 106.9. Continuing west, the route passes through planned and proposed wind farm areas and back into big game crucial winter range. The route enters Carbon County at mile 130.6. Several raptor nest buffers are intercepted in the last several miles of the route. At mile 143.6 (point 1Ek) the route would again follow the original proposed 1E route, passing just north of the Medicine Bow River, and into Aeolus substation.

Compared to the proposed route, Alternative 1E-1 offers the following differences:

- The alternative is 48.5 miles longer than the proposed route.
- The alternative crosses 41.2 miles more big game crucial winter range than the proposed route.
- The alternative passes through 5.2 miles more historic trail buffers.
- The proposed route alignment includes 15.8 miles on slopes greater than 15%, the alternative intercepts 25.8 miles of steep slopes.
- The proposed route is located in 16 more miles of sage grouse core area. The alternative doesn't cross any.

The Companies recommend that this alternative be eliminated from further consideration.

Segment 1E Comparison 2
Compares the southern part of the proposed route to an alternative that avoids nearly all of the sage grouse core area.

Subsegment of Proposed Route 1E (1Eg, 1Ei, 1Ej, 1Ek, 2)

This 37.9-mile subsegment beings at mile 57.2 of the proposed route and would turn south into the sage grouse core area and follow a portion of the original proposed Route 1E, before leaving the original route and turning southwest at mile 65. Beginning at mile 79, the route would be located within big game crucial winter range, as well as near a proposed wind farm area. At mile 85, the route enters Carbon County and turns west, passing through several miles of crucial big game winter range, intercepting several raptor nest buffers, and one sage grouse buffer.

At mile 95.8 (point 1Ek) the route would again follow the original proposed 1E route, passing just north of the Medicine Bow River, and into Aeolus substation.

Alternative 1E-2 (1Eg, 1Eh, 1Ej, 1Ek, 2)

This 59.3-mile alternative begins at point 1Eg and continues to the southeast, staying just north of the sage grouse core area for a distance of approximately 4 miles to Smith Mountain. At mile 5.0 the route turns to the south, entering the sage grouse core area for two miles, and crossing Fort Fetterman Road at mile 7.5. At mile 7.8,

the route is located just east of the sage grouse core area, continuing for about 19 miles, crossing the North Laramie River at mile 16.8. Five Visual Resource Management (VRM) II areas are crossed, near miles 3.3, 4.5, 11.8, 14.3, and 14.8.

At mile 23.6, the route turns to the southeast following a bend in the sage grouse core area passing just north of Red Hill, then re-crossing Fort Fetterman Road at mile 30.8. The route turns to the west at mile 34.1 (point 1Eh), and crosses near a planned wind energy facility from mile 40.1 to 43.2, and crucial big game winter range at mile 42.4. The route crosses Rock Creek at mile 47.4, one mile north of Aurora Lake. At mile 50.6 (point 1Ej), the route turns to the northwest staying just north of Slate Ridge. Two raptor nest buffers would be crossed in this segment. The route crosses Little Medicine Bow River before turning west at point 1Ek and continuing west for approximately 6 miles, ending at the planned Aeolus substation.

Compared to the proposed route, Alternative 1E-2 offers the following differences:

- The alternative is 21.5 miles longer than the proposed route.
- The alternative impacts 2.1 miles of VRM II land avoided by proposed route.
- The alternative crosses 8.7 miles of steep slope , the proposed route crosses 0.6 mile.
- The alternative passes through 21.4 more miles of grazing allotments than the proposed route.
- The alternative impacts 12.6 fewer miles of sage grouse core area than the proposed route.

The Companies recommend that this alternative be studied in detail as a Feasible Alternative.

Segment 1-E Comparison 3

Compares the northern 17.6 miles of the proposed route, sited to avoid landowner concerns with Alternative 1E-3 which follows an existing utility corridor.

Subsegment of Proposed Route (1, 1Ed, 1Ee)

This 17.6-mile subsegment begins at the planned Windstar Substation, located just north of existing Dave Johnston Power Plant, approximately 3.5 miles east of Glenrock, Wyoming in Converse County. From Windstar, the proposed 230kV line would proceed west for approximately 6 miles, crossing the Burlington Northern Railroad, then the North Platte River, then Chicago and Northwestern Railroad and Wyoming Highway 20. At mile 6.2, the route would turn to the southwest, crossing Interstate 25 and several 69kV, 115kV and 230kV power lines on a route approximately two miles north and west of Deer Creek.

At mile 15.6, the route would turn south passing into the Laramie Mountains following the 1W routes described in the September 2008 siting study to reference point 1Ee at mile 17.6.

Alternative 1E-3 (1, 1Ee)

This 16.1 mile route is an alternative to the northern segment of Alternative 1E that would parallel the existing Dave Johnston – Difficulty – Freezeout 230kV transmission line (line 1W(c) that is also a WWE Corridor and a BLM-designated ROW corridor. This alternative would begin at the proposed Windstar substation heading southwest, crossing the Burlington Northern Railroad, the North Platte River, the Chicago and Northwestern Railroad, Wyoming Highway 87, a 230kV transmission line, and Interstate 25. The route passes through big game crucial winter range at mileposts 3.5 to 6.8 and 8.1 to 15.6, paralleling to the north of Route 1Wc. The route crosses Deer Creek at mile 15.5 and terminates at point 1Ee on Alternative 1E. In some locations, construction of the 1W and 1E routes adjacent to the 230 kV line to be rebuilt would result in three transmissions lines across concerned landowner properties.

The primary differences between Alternative 1E-3 and the northern subsegment of the proposed route 1E include the following:

- Alternative 1E-3 is 1.5 miles shorter than the comparable subsegment of the proposed route.
- The alternative passes through 3.2 more miles of big game crucial range that the proposed route.
- The alternative impacts 2.1 miles more irrigated agriculture than the proposed route.
- The proposed route impacts 0.5 mile more sage grouse core area than the alternative.
- Approximately 13 miles of the 16 mile alternative route would be within or adjacent to WWE Corridor or projected WWE Corridor as compared to less than 1 mile for the proposed route.
- Some landowners would be affected by up to three routes along the alternative route.

The Companies recommend that this alternative be eliminated from further consideration.

Segment 1-W Comparison 4

Compares the northern 20.3 miles of the proposed route, sited to avoid landowner concerns with Alternative 1W-1 which follows an existing utility corridor.

Subsegment of Proposed Route 1W(a) (1, 1Wa, 1Wb)

This 20.3 mile subsegment of Route 1W(a) begins at the Windstar Substation and would proceed to the northwest and west staying just north of an existing 230kV line, about one mile north of the North Platte River. At mile 7.4 the line turns to the south, crossing two historic trails, an oil and gas well field, Burlington Northern Railroad, North Platte River, Wyoming Highway 87/20, and Interstate 25. The route intercepts one raptor nest buffer north of the Interstate at mile 9.7. At mile 11.2 the line turns to the southwest for approximately 10 miles to reference point 1Wb at mile 20.3. Sage grouse core area is encountered in this subsegment from mile 18.7 to 20.3.

Alternative 1W-1 (1, 1Wb)

This 16.2 mile route segment would be an alternative to the north end of the proposed route between points 1, 1Wa and 1Wb. This alternative would begin at the proposed Windstar substation heading southwest, crossing the Burlington Northern Railroad, and the North Platte River. The route continues west, crossing the Chicago and Northwestern Railroad, Wyoming Highway 87, a 230kV transmission line, and Interstate 25. The route passes through crucial big game winter range at mileposts 3.7 to 6.8 and 8.1 to 15.5, paralleling to the north of Route 1W(c). The route crosses Deer Creek at mile 15.4 and ends at reference point 1Wb on the proposed Route 1W(a). In some locations, construction of the 1W and 1E routes adjacent to the 230 kV line to be rebuilt would result in three transmissions lines across concerned landowner properties.

The primary differences between Alternative 1W-1 and the northern subsegment of proposed 1W(a) include the following:

- Alternative 1W-1 is 4 miles shorter than the proposed route.
- The proposed route passes through 6.1 miles more grazing land and 1.2 miles more sage grouse core area than the alternative.
- The alternative crosses two miles of irrigated agriculture avoided by the proposed route.
- The alternative passes through 4.0 miles more habitat for Ute ladies' tresses orchid..
- Approximately 11 miles of the 16 mile alternative route would be adjacent to WWE Corridor or projected WWE Corridor as compared to none of the proposed route.
- Some landowners would be affected by up to three routes along the alternative route.

