File Copy

DOE/EIS - 0114-F

Final Environmental Impact Statement

BONNEVILLE POWER ADMINISTRATION

FALL RIVER/LOWER VALLEY TRANSMISSION SYSTEM REINFORCEMENT

U.S. Department of Energy

October 1985







BONNEVILLE POWER ADMINISTRATION

FALL RIVER/LOWER VALLEY TRANSMISSION SYSTEM REINFORCEMENT

U.S. Department of Energy

October 1985



BP

÷

FINAL ENVIRONMENTAL IMPACT STATEMENT

<u>Responsible Agency</u>: Department of Energy, Bonneville Power Administration.

<u>Cooperating Agencies</u>: U.S. Department of Agriculture - Forest Service and Soil Conservation Service; U.S. Department of the Interior - Fish and Wildlife Service and Bureau of Land Management.

<u>Title of Proposed Action</u>: Fall River-Lower Valley Transmission System Reinforcement.

<u>Cooperating Agencies' Actions</u>: (1) Forest Service - Grant right-of-way on Federal Land; (2) Bureau of Land Management - Grant right-of-way on Federal land; (3) Fish and Wildlife Service - Threatened and endangered species determination; (4) Bureau of Reclamation - Grant right-of-way on Federal land.

<u>State and Counties Involved</u>: Idaho - Bonneville, Madison, Teton, Fremont, Jefferson, and Bingham Counties.

Abstract: • BPA has identified the need to reinforce the transmission system in the Targhee, Drummond, Palisades, West Yellowstone, and Teton areas in southeastern Idaho by winter 1988 in order to maintain reliable electric service to that region. • The Goshen-Drummond plan, with several alternate routes, would best satisfy this need. Three other construction alternatives did not meet the need as well and cost more. • A 73-mile, 161-kV, partly single- and double-circuit line would be built from Goshen Substation, near Idaho Falls, across the Snake River, to Drummond Substation, near Ashton, Idaho. The preferred alternative would head northeast from Goshen Substation, pass just east of the town of Ririe, and cross the Snake River north of town. It would then continue north past the White Owl Butte and Teton Dam site areas along county roads to Drummond Substation. Up to 5 acres of additional land would be required for expansion at the Drummond Substation. • Significant land use and agriculture impacts could be expected from some of the alternatives; these plus significant visual and wildlife impacts could be expected from others. Effects on agriculture and developed land use would be reduced by tearing down and rebuilding 20 miles of an existing line with two circuits on the same set of structures instead of building a parallel line. Single-pole structures (rather than H-frame) would lessen disturbance of these resources in more developed areas. Locating along established linear features would limit the amount of clearing for right-of-way and access roads. • Alternatives to construction were evaluated and found to be not feasible. The alternative of taking no action would result in the decline of quality of electric service to the area, and would violate operating criteria. Implementing conservation measures is not possible due to technological and timing constraints.

This final environmental impact statement (EIS) is being mailed to agencies, groups, and certain individuals on the mailing list (see Chapter 6, DEIS). All other individuals will receive a summary and a copy of the comments and responses.

For additional information, contact: Anthony R. Morrell, Environmental Manager Bonneville Power Administration P.O. Box 3621 - SJ Portland, OR 97208 Area Code (503) 230-5136. --•

PREFACE How to Use This BIS

In June 1985, a Draft Environmental Impact Statement (DEIS) on the proposed Fall River Transmission Reinforcement Project was published for public review. The review period extended from June 21 to August 5. Three public open houses were held in the study area during the week of July 22. Comments were received from the public and from various interested agencies, offering opinions, corrections, and additional facts for the environmental study. These comments have been reviewed and used to help produce this Final Environmental Impact Statement (FEIS).

Because changes were not extensive, reprinting the entire document was not necessary. Instead, this FEIS consists of three parts: a complete summary of the project and its impacts, a chapter with list of changes to the original text (Part 1), and a chapter which reproduces the letters received from the public, together with specific responses to comments in those letters (Part 2).

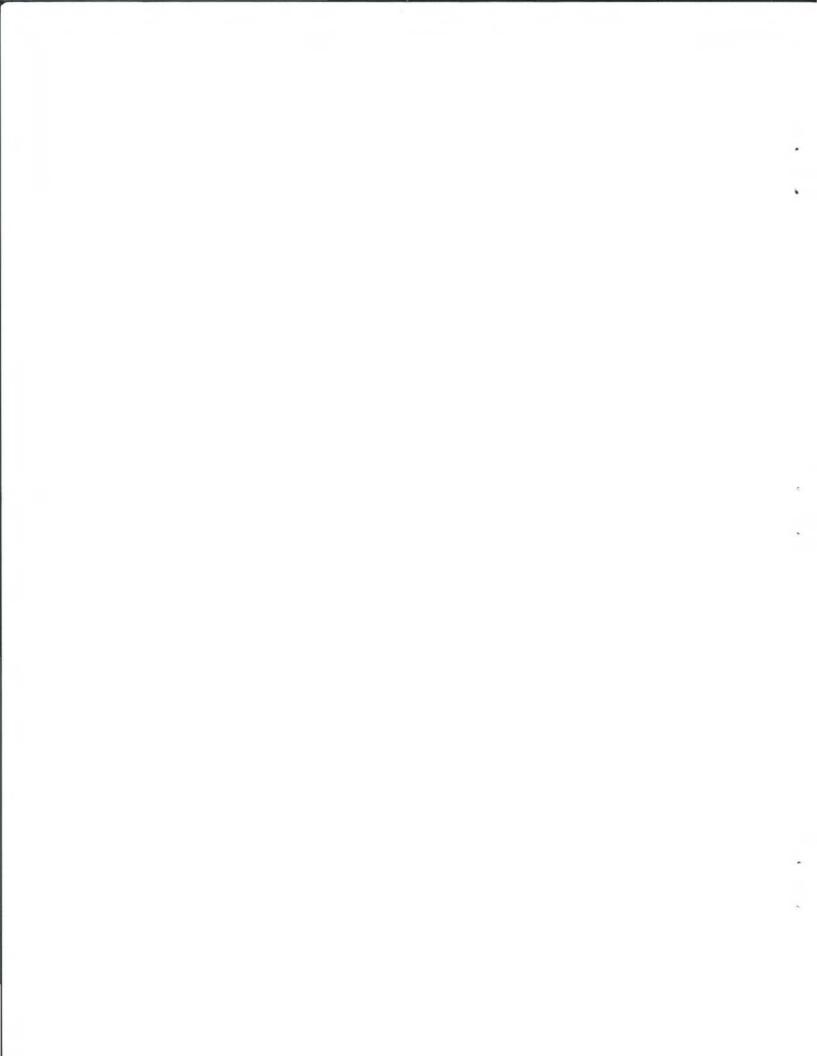
To get an accurate picture of the project and its environmental impacts, we suggest that you first read the summary. Then, if you wish to see individual changes, you may wish to crosscheck the original DEIS* with the changes listed in Part 1 of this FEIS. The changes are listed by page and paragraph (where appropriate) to make the job easier. Some of the changes were made in response to public/agency comment; some were made as design and location information was refined in work with landowners.