The Companies recommend that this alternative be eliminated from further consideration.

SEGMENT 2

Segment 2 Comparison 1

A single new comparison is offered for Segment 2. In the vicinity of Fort Fred Steele historic site located east of Rawlins, Wyoming two routes are compared. The proposed route has been sited to be further from the Fort Fred Steele Historic Site and residences. The alternative is the Companies' original proposed route. Table 3 is a comparison table for the two alternatives. A segment map is included as Figure 2.

Subsegment of Proposed Route *(2e.1, 2e.2, 2e.3)*

This 7.0-mile segment of the proposed route would begin on BLM-managed land at Point 2e.1, approximately 1.5 miles east of Fort Steele Historic Site at Segment 2 milepost 39.7. The alternative proceeds in a southwest direction across BLM land, crossing I-80 at mile 41.3, and continuing between two raptor nest buffers to the east bank of the North Platte River at mile 42.1. From there, the route proceeds west, passing between Wyoming Game and Fish Department (WGFD)-managed land and a BLM Special Management Area (SMA,) and north of an east-west ridge containing multiple raptor nests, crossing the North Platte River at mile 42.3 and continuing west for about 1.2 miles. At mile 43.3, the route heads northwest to meet an existing jeep trail, a buried pipeline and other utilities at point 2e.2. The alternative route then passes through alternating sections of private and BLM-managed land, following the pipeline/utility corridor to the west for 1.6 miles, and then following a bend in the pipeline to the northwest, proceeding another 1.7 miles to milepost 45.7, approximately 4.4 miles southwest of Fort Fred Steele.

Alternative 2-1 (2e.1, 2e.3)

This 6.2 mile alternative consists of the original proposed alignment in the vicinity of Fort Fred Steele Historic Site. Concerns by rural residents and concerns about visual impacts to the historic site resulted in the Companies changing this route segment from proposed to a feasible alternative.

The differences in the proposed route and Alternative 2-1 include the following:

- The proposed route avoids residences and visual impacts to historic Fort Fred Steele.
- The proposed route is 0.8 miles longer than Alternative 2-1.
- The proposed route impacts 1.8 miles more big game crucial winter range and 1.3 miles more raptor nest buffers than the alternative.
- The alternative passes directly through an eagle nest buffer, while no eagle nest buffers are encountered by the proposed route.

The Companies recommend that this alternative be studied in detail as a Feasible Alternative.

SEGMENT 4

A single new comparison is offered for Segment 4. In the Kemmerer portion of Segment 4, the original proposed route contained impacts to historic trails and wildlife resources. As a result of meetings and discussions between WDGF, SHPO, BLM and the Companies a new route located several miles north of the original route was identified. Table 4 is a comparison table for the proposed and alternate routes. A segment map is included as Figure 3.

Segment 4 Comparison 1

Compares the new northern proposed route to the original proposed route now considered an alternative by the Companies.

Subsegment of Proposed Route *(4b, 4f, 4e, 4f.6, 4f.4, 4j)*

This 90.2-mile subsegment of Proposed Segment 4 begins at mile 52.0 (reference point 4b). The route crosses the Green River at mile 52.4 and enters crucial big game range, proceeds west for two miles, then northwest for about 3.5 miles before heading west and paralleling existing 345kV transmission lines. At mile 66.4, the route leaves crucial big game range before turning northwest at mile 67.7. The route crosses the existing transmission lines, continuing northwest through Whiskey Basin, entering Lincoln County at mile 76.0, passing through an oil and gas well field from miles 77 to 82, and entering crucial big game range at mile 77.4. The route passes through a historic trail buffer between miles 81 and 83, and crossing US Highway 89 at mile 88.2. At mile 89.8 (point 4f.6), the route turns to the west paralleling the south side of Fontenelle Creek. Constraints include big game crucial winter range, historic trails, and encroaching on one raptor nest buffer. Turning slightly to the northwest, the route passes South Fork Mountain, Commissary Ridge, crossing Hams Fork River, and passing just south of Quenly Reservoir approximately 3 miles north of Cokeville, then crosses the Bear River at mile 131.4.

At mile 134.3 (reference point 4f.4) the route turns to the northwest crossing Boundary Ridge and proceeding from Lincoln County, Wyoming into Bear Lake County, Idaho at mile 135.7. From the state line, the proposed route parallels the east side of the existing 345kV corridor across Bear River at mile 139.8. This subsegment of the proposed route ends at point 4j at mile 142.2.

This subsegment crosses VRM Class II land near miles 62.4, 64.5, 87.8 to 107.0, 109.2 to 117.7, 121.8 to 125.2, mile 128, 135.7, 138.9, 140.0, and 141.4.

Alternative 4-1 (4b, 4f, 4e, 4f.4, 4j)

This 87.5-mile alternative was originally proposed by the Companies. However, based on agency and Company meetings and discussions, the currently proposed route was identified as having fewer impacts.

From reference point 4b (mile 0) to mile 15.7 this alternative route is the same as the proposed route. At mile 15.7 Alternative 4-1 diverges from the proposed route, heading west, paralleling an existing 345kV transmission line, entering Lincoln County at mile 19, and passing through an oil and gas well field for approximately six miles between miles 19 and 25. The route continues along the south side of the 345kV transmission line, passing approximately 5 miles north of the Ham's Fork River and the town of Opal, Wyoming, over Oyster Ridge, into Pomeroy Basin, then onto Commissary Ridge. The

route crosses the existing transmission line at mile 48.5 and two historic trails at mile 50.5. The route then turns north for about 5 miles, then back to the northwest for about 12 miles before meeting the proposed route at mile 129.3. From there, the alternative is the same as the proposed route for the final 13 miles to reference point 4j.

This alternative crosses VRM Class II land near miles 10.4, 12.5, 41.0 to 43.8, 44.7 to 48.7, 49.7 to 53.8, 55.1, 56.4, 58.1, 58.7, 59.9 to 62.9, 63.3, 64.0 to 70.2, 71.0, 73.4, 74.4, 81, 84.2, 85.4, and 86.7.

The proposed route and Alternative 4-1 are different in the following areas:

- Alternative 4-1 is 2.6 miles shorter than the proposed route subsegment.
- The proposed route impacts 26.0 miles more big game crucial range than the alternative.
- The proposed route impacts 2.7 miles more VRM II land and 7.0 miles more black-footed ferret habitat than the alternative.
- The proposed route passes through 3.5 miles more medium and high value historic trails than the alternative.
- The alternative crosses 9.2 miles more sage grouse core area than the proposed route.

The Companies recommend that this alternative be studied in detail as a Feasible Alternative.

SEGMENT 5

Two new comparisons are offered for Segment 5. On the west portion of the route, Power County and local citizens provided comments on route locations between Rockland and the Borah Substation. The original route raised concerns about impact to agricultural operations, existing and planned transmission line congestion in the approaches to the Borah Substation and passed through the buffer of a bald eagle nest near the Snake River. As a result of the comments and community meetings , the Companies have moved the proposed route in this area to the east on to more public land. The second alternative involves a different route into the Borah Substation proposed by Power County. Table 5 is a comparison table for the two alternatives. A segment map is included as Figure 4.

Segment 5 Comparison 1

Comparison 1 compares a subsegment of the proposed Segment 5 with an alternative route of similar distance.

Subsegment of Proposed Route (5i, 5j, 5l, 6)

This 19.4-mile subsegment of Proposed Route 5 begins along the East Fork of Rock Creek, approximately 6 miles east of Rockland, Idaho, at mile 35.2 of the proposed route. The route proceeds north for 13.6 miles, up and down through foothills and valleys of the Deep Creek Mountains. VRM Class II land is crossed near miles 36.2, 41.0, 41.3, 43.3, and 43.8. The route turns to the west at mile 48.8 (point 5l), paralleling a 345kV transmission line, crossing State Highway 37 at mile 51.4, paralleling Interstate 86 (I-86) for about one-half mile then crossing I-86 and the Snake River before entering Borah Substation at mile 54.6.

Alternative 5-1 (5i, 5d, 5e, 5h, 6)

This 17.5-mile alternative is located one to two miles west of the proposed route. Originally the proposed route, this alternative is considered a feasible alternative. Power County representatives and residents identified concerns about the impacts to farmland in this area. Other issues included proximity to existing and planned residences, a bald eagle nest site, and the crossing of the Snake River. Beginning at mile 35.2 of the proposed route the alternative proceeds west for approximately two miles before turning north at the East Fork Rock Creek, about 3 miles east of Rockland, Idaho. The route proceeds north and slightly west for about 12.5 miles through predominantly private farmland. The route then turns to the northwest, crossing Interstate I-86, passing through a bald eagle nest buffer, across the Snake River and into Borah Substation.

The following comparisons are provided for the proposed route and Alternative 5-1::

- Alternative 5-1 is 3.0 miles shorter than the proposed route.
- Alternative 5-1 encroaches on a bald eagle nest buffer, while the proposed route avoids raptor nest buffers.
- The proposed route passes through 6.2 less irrigated farmland than the alternative.

The Companies recommend that this alternative, originally proposed identified by the Companies as the proposed route, be studied in detail as a Feasible Alternative.

Segment 5 Comparison 2

Comparison 2 compares a western subsegment of the proposed Segment 5 with an alternative containing a different route proposed by Power County into the Borah substation.

Subsegment of Proposed Route (5l, 6)

This 5.8 mile subsegment begins at mile 48.8, proceeding west for approximately 2.9 miles to Interstate 86 (I-86). The route turns to the southwest for approximately one half mile, before heading northwest, crossing I-86 and the Snake River before entering the Borah Substation at mile 54.6.

Alternative 5-2 (5l, 5m, 6)

Power County has requested that an alternative route be approved as the preferred approach to the Borah Substation from the east. The 5.3 mile alternative would begin at reference point 5l and proceed northwest for approximately 0.4 miles before crossing over the existing 230 and 354kV lines. The route would then proceed due west directly adjacent to the existing lines. The proposed and existing lines would remain parallel and adjacent for approximately 4.2 miles, with a crossing of the Snake River in this interval. The route would then cross a 230kV transmission line and the three lines would run parallel and adjacent for about 1.1 miles into the Borah Substation (point 6). If the proposed 500kv transmission line were added next to the two existing transmission lines, it would not meet the Companies' reliability criterion. This criterion specifies that in order to avoid rating as adjacent transmission circuits, (assumed likely to fail simultaneously if a failure event affects one of them), those circuits must be separated by at least "the longest span length of the two transmission circuits at the point of separation or 500 feet, whichever is greater, between the transmission circuits". For Gateway West, the longest span was assumed to be 1,500 feet, which would therefore be the minimum distance between existing and proposed transmission lines serving the same load. The centerline distance between the two existing transmission lines is approximately 150 feet and the Gateway West line would be within 150 feet of the 230kV transmission line. An exception exists when approaching a substation that allows the last five spans to be closer. For Gateway West this would be up to 1.5 miles. However, this alternative is 5.3 miles long, most of which is adjacent to at least one existing transmission line, and therefore it would not meet the exception criterion. Even if the reliability criterion didn't exist, Alternative 5-2 would still impact more irrigated farmland and cross more private lands than the proposed route.

The Companies recommend that this alternative be eliminated from further consideration because it would not meet the Companies' reliability criterion nor does it offer any apparent environmental benefit over the proposed route. .

SEGMENT 7

Three comparisons for Segment 7 are presented below. Table 6 presents a summary of constraints and opportunities for each Segment 7 route. Figure 5 displays the routes.

Segment 7 Comparison 1

Comparison 1 compares the proposed Segment 7 with an alternative route favored by local residents and county governments.

Proposed Route (5, 7a.0, 7c, 7d, 7e, 7v,7g, 7h, 7j, 7j.1, 7k,7l, 7y, 7m.1, 7t, 7s, 7s.3, 7s.1, 7z, 9)

The proposed 118.0-mile single-circuit 500kV line route (points 5, 7a.0, 7c, 7d, 7e, 7v,7g, 7h, 7j, 7j.1, 7k,7l, 7y, 7m, 7t, 7s, 7s.1, 7z, 9) would extend from the expanded Populus Substation about 9.2 miles along the east side of the existing 345kV lines before turning west and crossing these existing lines south of Cedar Mountain. It generally parallels the south side of the existing 345kV corridor around Hawkins Reservoir, turning northwest before turning west at mile 15.6 and leaving the existing transmission corridor and passing along the south side of Pauline. From there, the proposed route continues west across the Arbon Valley and the Deep Creek Mountains before crossing SR 37 less than 1 mile south of Rockland at mile 40.6. This segment continues west another 7 miles to point 7d, at the eastern foot of the Sublett Range.

At mile 48.6 it crosses into Cassia County and then proceeds across the Raft River Valley, where it turns southwest along the western toe of the Albion Mountains before angling west for about 22 miles across predominantly irrigated cropland and dairy operations then into the proposed Cedar Hill Substation. This route crosses VRM Class II lands near miles 28.2 to 32.5, 113.5 to 114, and 115.9 to 117.7

Alternative 7-1 (5, 7a.0, 7b.1, 7a.2, 7r.1, 7r.2, 9a.1, 9a, 9)

Citizens and landowners in southeastern Idaho were very involved in the Segment 7 route siting process. That interest resulted in the formation of a multi-county task force consisting of representatives from Bannock, Oneida, Power, Cassia and Twin Falls county governments and interested land owners. Input was received from the task force, as well as from local Idaho state legislators, and the States of Utah and Nevada were contacted with the goal of providing an alternative route. Alternative 7-1, or the State Line Route as it is commonly called, is the route recommended by this task force.

From Populus Substation, this 173.2-mile alternative is coincident to the proposed route for the first 9.2 miles (point 7a.0). It proceeds to the west for a distance of 5 miles through the Caribou National Forest, including 0.7 miles designated as a roadless area. Continuing west, the route crosses into Oneida County at mile 14.0 and turns southwest at mile 15.2 crossing the Pleasantview Hills, the Arbon Valley, and into the Deep Creek Mountains. At mile 32.9 the route turns west and is located along the Power County/Oneida County line through the southern portion of the Rockland Valley and into the Sublette Mountain Range. At mile 45.9 the route enters the Sawtooth National Forest, turning southwest and crossing into Cassia County at mile 52.2. At mile 55.8, the route is again to the west, crossing Interstate I-84 at mile 57.7 and passing through several raptor nest buffers. At mile 65.2 (point 7r.1) the route turns to the southwest then west passing along the east side then south side of the Raft River Valley. The route crosses the Salt Lake Alternative of the California Historic Trail at mile 82.6, crosses several more raptor nest buffers and comes within less than one mile of Utah in

the Cedar Hills at mile 98.2. This portion of the route passes just south of, but within sight of the City of Rocks National Reserve, and much of the route in this area is located within VRM II classification. Continuing west, the route enters Junction Valley and re-crosses the California Emigrant Historic Trail three different times at miles 103.8, 111.9 and 114.9. The route enters the Albion Mountains and the Sawtooth National Forest at mile 121.0, and dips into Elko County Nevada between miles 122.3 and 129.5. The Nevada portion is adjacent to, but just south of the Sawtooth NF, but the route re-enters the National Forest as it re-enters Idaho, eventually turning north and leaving the Forest at mile 152.6 and proceeding to a WWE Corridor at mile 155.3 (point 9a.1). From here, the route follows the WWE Corridor and an existing 345 kV transmission line to the northeast, past point 9.a and into the proposed Cedar Hill Substation.

Differences between the proposed route and Alternative 7-1 include the following:

- Alternative 7-1 is 55.3 miles longer than the proposed route.
- Alternative 7-1 is substantially a greenfield ROW.
- Alternative 7-1 enters Nevada, requiring involvement of multiple new stakeholders.
- Alternative 7-1 requires a back track of 8 miles from point 9.a, east to Cedar Hill Substation. To meet reliability criteria, this will require extra ROW to accommodate the alternative plus the Route 9 line that runs west from Cedar Hill.
- Alternative 7-1 crosses 28.4 miles of Forest Service land in several areas including lands under visual management classes of Retention/Partial Retention.
- The alternative passes through 8.3 miles of raptor nest buffers, the proposed route crosses 3.2 miles.
- The proposed route crosses 24.6 more miles of irrigated agriculture than the alternative.

The Companies recommend that this alternative be eliminated from further consideration.

Segment 7 Comparison 2

Comparison 2 compares the proposed Segment 7 with an alternative route that represents a compromise between Alternative 7-1 and the proposed route.