If you would like to see what letters were received on the project, turn to Part 2. All letters received are printed there, with responses to questions raised by the writers. The three open houses held in Ririe, Idaho Falls, and Rexburg (July 1985) also offered opportunities for comments and questions. Although many of these were answered on the spot by BPA representatives, we have included a summary of them for your interest.

Copies have been sent to all agencies, organizations, and individuals listed in Chapter 6 of the DEIS, to all commentors on the DEIS, and to those who have since requested copies.

* If you do not have a copy of the draft BIS, copies can be found in area libraries and town halls. Or, you may request one from: Anthony R. Morrell, Environmental Manager, Bonneville Power Administration, P.O. Box 3621 - SJ, Portland, OR 97208, (503) 230-5136.

CONTENTS Ц О TABLE



FALL RIVER/LOWER VALLEY TRANSMISSION SYSTEM REINFORCEMENT FINAL ENVIRONMENTAL IMPACT STATEMENT

TABLE OF CONTENTS

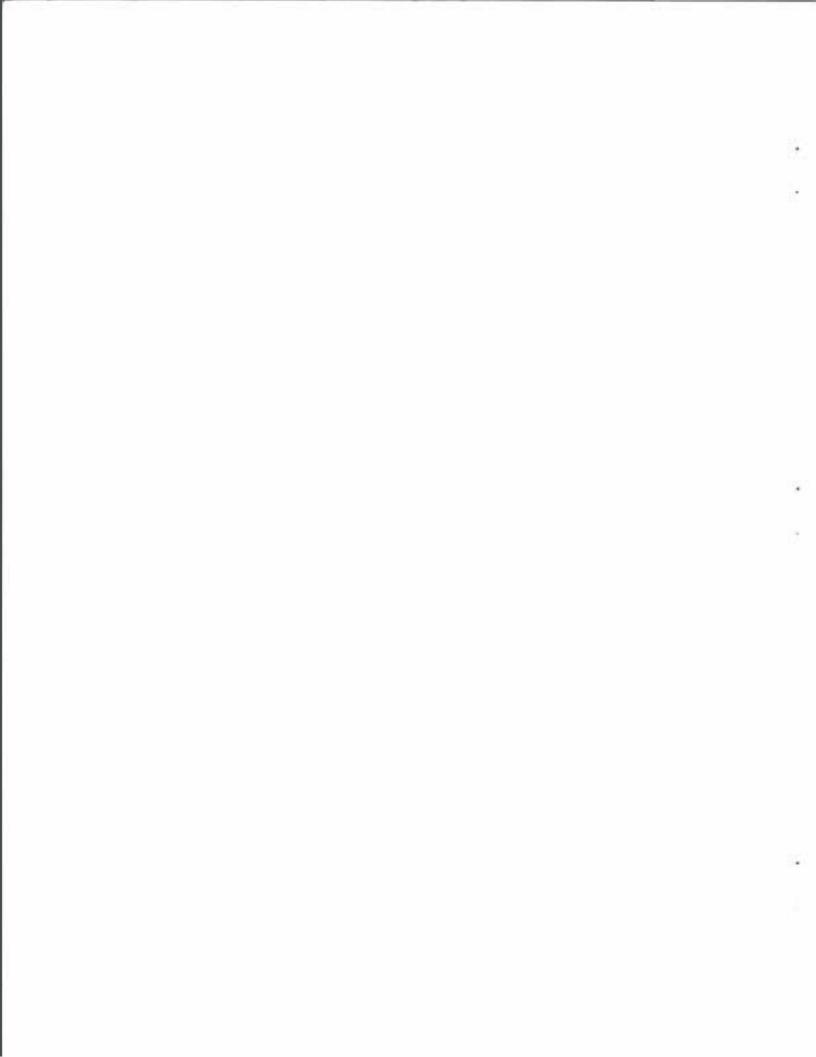
Page

Cover Sheet

Рге	face: How to	Use This BIS	
Tab	le of Content:	S	i
Sum	mary		1
1.	CORRECTIONS	AND ADDITIONS TO THE DRAFT BIS	
	Chapter 1:	Purpose and Need for Action	1-1
	-	Alternatives Including the Proposed Action	1-3
		Affected Environment	1-11
	Chapter 4:	Environmental Consequences	1-13
	Chapter 5:	List of Preparers	1-19
	Chapter 6:	List of Agencies, Organizations, and Persons	1-21
		to Whom Copies of the Statement are Sent	
	Chapter 7:	References	1-23
	Chapter 8:	Glossary	1-25
	Chapter 9:	Index	1-27
	Appendices		1-31
2.	COMMENTS RECEIVED ON THE DRAFT EIS AND RESPONSES TO THOSE COMMENTS		
	Introduction		2-1
	Comment Letters and Responses		2-3
	Summary of Open House Comments		· 2–53

•





SUMMARY *

STATUS

The Fall River-Lower Valley Transmission System Reinforcement project is a proposal to add 161-kV transmission facilities to Bonneville Power Administration's (BPA) regional power system serving the Pacific Northwest in order to maintain reliable service to loads in the Targhee, Drummond, Palisades, West Yellowstone, and Teton areas in southeast<u>ern</u> Idaho. (See figure 1-1, <u>DBIS</u>.) The project would consist of a 161-kV partly single- and partly double-circuit line from Goshen Substation, near Idaho Falls, Idaho, to Drummond Substation, near Ashton, Idaho. Drummond Substation would be expanded by up to 5 acres to accommodate new equipment.

The project is needed because existing lines are now near capacity and more load growth is predicted. This situation will cause low voltages and overloads. If the system is not reinforced, BPA could have to cut off or reduce electrical service to customers by 1989 because of these problems. [Chapter 1]

This project was first described in a Notice of Intent in the <u>Federal Register</u> on March 23, 1983. Public meetings to determine the scope of the project were held in the project area in the spring of 1983; landowner and local government interviews, as well as government agency involvement, continued throughout 1984. [Appendix A] A plan to build the line between Goshen and Drummond Substations was proposed after alternative ways of meeting the need were investigated and eliminated from detailed consideration. A complex route network within the Goshen-Drummond option was developed (largely in response to public comment and concerns), and a preferred route option was proposed in winter 1984. Public meetings were held in Ririe, Idaho Falls, and Rexburg in February 1985 to solicit comment on the alternatives. <u>The draft Environmental Impact Statement (DEIS)</u> reflected ideas received at those meetings.

During public review (June 21-August 5, 1985), 16 comment letters on the DEIS were received. Comments were also received during the three Open Houses held in Ririe, Idaho Falls, and Rexburg in late July. Based on those comments, this final EIS includes: 1) the DEIS; 2) changes and additions to the DEIS; 3) comments on the DEIS; and 4) responses to comments received.

MAJOR CONCLUSIONS

 The Goshen-Drummond Plan is the preferred alternative. Two other plans, using existing transmission facilities between Goshen, Swan Valley, and Targhee substations, were also considered. (See figure 2-5, <u>DEIS</u>.) However, these other plans were more costly and failed to meet the need as well as Goshen-Drummond would. Environmental tradeoffs for the three plans would be fairly equal. [Chapter 2]

^{*}References in brackets indicate where more information on a particular subject can be found in the body of the BIS. <u>Text is underlined where new</u> <u>material has been added.</u>

- 2. The possibility of not building the project or of delaying it for a period of years (No Action) was also considered and eliminated because it would not satisfy the need for the project. [Chapter 2]
- 3. The possibility of implementing energy conservation measures instead of building the project was also examined; this alternative would not meet the need because of technological and timing problems, and so was dropped. [Chapter 2]
- 4. A specific location and set of designs for structures have been proposed from the various possibilities considered. [Chapter 2; figures 2-2a, b, and 2-3] The proposal is based on analysis by a team of environmental specialists and engineers, and considers environmental, social, economic, engineering, and public concern factors. [Chapter 2, Appendix B]

•	ronmentally Preferred Route/Designs The proposed route locations and design options below have been				
	determined to have the least environmental impact of all Goshen-				
Drummond alternatives. They are the environmentally preferred					
	alternatives for the project.				
Prop	<u>osed Route</u> (see figure 2-1)				
•	Segments 1, 2, 3, 4, 10, 11, 12a, 12c, 12e, 12f, 12q, 28, 29, 40, 46, 47, 48, 54, 55, 57, 58, 59, 63, 64, 65, 66. This location reflects team conclusions about two areas where the public asked BPA to consider alternative routings (see <u>Comparison of Alternatives</u> , below, for more detail):				
	- Near the town of Ririe, the suggested routing $(\underline{12c}, \underline{12d}, \underline{12e}, \underline{12f})$ was preferred by the team over the original route $(\underline{12b})$.				
	The team also reevaluated its original preference for a route between Moody Creek and Drummond. The western route (<u>54</u> , <u>55</u> , <u>57</u> , <u>58</u> , <u>59</u> , <u>63</u> , <u>64</u> , <u>65</u> , <u>66</u>) again emerged as preferred over the eastern route (<u>70</u> , <u>73</u> , <u>74</u> , <u>75</u> , <u>76</u> , <u>77</u> , <u>66</u>).				
	- BPA has identified a route adjustment into Drummond which avoids building a parallel line except for the last mile into Drummond. This adjustment is shown in Part 1, after p. 1-4.				
Prop	<u>osed Designs</u> (see figures 2-2a, 2-2b, 2-3)				
•	<u>Standard H-frame</u> (two poles) (segments <u>3</u> , <u>29</u> , <u>40 (part)</u> , <u>46</u> , <u>47</u> , <u>48</u> ,				
	<u>54, 55,</u>				
	<u>57, 63</u> (part), <u>66</u>				
•	<u>Double Circuit H-frame</u> (segments $\underline{1}$ and $\underline{2}$). Double-circuit (tearing				
	down an existing line and building in its place one set of struc- tures to carry both the new and existing line) is proposed because				
	it will substantially limit impacts on farming operations, developed				
	land, and social and economic conditions on these segments.				
•	<u>Single Pole</u> (segments <u>4</u> , <u>10</u> , <u>11</u> , <u>12</u> , <u>40</u> (part), <u>58</u> , <u>59</u> , <u>63</u> (part), <u>64</u> , <u>65</u>).				