Proposed Route (5, 7a.0, 7c, 7d, 7e, 7v,7g, 7h, 7j, 7j.1, 7k,7l, 7y, 7m.1, 7t, 7s, 7s.3, 7s.1, 7z, 9)

See same description of proposed route contained under Comparison 1.

Alternative 7-2 (5, 7a.0, 7b.1, 7a.2, 7r.1, 7q.1, 7s.3, 7s.1, 7z, 9)

Although longer than the proposed route, this 127.4-mile alternative provides a route that avoids some of the dairies and center pivot irrigation facilities located near the proposed route. This route is the same as Alternative 7-1 for the first 65.2 miles (point 7r.1). From there, the route proceeds to the west into the Raft River Valley where two raptor nest buffers and one sage-grouse lek buffer are crossed. The route continues into the Jim Sage Mountains, the Elba Basin, and the Albion Mountains. The route is within the Sawtooth National Forest from mile 87.6 to 92.0, then re-enters agricultural land passing

south of Oakley, Idaho turning northwest then north before meeting the proposed route at point 7s.3 and continuing west into the proposed Cedar Hill Substation.

Differences between the proposed route and Alternative 7-2 include the following:

- The alternative is 9.4 miles longer than the proposed route.
- The alternative is all greenfield ROW.
- The alternative crosses Forest Service land for 12.1 miles, in multiple locations and other land set aside by the Forest Service for Retention/Partial Retention. The proposed route avoids Forest Service land.
- The alternative crosses 0.8 miles more of sage grouse lek 0.65-mile buffer than the proposed route;
- The alternative crosses 7.7 miles of raptor nest buffers, whereas the proposed route crosses 3.2 miles.

This route was originally not proposed for detailed analysis because it would cross National Forest for 12.1 miles, in multiple locations, most of which is high-quality habitat, and the route would be all greenfield. Also, this route would result in more impacts to raptors and sage grouse compared to the proposed route. Overall, this alternative would result in measurably more environmental effects than the proposed route. However, the Companies consider this route as more desirable to Alternative 7-1 and recommend it for detailed analysis.

Segment 7 Comparison 3

Comparison 3 compares a portion of the proposed route with Alternative 7-3.

Subsegment of Proposed Route (*7h, 7j, 7j.1, 7k, 7l, 7y, 7m.1*)

This 10.5-mile subsegment of the proposed route would begin in the East Hills in Cassia County at mile 78.1. The route proceeds to the southwest, avoiding sage grouse leks and crucial mule deer winter range, but passing through two raptor nest buffers, and ending at mile 88.6. This subsegment is closer to agricultural areas than the alternative. However, the proposed line would be readily visible to local residents who value the current views of the East Hills.

Alternative 7-3-(7h, 7j.2, 7m.1)

This 10.8-mile alternative leaves the proposed route at mile 78.1, and heads more southerly than the proposed route. It is located in more mountainous terrain than the proposed route, but intercepts a sage grouse lek buffer, two raptor nest buffers, and passes through the crucial mule deer winter range.

A review of the proposed route and Alternative 7-3yields the following comparison:

- The alternative crosses 1.6 miles of big game winter range avoided by the proposed route.
- The alternative passes through 4.2 miles more grazing allotments than the proposed route.
- The alternative crosses 0.9 miles more sage grouse lek buffer than the proposed route.

- The proposed route crosses 1.4 miles of raptor nest buffers, the alternative crosses 1.1 miles.

The route lengths are nearly identical. The Companies recommend that this alternative be studied in detail as a Feasible Alternative and have also requested that BLM consider a modification of this alignment that would avoid Water Canyon.

SEGMENT 8

The three comparisons for Segment 8 are presented below. Table 7 presents a summary of constraints and opportunities for each Segment 8 route. Figure 6 displays the routes.

Segment 8 Comparison 1

Comparison 1 compares two alternatives of similar length located near a planned expansion of the Mayfield Subdivision.

Subsegment of Alternative 8-1 (8q, 8r, 8s)

This 6.5-mile includes both alternative and proposed route segments. Alternative 8-1 begins at mile 85.3 of the proposed route. It would proceed west for 2.5 miles, then northwest for another 2.5 miles along the proposed route to point 8r, mile 90.5. At this point, the route diverges from the proposed route to the northwest for 1.4 miles back to Alternative 8-3 just south of Indian Creek Reservoir at point 8s. This subsegment passes through several raptor nest buffers.

Alternative 8-2 (8q, 8o, 8s)

This 6.4 mile alternative was originally a portion of the proposed route. Beginning at mile 85.3 of the proposed route, it proceeds northwest along the WWE Corridor for 4.1 miles, then west for 2.3 miles to point 8s. The Companies changed this route to an alternative in this area due to its occurrence within the Mayfield subdivision. It is kept as a viable alternative because the comparable portion of the proposed route is of similar length and impacts a similar amount of private land.

A comparison of Alternatives 8-1 and 8-2includes the following:

- Alternative 8-1 avoids the Mayfield subdivision.
- The routes are of similar length, 6.5 miles for the subsegment of Alternative 8-1, versus 6.4 miles for Alternative 8-2.
- Alternative 8-2 follows the WWE Corridor for 4.8 miles, whereas Alternative 8-1 only 1.4 miles.

The Companies recommend that this alternative be studied in detail as a Feasible Alternative.

Segment 8 Comparison 2

Consultation with the Idaho National Guard identified their preference for the transmission line to avoid a portion of the “Alpha” Orchard Hill Training Area. This comparison is provided to compare the proposed route to a re-route the Companies would consider as an alternative to meet the National Guard request.

Subsegment of Proposed Route (8r.1, 8r.3)

This 6.9-mile subsegment of the proposed route begins at mile 102.5 and proceeds to the west to mile 109.4. This subsegment is located within the Idaho National Guard “Alpha”

Orchard Hill Training Area, the Morley Nelson Snake River Birds of Prey National Conservation Area (NCA), big game winter range, and within multiple raptor nest buffers.

Alternative 8-3 (8r.1, 8r.2, 8r.3)

This alternative would avoid a portion of the "Alpha" Orchard Hill Training Area. This 8.1 mile alternative begins at mile 102.5 along the proposed route. At this point, Alternative 8D would divert to the northwest to the existing Summer Lake to Midpoint 500 kV transmission line structures or onto new structures if the existing ones are not adequate to support the proposed conductor. The existing line would then be relocated north and parallel to its original location. This alternative would continue to the west, until it was clear of the National Guard Training Area, proceeding back to the southwest to meet the proposed route at mile 109.4.

A comparison of the proposed route and Alternative 8-3is presented below:

- Alternative 8-3 is 1.2 mile longer than the proposed subsegment.
- The alternative passes through 2.2 miles of irrigated agriculture, whereas the proposed route crosses none.
- Alternative 8-3 crosses 0.4 miles of the Alpha Training Range while the proposed route crosses 5.1 miles.
- Both routes cross a similar amount of raptor nest buffers, approximately 6.1 to 6.2 miles each.
- The proposed route crosses 3.5 miles more in the NCA.

The Companies recommend that this alternative be studied in detail as a Feasible Alternative.

Segment 8 Comparison 3

Compares the proposed route that passes through the NCA to a more northerly route located predominately on private land.

Subsegment of Proposed Route (8q, 8r, 8r.1, 8r.3, 9t, 9v, 11)

This 45.3-mile alternative begins at mile 83.5 on the proposed route. The route would proceed west and northwest, crossing Interstate I-84 at mile 89.4 and the Elmore-Ada County line at mile 89.9. Continuing west, the proposed route is located approximately 1,500 feet south of the existing Summer Lake to Midpoint 500kV transmission line. This existing line is utilized by nesting raptors, as raptor nest buffers overlap over much of the existing line. The route enters the NCA and the Idaho National Guard Training Area at mile 97.8 and continues to the west, then southwest through Ada County. At mile 115.8, the route turns more to the south and crosses the Snake River between miles 117 and 119. The Snake River in this area comprises the Ada-Owyhee County line. The route continues southwest, then west through Owyhee County before intercepting a WWE Corridor and turning northwest at mile 123.6. The route leaves the NCA area at mile 125.8 before ending at the proposed Hemingway substation at mile 130.7.