Single pole structures will cause far less disturbance of farming operations and intrusion on residences where these land uses occur along the line.

 <u>Steel Lattice</u> (segment <u>28</u>--Snake River Crossing). This design provides the additional support necessary for the long upward span across the river.

AREAS OF CONTROVERSY

Areas of controversy are topics over which substantial disagreement exists and which are not easy to resolve. Such areas for this project, derived from questions and comments by members of the public and by government agencies, are listed below. Specific sites of controversy are discussed in the Alternatives Comparison summary (pp. 4 - 11). [Chapter 2, Appendix A]

The major areas of controversy for this project arise over the location of the line and the consequences of that location. These interrelated issues include:

Location of the Line

There are many ways to reinforce the existing system. The proposed route, from Goshen to Drummond Substation, has fourteen major route alternatives. Other plans or routes have also been identified and examined. Controversy arises over whether there might be an acceptable plan other than Goshen-Drummond to meet the need; over the extent to which the line should be located along existing roads and not cut across new territory; over the relative benefits of locating off developed land as much as possible (see <u>Resource</u> <u>Tradeoffs</u>, below); over whether the present railroad right-of-way could be followed; over the best place to cross the Snake River; over the best way to bypass the town of Ririe; and a variety of similar questions.

Design of the Line

Three main structure designs are proposed for the project (see figure 2-2a, <u>DEIS</u>): The H-frame (two-pole) wood pole structure is the "base" design for the project. For areas where space is constricted by development and/or where visual impact on developed land uses is important, a single-pole wood structure has been proposed. And an H-frame wood pole structure built to carry two lines has been developed where an existing line would be torn down first, and the new facilities built to carry both the old and the proposed line. The single-pole design costs the least per structure, but requires about twice as many structures per mile. The teardown-rebuild option (H-frame, doublecircuit) costs much more than the other two. Controversy arises over where each type of structure should be used; over the factors of costs, esthetics, durability, and difficulty in structure placement as they are balanced in these decisions; and over the extent to which the public may influence the use of any of the three designs in a given area.

Resource Tradeoffs

20 72 19 0 4

Many resources--both "social" and "natural"--may be affected by the project. Some routes would have more effects on natural values, such as wildlife, native vegetation, soils, and water resources. Some routes would have more effects on social values such as residences, farming operations, and other cultural resources. Some resources also cross these boundaries, such as recreation values dependent upon an unspoiled natural environment, and soil stability which affects both farmland and forest. Routing choices which locate the line farther away from populated or intensively farmed areas increase potential impacts on wildlife and other natural resources. Routing choices which seek to protect natural resources may increase potential effects on the lives and livelihoods of a community. Controversy arises over the proper balance of these two needs and resources. Controversy also arises where mitigation measures for one impact may increase impacts on another resource: for instance, where marker balls are placed on the line to warn aircraft of lines over rivers, their increased visibility may detract further from a scenic view.

Costs

Controversy arises when cost affects choices made about location, design, mitigation measures, and resource tradeoffs. Controversy also arises when the costs of a choice--for instance, the choice to parallel an existing line rather than to tear down and rebuild an existing line--appear to fall on the residents of the area rather than on BPA.

Safety.

Disagreement exists over the extent to which the proposed line (or, the proposed line in addition to an existing line in places) may interfere with the safe operation of farm machinery, including large vehicles or combines, irrigation systems, and aerial spraying operations.

ALTERNATIVES COMPARISON

BPA has considered three basic alternative actions for reinforcing its transmission system in the region (see figure 2-5, <u>DEIS</u>). However, the Goshen-Drummond alternative is the only reasonable plan from an engineering/cost perspective. The option of not taking any action to meet the need was also compared to the Goshen-Drummond plan. <u>The alternative of other utilities</u> <u>building the transmission facilities was also considered</u>. Below is a discussion of (1) the Goshen-Drummond Plan, (2) No Action, (3) Other Plans Considered, <u>and (4) the Other Utilities Build alternative</u>. [Chapter 2]

Goshen-Drummond

The Goshen-Drummond Plan involves building a new 73-mile 161-kV line directly from Goshen Substation (15 miles southwest of Idaho Falls) to Drummond Sub-

station (east of Ashton, Idaho). Two 115-kV power circuit breakers would be added at Drummond Substation. The 161-kV line would be operated initially at 115-kV. Later (1992), a 161/115-kV transformer would be added at Drummond Substation. An additional 115-kV circuit breaker would be required at Goshen Substation until the line is converted to 161-kV.

Numerous <u>route options</u> were located and considered in developing the proposal. Most of the line would be built along new routes. The proposal also includes several <u>design options</u>. These range from tearing down an existing line and building new structures to carry both the old and new circuits (double-circuit option) to using different types of structures in special areas. The design options have been considered as measures to lessen effects on human or natural resources where appropriate.

Alternatives within the Goshen-Drummond plan were divided into four sectors, for ease of discussion. From south to north, they are: the <u>Goshen Entry</u>, the <u>Snake River Network</u>, the <u>Crossovers</u>, and the <u>North Sector</u>. These sectors, and the route segments included in them, are shown on figure $P-1^*$. The preferred option is the basis for discussion below; less preferred route options are shown in brackets.