Alternative 8-4 (8q, 8r, 8s, 8g, 8h, 8j, 8k, 8l, 8m, 8n, 8p, 11)

This 45.8-mile alternative was originally identified by the Companies as their proposed route. However, the communities of Kuna and Melba expressed strong opposition to this route when it was proposed. The communities commissioned a study of the effects of the then proposed route. (ECS 2009). The study contends this route would affect long-term growth potential by altering the on-going comprehensive planning process and associated development patterns.

Representatives of Melba, Kuna, Ada County, the Companies and BLM have worked collaboratively to reach a mutually acceptable solution. To that end, the Companies have now proposed a route that avoids the areas of concern identified by Kuna and Melba. Nevertheless, Alternative 8-4 is being considered in detail for two reasons: (1) while some of the concerns expressed by Kuna and Melba may occur it is unlikely that they would occur to the degree they assert and (2) it avoids the NCA negating the need for a Resource Management Plan (RMP) amendment involved with crossing over 26 miles of the NCA.

The alternative begins at mile 85.8 of the proposed route in Elmore County. It proceeds northwest along the alignment of the proposed route to mile 90.9 entering Ada County at mile 90.4. It then leaves the proposed route and continues northwest for about 1.5 miles to a point just south of Indian Creek Reservoir. The route then turns west, crossing railroad tracks at mile 10.0 then turns northwest to parallel an existing transmission line at mile 10.7. At mile 16.6 the alternative leaves the existing transmission line and bends more to the west. In the vicinity of mile 25.5 the route is at the north edge of the NCA where it crosses for a short distance. This portion of the route includes crossing land annexed by Kuna. At mile 31.6, the route turns to the southwest following the west side of the NCA boundary before turning west, passing just north of Melba, across the Snake River at mile 42.8 and into Hemingway Substation.

A comparison of the proposed route and Alternative 8-4follows:

- The routes are of similar distance.
- The proposed route passes through 3.6 miles of VRM I land and 6.9 miles of VRM II land, whereas Alternative 8-4 crosses visually prominent Kuna Butte and would be closer to more viewers.
- The proposed route crosses 26.3 miles of the NCA area, 5.1 9.1 miles of the National Guard “Alpha” Training Area , and 27.2 miles of raptor nest buffers. The alternative avoids all but a short crossing of the NCA and all of the training area and crosses 7 miles of raptor nest buffers.
- The proposed route passes through 3.3 miles of the Guffy Butte Archaeological Site, while the alternative avoids it.
- The alternative crosses 12.4 miles more irrigated farm land than the proposed route.
- The alternative route crosses developing areas of Kuna and Melba

The Companies recommend that this alternative be studied in detail as a Feasible Alternative.

SEGMENT 9

The four comparisons for Segment 9 are presented below. Table 8 presents a summary of constraints and opportunities for each Segment 8 route. Figure 7 displays the routes.

Segment 9 Comparison 1

Compares two similar length routes that pass through slightly different areas of agricultural land.

Subsegment of Proposed Route (9a, 9a.2, 9a.3)

This 7.8-mile subsegment of the proposed route would begin at mile 8.4, in Twin Falls County. It would proceed west, crossing Cottonwood Creek at mile 9.8, passing about one mile south of Hub Butte and the Twin Falls Military Reservation, and ending at point 9a.3, about three miles north of Hollister, Idaho.

Alternative 9-1 (9a, 9a.3)

This 7.7 mile alternative was originally identified by the Companies as the proposed route. Consultation between local landowners and residents concerned about impacts to irrigated agriculture and dairies, BLM representatives and the Companies identified a new route which has been adopted by the Companies as the proposed route. Alternative 9-1, formerly the proposed route, remains a feasible alternative warranting detailed analysis. The alternative is located about two miles south of Hub Butte in Twin Falls County. It parallels the proposed route, approximately one to 1.5 miles to the south.

The routes are of similar length and impact nearly identical quantities of grazing allotments and irrigated agriculture.

The Companies recommend that this alternative be studied in detail as a Feasible Alternative.

Segment 9 Comparison 2

Compares two routes of similar length, one through predominantly private agricultural land and one mainly on public land.

Subsegment of Proposed Route (9a.5, 9c.1)

This 15.3-mile subsegment of the proposed route would begin at mile 33.0, turning west and crossing an Area of Critical Environmental Concern (ACEC) associated with Salmon Falls Creek and recently re-classified as a Wild and Scenic Study River. Several raptor nest buffers and VRM II lands are crossed as the route continues northwest through the Bruneau Desert to mile 47.2.

Alternative 9-2 (9a.5, 9b, 9c, 9c.1)

This 14.7-mile alternative was originally identified by the Companies as the proposed route. Due to local landowners and residents concerned about impacts to irrigated agriculture and dairies, County and BLM representatives and the Companies identified a new route which has been adopted by the Companies as the proposed route. Alternative 9-2 remains a feasible alternative warranting detailed analysis. This alternative follows an existing 138kV transmission line and Salmon Falls Creek to the

north and west passing within 3.5 miles west of Castleford, Idaho. At mile 9.2 the route crosses the existing transmission line, turns to the west passing along the east then the north side of Balanced Rock County Park, and crossing Salmon Falls Creek. The route continues west through Blue Gulch, before meeting the proposed route at reference point 9c.1.

A comparison of the proposed route and Alternative 9-2 is presented below:

- The alternative is 0.6 miles longer than the proposed route.
- The proposed route crosses a Wild and Scenic River study corridor and an ACEC that is avoided by the alternative.
- The proposed route passes through 3.7 miles more VRM II land than the alternative.
- The alternative passes through 3.2 miles of irrigated farm land compared to none in the proposed route.
- The alternative is in close proximity to several residences.

The Companies recommend that this alternative be studied in detail as a Feasible Alternative.

Segment 9 Comparison 3

Comparison 3 compares a portion of the proposed route to an alternative located mainly within the NCA.

Subsegment of Proposed Route (9n, 9l, 9m, 9p)

This 57.2-mile subsegment of the proposed route would begin at mile 95.5, about 2 miles south of Bruneau Sand Dunes State Park in Elmore County. The beginning of this route is within the NCA, the US Air Force Military Operations Area, in VRM II, and within the WWE Corridor. This subsegment passes through the Saylor Creek Bombing Range restricted area and to the south of Bruneau Dunes State Park in the vicinity of miles 95.5 to 97. Consultation between representatives of the BLM, U.S. Air Force (USAF), Idaho Department of Parks and Recreation (IDPR) and Companies has determined that the location of the proposed route within the restricted Military Operating Area (MOA) and just to the south of Bruneau Dunes State Park is acceptable.

The route proceeds to the west crossing the Bruneau River at mile 98.9 and entering big game winter range. The route follows the WWE Corridor, paralleling the Bruneau River Valley to the north and east, entering raptor nest buffers at mile 102, 109, 114, and 124. VRM II classified land is present between mile 119.7 to 122. The route returns to the NCA at miles 142.4 to 146.2 where two raptor nests buffers are entered. The route continues northwest within the WWE Corridor to point 9p at mile 152.6, located about two miles west of Murphy, Idaho. The NCA is crossed at the west end of the subsegment, from mile 151.3 to 151.9, and from mile 152.1 to 152.5.

Alternative 9-3 (9n, 9r, 9p)

This 58.2-mile alternative has been identified by the Owyhee County task force and recommended by Owyhee County for detailed analysis. The primary County siting

criteria has been avoidance of private land and maximizes the use of public land. The specific alignment has been developed through consultation between County task force and BLM representatives and the Companies. Although this alternative substantially deviates from the designated WWE Corridor followed by the proposed route and would cross 47.9 miles of the NCA thereby requiring a RMP amendment, it still warrants detailed consideration as a Feasible Alternative.

From point 9n the route would proceed northwest paralleling the Bruneau River to the south, crossing State Highway 78 at mile 5.4, and passing approximately 1.5 miles north of Bruneau, Idaho. At mile 6.8, the route turns west obliquely crossing the Narrows portion of CJ Strike Reservoir then turning north and crossing the Snake River approximately ½ mile downstream from CJ Strike Dam. Except for minor detours to avoid agricultural land, the route parallels a 138kV transmission line from the dam primarily west on the north side of the Snake River. The majority of this alternative (47.9 miles) is within the NCA, and the route intercepts many raptor nest buffers, VRM Class II land, and is within big game winter range. At mile 46.6 the route turns west and crosses Swan Falls Reservoir into Owyhee County before meeting the proposed route at reference point 9p.

The Owhyee County task force recently identified a short adjustment to their proposed alternative near Swan Falls. The Companies request that this adjustment be considered by BLM.