Preferred Option

<u>Goshen Entry (Option A: Segments 1, 2)</u> [See figures P-2, 2-3, <u>DEIS</u>] On the congested Snake River plain and through the adjoining benchlands, one of the two existing lines would be torn down and and rebuilt to double-circuit for about 20 miles out of Goshen Substation. The design option to build parallel for the benchland stretch was considered. <u>The parallel option was</u> <u>preferred for electrical performance, but is considered less desirable because</u> of public concern for potential impacts on farming operations. [There are no location options for this sector.]

<u>Snake River Network (Option G: Segments 3, 4, 10, 11, 12, 28, 29, 40)</u> [See figures P-3, 2-3, <u>DBIS</u>]

The line would leave the existing line's path west of Ririe Reservoir and head north, primarily along county roads. It would pass near the town of Ririe and cross the Snake River near the Union Pacific Railroad trestle. Construction from near Highway 26 to the river crossing would be on single wood pole structures to minimize conflict with cultivated land and other developed land uses.

[Other alternatives would head straight north along the Archer-<u>Shelton</u> Road, crossing the Snake River just south of Archer, then turning east to Moody Creek; or would pass west and north of Ririe; or would follow section lines/ county roads parallel to the preferred option but farther east; or would pass closer to Ririe Reservoir, heading north to cross the Snake River near the Heise Bridge or by the Cress Creek Trail. Design options would be the same as for the preferred option.]

<u>Crossovers (Option K: Segments 46, 47, 48)</u> [See figures P-4, 2-3, <u>DEIS</u>] Past the river, the line would head northeast, largely through wooded terrain. The standard H-frame structure would be used here.

^{*}P- Figures are found in the pocket on the back cover of the DBIS.

[Less preferred routing alternatives would continue north before turning east to join the North Sector at a point near White Owl Butte. Design options would be the same as that for the preferred option.]

North Sector (Option M: Segments 53, 54, 55, 57, 58, 59, 63, 64, 65, 66) [See figures P-5, 2-3, DBIS]

The line would cross Moody Creek, then continue north, primarily along county roads across mostly cultivated land. Just north of the Teton Dam Site it would turn east for about 11 miles to Drummond Substation. Single-pole structures are proposed for <u>most</u> cultivated areas. H-frames would be used elsewhere.

[The less preferred routing option would head east, then north, crossing Canyon and Calamity Creeks, passing through the edges of forested areas, then into cultivated land near the Teton River, as it continues north to Drummond Substation.]

Comparison of Alternatives within the Goshen-Drummond Plan

Within the plan, the alternative route and design alternatives were proposed as follows. In the <u>Goshen Sector</u> (figure P-2, <u>DBIS</u>), no location alternatives were feasible, as no lower-impact locations could be found across the extensively settled and farmed valley floor. Option B (double-circuit rather than parallel construction) was <u>preferred because it minimized</u> impacts on nearby residences and on irrigated farmland crossed diagonally by the present line on segment <u>1</u>; and <u>because it</u> responded to strong public concern about impacts from an additional set of poles across dryland farms in segment <u>2</u>.

In the Snake River Network (figure P-3, DBIS), both location and design alternatives exist. Single-pole construction was proposed for segments from Ririe Reservoir to the Snake River, as the route passes through more heavily developed areas where space available for two-pole construction is constrained. Alternatives which followed the Bast Shelton-Archer road north and then east were rejected for multiple impacts on developed land uses: nearly 80 homes were located within 500 feet of the route; avoiding the homes would mean interfering with adjacent areas of irrigated agriculture. Construction disturbance and visual impacts were considerable, and even displacement of some residences might be difficult to avoid. Alternatives which passed near Ririe Reservoir and then north to cross the Snake River at or near the Heise Bridge encountered rural residential areas, agriculture, and, finally, resources along a sensitive stretch of the Snake River. These eastern crossings of the Snake conflicted with viewer expectations at the Cress Creek trail and observation point, and with expectations of recreationists crossing into a multiple-use recreation area near Heise. They also more seriously disturbed wildlife on the scarp rising north of the river. They intruded on a proposed BLM Area of Critical Environmental Concern and a Special Recreation Management Area. Alternatives which ran north through the middle of the sector were preferred because they crossed the Snake River in a far less obtrusive location, were not a subject of concern for wildlife, and encountered less sensitive soils. These options--particularly the preferred option (G)--also avoided serious conflicts with agricultural land and residences. An adjustment of the route east around Ririe suggested by area residents was proposed to minimize impacts on agriculture and residences.

The south <u>Crossover</u> (figure P-4, <u>DBIS</u>) was preferred over the north crossover because it proved possible to locate the line on the farm/forest margins, avoiding impacts on wildlife. It also avoided greater impacts on agriculture in a less well-roaded area of the north crossover.

The preferred option in the <u>North Sector</u> (figure P-5, <u>DEIS</u>) was proposed to avoid greater and less mitigable impacts on big game habitat in relatively unroaded areas, on fishery and spawning streams, on soils and vegetation on sensitive terrain, and on irrigated land with center pivots and wheel lines located in the northern portion of the sector. (The route must follow existing transmission lines which make it impossible to avoid affecting these irrigation systems. Approximately 21 acres of agriculture would likely be removed from irrigation.) The preferred (western) option (M) crosses more miles of irrigated agriculture, but can be located to avoid affecting similar systems. A good system of roads parallels the route, reducing access road needs and therefore disturbance and interference with both wildlife and agriculture. It crosses a minor amount of big game range, and fewer fishery streams.

Mitigation

Mitigation measures can often reduce or eliminate many adverse impacts from construction, operation, and maintenance of transmission facilities. These measures are actions taken by BPA before, during, and/or after construction to ease the impacts on the land's people and its natural and cultural resources. The best mitigation for adverse impacts is to avoid areas where impacts may occur. To a large extent, this has been accomplished: the routes under consideration are the result of a route location process which has involved close contact with the public and individual landowners, in an effort to avoid sensitive resources as much as possible.