A comparison of the proposed route and Alternative 9-3 is presented below:

- The alternative is one mile longer than the proposed route.
- The proposed route impacts 28.1 miles more big game winter range than the alternative.
- The alternative crosses 3.5 miles of VRM I land and 8.3 miles of VRM II land, whereas the proposed route crosses no VRM I and only 0.2 miles of VRM II.
- The alternative crosses 2.6 miles of the Guffy Butte Archaeological Site and 3.8 miles of historic trail buffers, while the proposed route avoids these areas.
- The proposed route passes through 8.6 miles more irrigated agriculture than the alternative.
- The alternative crosses 43.1 more miles of the NCA and 20.2 more miles of raptor nest buffers, compared to the proposed route.

The Companies recommend that this alternative be studied in detail as a Feasible Alternative.

Segment 9 Comparison 4
Comparison 4 compares a portion of the proposed route with a more southerly alternative proposed by Owyhee County that avoids agricultural areas.

Subsegment of Proposed Route (9n, 9l, 9m, 9p)
This subsegment is the same as that described in Comparison 3.

Alternative 9-4 (9n, 9l, 9s, 9p)
This 68.7 mile alternative has been identified by the Owyhee County task force and recommended by Owyhee County for detailed analysis. The primary County siting criteria has been avoidance of private land and maximizes the use of public land. The specific alignment has been developed through consultation between County task force and BLM representatives and the Companies. Although this alternative substantially deviates for the designated WWE Corridor it still warrants detailed consideration as a Feasible Alternative. It predominantly avoids the NCA, staying well south of the Snake River and Owyhee County agricultural land.

Beginning at mile 95.5 of the proposed route, this alternative proceeds south for approximately 6 miles, then turns west, crossing the Bruneau River at mile 5.6 and entering big game winter range. Much of this portion of the route is within VRM Class II management land. The route crosses Highway 51 at mile 15.7, continuing west through the Owyhee Foothills to mile 19.4, then northwest. At mile 44.2, the route crosses Castle Creek, and continues northwest, intercepting several sage grouse lek and raptor nest buffers. At mile 57.9, the route turns north at Sinker Creek, proceeding approximately 10 miles, before intercepting the proposed route at mile reference point 9p.

The following comparison of the proposed route and Alternative 9-4 is offered.

- Alternative 9-4 is 11.6 miles longer than the proposed route.
- Compared to the proposed route, Alternative 9-4 crosses 46.5 miles more big game crucial range and 10.9 more miles of grazing allotments.
- The proposed route crosses 9.9 miles more irrigated agriculture than the alternative.

The Companies recommend that this alternative be studied in detail as a Feasible Alternative.

TABLE 2 - SEGMENTS 1E and 1W											
	Seg 01E Proposed - Total Length	COMPARISON 1		COMPARISON 2		COMPARISON 3		Seg 01Wa Proposed - Total Length	COMPARISON 4		Seg 01Wc Proposed - Total Length
		Seg 01E Proposed	Alt 1E-1	Seg 01E Proposed	Alt 1E-2	Seg 01E Proposed	Alt 1E-3		Seg 01Wa Proposed	Alt 1W-1	
	1, 1Ed, 1Ee, 1Ef, 1Eg, 1Ei, 1Ek, 2	1, 1Ed, 1Ee, 1Ef, 1Eg, 1Ei, 1Ek, 2	1, 1Eh, 1Ej, 1Ek, 2	1Eg, 1Ei, 1Ek	1Eg, 1Eh, 1Ej, 1Ek	1, 1Ed, 1Ee	1, 1Ee	1, 1Wa, 1Wb, 1Wc, 1Wd, 2	1, 1Wa, 1Wb	1, 1Wb	1x, 1x.1, 1x.2, 2
CONSTRAINTS											
Bates Hole Management Area	2.42	2.42						10.53			10.39
Big Game Crucial Range - Parturition											
Big Game Crucial Range - Winter	25.06	25.06	66.40	13.34	15.02	0.80	4.01	17.80	1.44	3.65	19.56
BLM Range Allotment	71.86	71.86	107.93	37.86	59.32	2.76	1.39	54.26	7.70	1.58	46.96
BLM VRM II	6.03	6.03			2.11			0.62			1.20
Blowout Penstemon			1.80					7.79	7.79		
Steep Slope (>15%)	15.80	15.80	25.76	0.64	8.71	1.34	1.50	9.96	2.34	1.35	10.83
Historic Trail (buffer)	1.03	1.03	6.28		1.05	1.03	1.02	1.59	1.59	1.03	0.63
Irrigated Agriculture	0.11	0.11				0.11	2.24			2.00	0.52
No Surface Occupancy	2.30	2.30	1.06			0.59	1.51	0.69	0.23	1.45	3.53
Oil/Gas Well (buffer)							0.04	0.16	0.16		
Raptor Nest (buffer) - Other								1.06	0.81		1.00
Sage Grouse Core Areas - Wyoming	16.22	16.22		14.88	2.30	0.55	0.03	17.75	1.54	0.30	14.76
Sage Grouse Lek (0.65 mile buffer)	1.64	1.64	0.52	0.88				1.20			
Small Mammal Habitat - White-tailed Prairie Dog	2.10	2.10				0.77	0.29	1.87	0.02	0.19	2.45
Ute Ladies'-tresses Orchid	7.78	7.78	4.45			0.74	3.06	7.25	0.50	3.99	10.54
Wetlands (NVCS)	0.58	0.58		0.27		0.05	0.37	0.60		0.48	0.80
Wetlands (NWI)	0.54	0.54	0.62	0.11	0.46	0.12	0.16	0.31	0.12	0.16	0.79
OWNERSHIP											
TOTAL ROUTE LENGTH (MILES)	100.49	100.49	149.00	37.86	59.32	17.61	16.10	76.47	20.27	16.24	70.62
Bureau of Land Management	11.59	11.59	17.20	3.83	8.66	0.05		26.56			24.15
National Forest	2.77	2.77						2.30			2.33
Private	63.98	63.98	118.32	30.12	45.59	6.05	9.47	29.07	9.95	10.70	28.70
State	22.05	22.05	13.26	3.90	4.92	11.41	6.55	18.50	10.28	5.47	15.38
Water	0.09	0.09	0.22		0.15	0.09	0.08	0.03	0.03	0.08	0.05
WWEC / EXISTING TRANSMISSION CORRIDORS											
Within WWEC Corridor								18.80			21.04
Within Projected WWEC Corridor	6.58	6.58	0.54				7.24	14.08			38.88
Adjacent to WWEC Corridor / Projected WWEC Corridor	6.65	6.65	0.57			0.42	6.33	21.87		10.74	11.22
Within Existing Transmission Corridor	8.14	8.14	0.29			2.10	10.25	43.67	6.19	1.67	66.51
Adjacent to Existing Transmission Corridor	10.92	10.92	0.33			2.38	4.75	16.21	2.61	10.67	4.10
Within 3000 Feet of Existing Transmission Lines	19.06	19.06	0.62			4.48	14.99	59.89	8.81	12.33	70.62

TABLE 3 - SEGMENT 2			
	Seg 02 Proposed - Total Length	COMPARISON 1	
		Seg 02 Proposed	Alt 2-1
	2, 2a, 2d, 2e, 2e.1, 2e.2, 2e.3, 2f, 2h, 2i, 3	2e.1, 2e.2, 2e.3	2e.1, 2e.3
CONSTRAINTS			
Active Mining Lease	7.15		
Anschutz Chokeberry - Sierra Madre Wind Farm	6.09	0.49	0.45
Big Game Crucial Range - Winter	35.49	3.62	1.84
BLM Range Allotment	96.67	7.00	6.19
Herd Management Area	12.08		
Steep Slope (>15%)	11.19	1.04	0.04
Historic Trail (buffer)	2.83		
Mountain Plover	1.50		
North Platte SRMA	0.24	0.24	
Oil/Gas Well (buffer)	0.09		
Raptor Nest (buffer) - Bald Eagle			2.01
Raptor Nest (buffer) - Other	5.10		
Sage Grouse Core Areas - Wyoming	50.52		
Sage Grouse Lek (0.65 mile buffer)	1.22		
Sage Grouse Lek (RFO) (0.65mile buffer)	0.96		
Sage Grouse Winter Range (UT)	1.27		
Small Mammal Habitat - Black-footed Ferret	14.57		
Wetlands (NVCS)	0.94		
Wetlands (NWI)	1.22	0.04	0.08
OWNERSHIP			
TOTAL ROUTE LENGTH (MILES)	96.67	7.00	6.19
Bureau of Land Management	36.93	4.22	2.31
Private	53.47	2.71	3.84
State	6.16		
Water	0.11	0.07	0.03
WWEC / EXISTING TRANSMISSION CORRIDORS			
Within WWEC Corridor	16.45	0.35	1.17
Within Projected WWEC Corridor	24.20		1.67
Adjacent to WWEC Corridor / Projected WWEC Corridor	11.78	0.41	0.44
Within Existing Transmission Corridor	41.44	0.06	1.67
Adjacent to Existing Transmission Corridor	12.24	0.41	1.38
Within 3000 Feet of Existing Transmission Lines	53.67	0.47	3.05