Where environmental effects are not avoidable, measures can be used to minimize them. Below is summarized the mitigation included as part of the proposal. Specific measures that could be used along alternative routes that have not been proposed but could still be selected are listed at the end. [Chapters 2, 4]

Standard Mitigation Measures

The proposed route has been located close to existing roads or in less productive areas, wherever possible, to minimize disturbance from clearing and road construction. Detailed design and planning of access and right-of-way clearing will further minimize road and clearing needs. This includes working with private landowners and state and Federal agencies to minimize impacts and to serve BPA's needs and their needs or plans. BPA will consider all land use and environmental factors in an area, when locating structures and planning clearing and road locations.

In cultivated areas, locating the line along roads and at field edges (particularly where single-pole structures are proposed) will limit disturbance of farming operations and irrigation systems, removal of land from production, and nuisance, trespass, and construction disturbance. Where the line parallels existing roads, access during construction will be from the roads. Convenience roads will be <u>built only where absolutely necessary due to terrain</u> <u>limitations</u>. Where access is required in tultivated areas, most access roads required for construction will be removed after construction is complete, and the ground restored. BPA will work with landowners and land managers to develop further appropriate mitigation for affected agricultural land and rangeland, including locating structures for minimal disturbance, subsoiling of compacted areas, weed control at structure sites, compensation for land lost to production and for any crops destroyed during construction, and reseeding of disturbed rangeland. BPA will try to avoid construction during adverse weather or field conditions.

In forested areas, the route has been located to follow existing clearings, where possible, to minimize new clearing. Minimizing clearing also limits accompanying effects on wildlife, visual/recreational resources, soils, and water resources. The following procedures will also be incorporated in the design where sensitive natural resources exist:

- In key wildlife areas, the line will be routed along the margins of farmland and forest to avoid splitting blocks of secure wildlife habitat. Where there are some existing roads near such areas, spur roads to structure sites will be used rather than continuous or loop roads. Structures and road locations will be planned with assistance from the State of Idaho Department of Fish and Game. Use of access roads will be controlled where appropriate.
- Sediment traps (e.g., bales of hay placed downstream to filter sediment) will be used during construction where roads cross streams with fishery values.
- Disturbed areas will be seeded with quick-growing grass species easily adaptable to the site and fertilized if necessary. Standard erosion control measures such as water bars, drainage structures, and low-gradient road cuts will also be used in problem soils areas. To reduce rutting and compaction, BPA will try to avoid construction on problem soils when they are wet.
- In riparian areas, clearing of vegetation for transmission line right-of-way will be limited. Access roads will be designed to avoid riparian areas as much as possible. Canyons which can be spanned with adequate line clearance (such as Moody Creek and the Teton River) will not be cleared.
- Wetlands will be avoided and no transmission towers or access roads will be constructed in wetland areas, where possible. Where construction does occur adjacent to a wetland, measures will be taken to prevent disturbing it.

Vegetation management plans, including uses of and limitations on herbicide applications, will be developed for public lands in cooperation with the appropriate Federal land management agency responsible (USFS, BLM). Similar coordination in the interest of promoting multiple uses of the right-of-way may be undertaken with respect to State lands, individual landowners, and weed control districts.

A vegetation control program will be used selectively to minimize injury to groundcover and low-growing shrubs which are compatible with the line and which stabilize the soil. Trees which became a hazard to the transmission line occur relatively sparsely and as a rule are very slow growing, thus requiring only infrequent control by mechanical cutting or by herbicides. BPA will also encourage maximum use of clearing waste timber, wood fiber, and other forested products. On public land, this may include public use of nonmerchantable trees for firewood.

To reduce effects on air quality, debris piles will be kept as clean and dry as possible and burned in such a manner as to reduce smoke. No garbage or petroleum-based products will be burned. Leftover construction materials will be retained for reuse or reprocessing where practical. Water or other dust control agents will be used on roads as necessary.

Coordination with local government agencies will minimize service- and community-related impacts from the construction workforce. Close consultation with landowners on structure and access road siting, maintenance of weed control programs, advance notice of necessary construction and maintenance works, continued development of fair negotiation and compensation practices for easement acquisition, and prompt response to landowner problems are measures that will reduce socioeconomic impacts. Good gate management and location of structures off irrigated land wherever possible will also limit social concerns related to trespass and interference with agricultural operations.

If residents experience television or radio reception problems due to the line, BPA will investigate such reports and provide appropriate mitigation to restore reception to preconstruction level if a BPA facility should be found to be the cause.

Any potential problems with telecommunication or railroad entities due to BPA's line are generally investigated and mitigated in the design stage (before construction), according to BPA policy and in cooperation with the affected entity.

BPA would consider excavation to recover below-ground cultural remains; this could partially avoid loss of cultural deposits at most identified historic and prehistoric sites. Impacts on any remaining structures would be avoided should they be determined eligible for nomination to the <u>National Register of Historic Places</u> (see <u>CONSULTATION, REVIEW, AND PERMITS REQUIREMENTS</u> section, Chapter 4).

Site-specific Mitigation Measures

<u>Double-Circuit</u> (segments <u>1</u> and <u>2</u>) For the first 20 miles out of Goshen Substation (segments <u>1</u>, <u>2</u>), the existing line would be taken down and two circuits placed on one set of towers in its place (Option B). (See figure 2-2a., <u>DEIS</u>) Originally, double-circuit was proposed only for the first 3.5 miles. The next 17 miles were proposed for double-circuit in response to public concern. The main benefits of this option would be to limit visual effects of and disturbance of residences and farming operations. With double-circuit construction, farmers will not experience the long-term additional interference with their operations or loss of farmland to the extent that a new, parallel line would cause. (Disturbance will still occur during construction.) It may also be possible to locate some new structures to avoid the interference the existing line now causes with farming operations, such as irrigation systems. The existing level of visual intrusion for residences along segment $\underline{1}$ would remain about the same with double-circuit construction. [Chapter 2]

Ririe Reroute (segments 12a, 12c, 12e, 12f, 12g)

Ririe residents suggested relocating the proposed route near Ririe east around the town to reduce effects on agricultural operations and residences. BPA has determined that such a route adjustment is preferable from the standpoints of environmental impact, technical feasibility, and landowner acceptability. An adjustment has been included in the proposal as mitigation, pending the resolution of any canal maintenance problems which might arise. The specific location is still being worked out. BPA is currently consulting with the Progressive Irrigation District to identify and solve any such problems. [Chapter 2]

<u>Single-Pole Structures</u> (segments <u>4</u>, <u>10</u>, <u>11</u>, <u>12a</u>, <u>12c</u>, <u>12e</u>, <u>12f</u>, <u>12q</u>, <u>part of</u> <u>40</u>, <u>58</u>, <u>59</u> <u>63</u> (part), <u>64</u>, <u>65</u>)

Single-pole structures (figure 2-2a, <u>DEIS</u>) are proposed instead of H-frame structures in more intensively farmed or settled areas (e.g., near Ririe) where linear features such as roads, or field, property or section lines can be followed. The single-pole structure takes less space and thus would reduce potential interference with farming operations. The structures would also avoid conflicts with residential development and, where residences are nearby, would be less visually intrusive than H-frames. Visibility can be further reduced by placing structures to either side of rather than in front of residences.

Heise-Thornton Road (segment 28)

<u>Cultural resources</u> survey for the Heise-Thornton Road (segment <u>28</u>), followed by mapping and photographing of any remaining unaltered portions, would reduce overall impact; any portions determined eligible for National Register listing would be avoided.

Airstrips (segment 58)

Where the line <u>might</u> have interfered with use of <u>a farmroad</u> as an airstrip, <u>adjustments to avoid crossing adjacent farmland have avoided potential</u> <u>conflict with the airstrip as well</u>. No adjustment seems possible for the northern airstrip (<u>on Byrman Road</u>) because the surrounding area is all farmland. <u>If</u> the owner of the service <u>confines operation to the airstrip</u> <u>itself</u>, there should be no interference.

<u>Center-Pivot Irrigation</u> (segment 59)

The line north of the Teton River is being adjusted to avoid interfering with existing and planned circle irrigation system for about 2 miles. Interference with these systems will be avoided by placing single-pole structures near the edge of a road or along the Teton canyon rim.

<u>Parallel_into Drummond</u> (segment <u>66</u>)

The line into Drummond would be located parallel to a road that already has a transmission line on either side. This line would be located next to the 115-kV line on the west side of the road. H-frame structures would be placed to match existing spacing, to limit additional disturbance of farming operations. BPA has identified a route adjustment into Drummond which avoids building parallel except for the last mile into Drummond. This adjustment is shown in Part 1, after p. 1-4.

Mitigation Not Included in the Proposal

Where the proposed route would cross the Snake River (segment <u>28</u>), BPA <u>studied</u> <u>removing</u> the overhead groundwires to <u>reduce potential for bird collisions</u>. <u>Removal is not feasible, as it would decrease line reliability below</u> <u>acceptable limits due to the high incidence of line strikes by lightning in</u> <u>the area</u>. Placing marker balls <u>on the groundwires</u> to increase visibility to water fowl and raptors <u>is still being considered here and in other areas of</u> <u>high waterfowl use</u>. <u>A tradeoff of using marker balls would be increased</u> visibility of the line to recreationists along the Snake.

The following are measures which would be used on segments that are not part of the proposed route but that could still be selected.

On certain alternative routes, residences and buildings or distribution lines exist on both sides of the right-of-way. Avoiding them may require placing structures farther into cultivated areas. This could cause or increase effects on other resources, particularly farming or farming operations. Such tradeoffs could occur on the following segments: <u>6</u>, <u>7</u>, <u>12b</u>, <u>20</u>, <u>36</u>, <u>37</u>, <u>39</u>, and <u>58</u>.

Where the line would parallel an existing line across farmland where aerial spraying is employed (i.e., segments $\underline{76}$, $\underline{77}$), structure spans would be matched as much as possible to minimize safety hazards or impairment of the spraying operations.

Double-circuit construction would be considered on segments <u>76</u> and <u>77</u> leading up to Drummond Substation to <u>reduce</u> increased conflicts with farmland and additional interference with operations on loss of farmland. Problems with taking the existing line out of service would have to be solved for this to be viable.

Where streams and rivers would be crossed (segments $\underline{13}$, $\underline{27}$, $\underline{38}$, $\underline{41}$, and $\underline{42}$), consideration will be given to removing the overhead groundwire or marking it with marker balls to increase visibility to waterfowl and raptors.

Access roads would be routed around the Heise-Thornton Road remains in $\underline{38}$; roads for $\underline{42}$ would also be routed around the remains of the Hawley Ditch.

No Action

Under No Action, the environmental impacts associated with the development of this proposal would not occur or would at least be deferred if the project were to be built at another time. These impacts include commitments of capital expenditures, materials (wood, steel, ceramics, and fuels), labor, and other resources; and short- and long-term impacts associated with the line, the right-of-way, substation facilities, and the access road system would not occur.