TABLE 4 - SEGMENT 4			
	Seg 04 Proposed - Total Length	COMPARISON 1	
		Seg 04 Proposed - Compare to Seg 04 Alt 4A,B,C,D,E,F	Alt 4-1
	4, 4a, 4b, 4f, 4e, 4f.6, 4f.4, 4j, 4k, 4m, 4n, 4o, 4p, 5	4b, 4f, 4e, 4f.6, 4f.4, 4j	4b, 4f, 4e, 4f.1, 4f.2, 4f.5, 4f.3, 4f.4, 4j
CONSTRAINTS			
Active Mining Lease	9.38	0.24	0.24
Big Game Crucial Range - Parturition	6.41	6.41	8.19
Big Game Crucial Range - Winter	76.42	48.79	20.93
BLM Range Allotment	155.00	82.87	78.89
BLM VRM II	19.93	19.13	16.45
BLM VRM III	22.97	15.99	10.54
Dempsey Ridge Reservoir			0.10
Fisheries Stream	16.95	16.78	14.49
Groundwater Recharge Area	4.71		
Herd Management Area	27.08	0.39	0.39
Steep Slope (>15%)	61.88	22.55	15.55
Highly Erosive Soils	2.51		
Historic Trail (buffer)	17.74	4.08	3.05
Historic Trail (high) KFO	3.04	3.04	2.35
Historic Trail (med) KFO	5.66	5.66	2.83
Historic Trail (low) KFO			1.34
Irrigated Agriculture	10.80	0.37	0.97
Oil/Gas Well (buffer)	0.20	0.20	
Raptor Nest (buffer) - Other	6.41	0.89	1.90
Rock Springs Grazing Association	18.72	3.64	3.64
Sage Grouse Core Areas - Wyoming	28.25	15.16	24.37
Sage Grouse Lek (0.65 mile buffer)	1.60	1.60	7.44
Scenic Highway (buffer)	9.06		
Slope Instability	3.23	2.92	1.36
Small Mammal Habitat - Black-footed Ferret	43.35	31.41	24.41
Small Mammal Habitat - Pygmy Rabbit	18.73	6.54	6.54
Small Mammal Habitat - White-tailed Prairie Dog	5.18	5.18	4.42
Trona Lease	20.73	14.51	14.51
Urban Area	1.32		
USFS Retention Area	2.93		
Wetlands (NVCS)	5.75	1.29	2.14
Wetlands (NWI)	6.04	1.40	1.33
OWNERSHIP			
TOTAL ROUTE LENGTH (MILES)	203.00	90.20	87.55
Bureau of Land Management	82.17	53.01	45.15
Bureau of Reclamation	3.10	3.10	3.10
National Forest	9.23		
Private	97.70	31.35	35.66
State	10.73	2.67	3.56
Water	0.08	0.08	0.08
WWEC / EXISTING TRANSMISSION CORRIDORS			
Within WWEC Corridor	11.94		
Within Projected WWEC Corridor	14.07		
Adjacent to WWEC Corridor / Projected WWEC Corridor	10.57		
Within Existing Transmission Corridor	80.34	18.36	46.37
Adjacent to Existing Transmission Corridor	19.26	1.83	8.65
Within 3000 Feet of Existing Transmission Lines	99.60	20.20	55.02

TABLE 5 - SEGMENT 5					
	Seg 05 Proposed - Total Length	COMPARISON 1		COMPARISON 2	
		Seg 05 Proposed	Alt 5-1	Seg 05 Proposed	Alt 5-2
	5, 5a, 5g, 5b, 5i, 5j, 5l, 6	5i, 5j, 5l, 6	5i, 5d, 5e, 5h, 6	5l, 6	5l, 5m, 6
CONSTRAINTS					
Big Game Winter Range	4.08	0.05	0.02		
BLM Range Allotment	21.42	5.27	0.09		
BLM VRM II	1.59	0.10		0.10	
BLM VRM III	3.93	1.15			
Steep Slope (>15%)	24.62	9.80	3.96		
Historic Trail (buffer)	1.84	1.15	1.30	1.15	1.30
Irrigated Agriculture	11.51	2.68	8.86	2.43	3.36
Raptor Nest (buffer) - Bald Eagle			0.68		
Wetlands (NVCS)	0.38	0.06	0.73	0.02	
Wetlands (NWI)	3.93				
CONSTRAINTS					
TOTAL ROUTE LENGTH (MILES)	54.63	19.60	16.50	5.77	5.29
Bureau of Land Management	13.23	8.74		1.16	0.14
Private	37.81	15.34	16.36	4.51	4.97
State	3.49	3.04	0.77		
State Fish and Game	0.06			0.06	
Water	0.04		0.35	0.04	0.02
WWEC / EXISTING TRANSMISSION CORRIDORS					
Within WWEC Corridor					
Within Projected WWEC Corridor					
Adjacent to WWEC Corridor / Projected WWEC Corridor					
Within Existing Transmission Corridor	5.61	0.86	1.00	4.64	5.29
Adjacent to Existing Transmission Corridor	13.11	3.36	0.37	1.13	
Within 3000 Feet of Existing Transmission Lines	18.72	4.22	1.37	5.77	5.29

TABLE 6 - SEGMENT 7							
	Seg 07 Proposed - Total Length	COMPARISON 1		COMPARISON 2		COMPARISON 3	
		Seg 07 Proposed	Alt 7-1	Seg 07 Proposed	Alt 7-2	Seg 07 Proposed	Alt 7-3
	5, 7a.0, 7c, 7d, 7e, 7v, 7g, 7h, 7j, 7j.1, 7k, 7l, 7y, 7m.1, 7t, 7s, 7s.3, 7s.1, 7z, 9	5, 7a.0, 7c, 7d, 7e, 7v, 7g, 7h, 7j, 7j.1, 7k, 7l, 7y, 7m.1, 7t, 7s, 7s.3, 7s.1, 7z, 9	5, 7a.0, 7b.1, 7a.2, 7r.1, 7r.2, 9a.1, 9	5, 7a.0, 7c, 7d, 7e, 7v, 7g, 7h, 7j, 7j.1, 7k, 7l, 7y, 7m.1, 7t, 7s, 7s.3, 7s.1, 7z, 9	5, 7a.0, 7b.1, 7a.2, 7r.1, 7q.1, 7s.3, 7s.1, 7z, 9	7h, 7j, 7j.1, 7k, 7l, 7y, 7m.1	7h, 7j.2, 7m.1
CONSTRAINTS							
Airport Zone	0.97	0.97		0.97	0.97		
Big Game Winter Range	9.08	9.08	12.13	9.08	5.49		1.57
BLM Range Allotment	36.39	36.39	111.02	36.39	67.11	1.71	5.94
BLM VRM I			1.95				
BLM VRM II	1.32	1.32	0.36	1.32	0.98	0.01	
BLM VRM III	7.87	7.87	18.04	7.87	15.27		
Designated Roadless Area			0.72		0.72		
Steep Slope (>15%)	27.45	27.45	60.04	27.45	41.89	4.26	6.22
Highly Erosive Soils			0.72		0.72		
Historic Trail (buffer)	5.64	5.64	6.38	5.64	7.63		
Irrigated Agriculture	43.18	43.18	18.55	43.18	18.82	1.99	1.66
Raptor Nest (buffer) - Other	3.21	3.21	8.30	3.21	7.70	1.41	1.13
Sage Grouse Lek (0.25 mile buffer)							0.42
Sage Grouse Lek (0.65 mile buffer)	0.79	0.79	0.34	0.79	1.60	0.79	1.27
Scenic Highway (buffer)	3.20	3.20		3.20	11.23	3.20	4.35
Small Mammal Habitat - Pygmy Rabbit			67.35				
USFS Retention/Partial Retention Area			29.61		11.39		
Wetlands (NVCS)	0.50	0.50	0.27	0.50	0.23		
Wetlands (NWI)	5.02	5.02	4.91	5.02	4.91		
OWNERSHIP							
TOTAL ROUTE LENGTH (MILES)	117.95	117.95	173.28	117.95	127.39	10.50	10.77
Bureau of Land Management	28.09	28.09	72.98	28.09	47.12	1.31	4.37
National Forest			28.42		12.10		
National Grassland			0.06		0.06		
Private	85.59	85.59	64.12	85.59	63.32	9.19	6.40
State	4.27	4.27	7.65	4.27	4.47		
State Fish and Game					0.31		
WWEC / EXISTING TRANSMISSION CORRIDOR							
Within WWEC Corridor	0.46	0.46	8.29	0.46	0.46		
Within Projected WWEC Corridor	0.90	0.90	3.32	0.90	1.11		
Adjacent to WWEC Corridor / Projected WWEC Corridor	1.05	1.05	9.13	1.05	1.24		
Within Existing Transmission Corridor	13.25	13.25	27.60	13.25	9.78		
Adjacent to Existing Transmission Corridor	3.77	3.77	2.04	3.77	2.09		
Within 3000 Feet of Existing Transmission Lines	17.02	17.02	29.64	17.02	11.87		

TABLE 7 - SEGMENT 8							
	Seg 08 Proposed - Total Length	COMPARISON 1		COMPARISON 2		COMPARISON 3	
		Alt 8-1	Alt 8-2	Seg 08 Proposed	Alt 8-3	Seg 08 Proposed	Alt 8-4
	8, 8a, 8b, 8c, 8c.1, 8q, 8r, 8r.1, 8r.3, 9t, 9v, 11	8q, 8r, 8s	8q, 8o, 8s	8r.1, 8r.3	8r.1, 8r.2, 8r.3	8q, 8r, 8r.1, 8r.3, 9t, 9v, 11	8q, 8r, 8s, 8g, 8h, 8j, 8k, 8l, 8m, 8n, 8n, 8p, 11
CONSTRAINTS							
Big Game Winter Range	22.52						
BLM Range Allotment	99.90	5.88	5.40	6.91	4.78	43.26	26.28
BLM VRM I	6.81					3.63	
BLM VRM II	15.06					6.90	
BLM VRM III	32.97	5.47	2.31			14.20	8.81
Guffy Butte Archeological Area	3.29					3.29	
Herd Management Area	7.00					7.00	
Steep Slope (>15%)	5.29	0.00	0.14			1.95	1.35
Historic Trail (buffer)	5.32					0.60	0.54
Irrigated Agriculture	13.09				2.16	0.72	13.15
National Guard	7.62						
Orchard Training Area (OTA)	9.07			5.10	0.40	9.07	
Raptor Nest (buffer) - Other	38.89	3.05	3.14	6.20	6.06	27.18	6.99
Scenic Highway (buffer)	5.52					4.60	4.00
Slick Spot Peppergrass (LEPA)	5.92	1.53	1.34			5.92	11.49
Slick Spot Peppegrass (LEPA) - Potential Habitat	50.38	4.01	3.98	4.66	1.80	20.71	16.89
Snake River Birds of Prey NCA	28.23			6.91	3.42	26.27	
Wetlands (NVCS)	0.19						0.10
OWNERSHIP							
TOTAL ROUTE LENGTH (MILES)	131.04	6.53	6.41	6.91	8.08	45.26	45.77
Bureau of Land Management	84.54	5.47	2.31	6.91	2.92	39.88	14.17
Bureau of Reclamation	3.68	0.25				2.73	1.55
Private	33.54	0.81	3.85		4.16	2.65	27.25
State	9.28		0.25		1.00		2.81
WWEC / EXISTING TRANSMISSION CORRIDOR							
Within WWEC Corridor	18.82	0.85	1.85			5.33	1.04
Within Projected WWEC Corridor	19.26		2.46			1.20	0.60
Adjacent to WWEC Corridor / Projected WWEC Corridor	4.71	0.50	0.46			2.37	1.06
Within Existing Transmission Corridor	76.11	0.86	1.49	3.68	1.65	0.69	4.35
Adjacent to Existing Transmission Corridor	33.28	1.22	4.04	6.91	8.08	1.17	3.15
Within 3000 Feet of Existing Transmission Lines	109.39	2.08	5.53	10.59	9.73	1.86	7.51

TABLE 8 - SEGMENT 9

	Seg 09 Proposed - Total Length	COMPARISON 1		COMPARISON 2		COMPARISON 3		COMPARISON 4	
		Seg 09 Proposed	Alt 9-1	Seg 09 Proposed	Alt 9-2	Seg 09 Proposed	Alt 9-3	Seg 09 Proposed	Alt 9-4
	9, 9a, 9a.2, 9a.3, 9a.4, 9a.5, 9c.1, 9e.1, 9e.2, 9h, 9i, 9n, 9l, 9m, 9p, 9w, 11	9a, 9a.2, 9a.3	9a, 9a.3	9a.5, 9c.1	9a.5, 9b, 9c, 9c.1	9n, 9l, 9m, 9p	9n, 9r, 9p	9n, 9l, 9m, 9p	9n, 9l, 9s, 9p
CONSTRAINTS									
ACEC	0.34			0.34					
Big Game Winter Range - Parturition	32.50					32.50	4.42	32.50	45.94
Big Game Winter Range	8.01								24.20
BLM Range Allotment	144.46	7.49	7.69	14.15	7.95	49.17	52.24	49.17	67.29
BLM VRM I	1.39						3.50		
BLM VRM II	8.15			3.85	0.10	0.18	8.29	0.18	1.33
BLM VRM III	31.39					13.72	28.16	13.72	22.84
Guffy Butte Archeological Area							2.56		
Herd Management Area	22.42					1.09	1.30	1.09	1.16
Steep Slope (>15%)	10.92		0.05	1.01	0.46	1.89	4.26	1.89	15.34
Historic Trail (buffer)	0.52						3.83		
Irrigated Agriculture	15.19	0.24	0.34		3.20	10.23	1.65	10.23	0.34
Military Operations Area (MOA)	12.25			0.78	0.64	0.12	0.13	0.12	0.12
NHRP Historic Point (buffer)	0.48					0.48		0.48	
Orchard Training Area (OTA)							3.34		
Raptor Nest (buffer) - Other	18.00			3.11	2.84	6.61	26.79	6.61	1.23
Sage Grouse Lek (0.65 mile buffer)	1.11					1.11		1.11	
Scenic Highway (buffer)	4.30					4.30	4.50	4.30	4.60
Slick Spot Peppegrass (LEPA) - Potential Habitat	24.57			2.96	1.34	1.00		1.00	2.40
Snake River Birds of Prey NCA	11.12					4.81	47.91	4.81	2.67
Wetlands (NVCS)	0.15		0.04			0.14		0.14	
Wetlands (NWI)	0.88					0.88	0.08	0.88	0.15
OWNERSHIP									
TOTAL ROUTE LENGTH (MILES)	161.70	7.78	7.69	14.72	15.29	57.16	58.24	57.16	68.71
Bureau of Land Management	128.70	5.98	5.58	13.63	8.28	37.60	50.79	37.60	65.06
Private	28.45	1.80	2.11		7.01	18.42	3.42	18.42	1.28
State	4.55			1.09		1.14	3.88	1.14	2.37
Water							0.15		
WWEC / EXISTING TRANSMISSION CORRIDOR									
Within WWEC Corridor	53.90	0.01	0.04			32.78	0.38	32.78	0.40
Within Projected WWEC Corridor	13.88					8.45		8.45	
Adjacent to WWEC Corridor / Projected WWEC Corridor	10.56	0.42	2.25		3.14	7.30	1.08	7.30	1.80
Within Existing Transmission Corridor	13.81	0.03	1.77	0.59	10.12		28.95		
Adjacent to Existing Transmission Corridor	3.55	0.45	0.56	0.64	0.34		2.07		
Within 3000 Feet of Existing Transmission Lines	17.36	0.48	2.33	1.23	10.46		31.02		