The possibility of No Action by BPA was found to be inadequate to meet regional electrical service needs. The proposal allows for reinforcement of the Federal Columbia River Transmission System to transmit power efficiently and reliably to the areas of Targhee, Drummond, Palisades, West Yellowstone, and Teton areas in southeast Idaho. The No Action alternative would not be able to support growing loads after 1989 in abnormally severe winters or even sconer if low water reduces the amount of Palisades Dam generation needed to support the system. These conditions could force BPA to curb power to customers as early as 1989 in the event of an outage or overload. Such an action violates BPA's reliability criteria and contracts with our customers. [Chapter 2]

OTHER PLANS CONSIDERED

In addition to the proposed Goshen-Drummond plan, BPA identified two alternative plans for meeting the need which would involve paralleling or rebuilding existing lines between Goshen, Swan Valley, Palisades, and Targhee Substations. These are:

- <u>Goshen-Targhee</u> A second way to reinforce the area's system would be to build a mostly parallel 161-kV line along the present Swan Valley-Goshen line to Swan Valley Substation, then into Targhee Substation, for a distance of 75 miles. (See figure 2-5, <u>DEIS</u>.)
- <u>Goshen-Swan Valley-Targhee</u> A third set of alternatives involved rebuilding the Palisades-Goshen 115-kV line. One option is to rebuild it to double-circuit 161-kV (or build a new parallel line) for 38 miles to Swan Valley. Another option would be to upgrade the existing line to 161-kV. (See figure 2-5, <u>DEIS</u>.) Bither option would be followed later by a parallel 161-kV line from Swan Valley to Targhee.

They were compared along with the Goshen-Drummond plan, based on: 1) how well they would meet the need (i.e., avoiding a system failure which would black out the loads of Fall River and Lower Valley service areas); 2) how much they would cost to build, operate, and maintain; and 3) how much and what kind of environmental tradeoffs they would have. (See table 2-3, <u>DEIS</u>.) The Goshen-Drummond Plan was favored, primarily because it would do the best job of increasing the reliability of the area transmission system to avoid blackouts and because it was the least cost option over the life of the project. (No plan emerged as superior in the environmental comparisons.) The other two plans were eliminated from further consideration.

The following discussion summarizes the team's findings on these alternative plans:

Although either of these plans would directly feed the Targhee-Driggs area, most of the load growth in the area is north of Targhee, in the West Yellowstone area. This is important because that relatively large load growth is at the <u>end</u> of a long line, which seriously affects the stability of the transmission system and makes it more difficult to keep the voltage at proper operating levels. The Goshen-Drummond Plan would reinforce the system closer to this growth area and thus would relieve these problems. To provide comparable stability, a line for either of these alternative plans through the Swan Valley area would have to extend 27 miles farther, from Targhee to Drummond. This would increase its costs considerably.

Other cost factors also have been considered. The Goshen-Targhee plan would be about two and one-half miles longer than Goshen-Drummond, and so would require more material for construction. The Goshen-Swan Valley-Targhee plan, although about 2 miles shorter than Goshen-Drummond, would require adding equipment at Swan Valley Substation, not required of the other two plans.

A line for either plan would also have fewer usable roads, and would cross more forested land and steeper terrain between Swan Valley and Targhee. Steel towers could be required in places. More workhours would be required for steel erection and assembly. In the more inaccessible areas, costs would also increase because it would take longer to relocate equipment. Therefore, costs for access, clearing, and materials and construction would be much higher for either of these alternatives.

Although BPA already has right-of-way for its existing lines, it is generally enough only for those lines. For most of the distance of either alternative plan, BPA would need to acquire about as much additional right-of-way for a new parallel line (about 95 feet) as for an entirely new right-of-way, such as on Goshen-Drummond. Costs for additional right-of-way would probably be comparable for the three plans. [Chapter 2]

OTHER UTILITIES PROVIDING TRANSMISSION FACILITIES

Utah Power and Light Company (UP&L) could construct a 46-mile 161-kV line from their Rigby Substation to Drummond Substation. They would also need to reconductor lines from nearby substations to reinforce Rigby Substation in order to avoid future overloads. Overall costs for the UP&L option, including exclusive BPA use charges for the new line and proportional use of charges for existing lines, would be greater than BPA's cost to build and maintain the Goshen-Drummond plan, based on data provided by UP&L. This proposal is also less desirable from an operation and maintenance standpoint, as mixed ownership could create difficulties in coordinating these activities, as well as in planning future activities.

Overall, this alternative is less favored because it would cost BPA more, while providing less benefits to Fall River Rural Electric Coop or to Lower Valley Power and Light.

ISSUES TO BE RESOLVED

The major issues to be resolved are which route, designs, and mitigation measures to select. The proposed and alternative routes, designs, and mitigation measures are presented in this Final EIS. Several decisions, based on the BIS, and public comments on it, will resolve these issues. These decisions (shown below, under <u>DECISIONS</u>) will be made after this Final BIS is issued and will be described in a Record of Decision (ROD) for the project. The sequence of events for resolving project issues and building the transmission facilities is also shown below, under <u>SCHEDULE</u>.

The purposes, or decision factors, against which the alternatives for this project are measured, are as follows:

- To minimize cost;
- to meet BPA contractual obligations
- to reduce the amount of radial service to customers (improve service to customers by providing a second way to convey power where only one exists now);
- to minimize environmental impacts, as directed by the National Environmental Policy Act (1969);
- to save energy (reduce energy losses on the existing lines)
- to allow Utah Power and Light connections to BPA's transmission system in the future; and
- to achieve consistency with National policies.

DECISIONS

THE BONNEVILLE POWER ADMINISTRATION IS TO DECIDE: Whether to build and which route/designs/mitigation measures to select for the proposed transmission facilities.

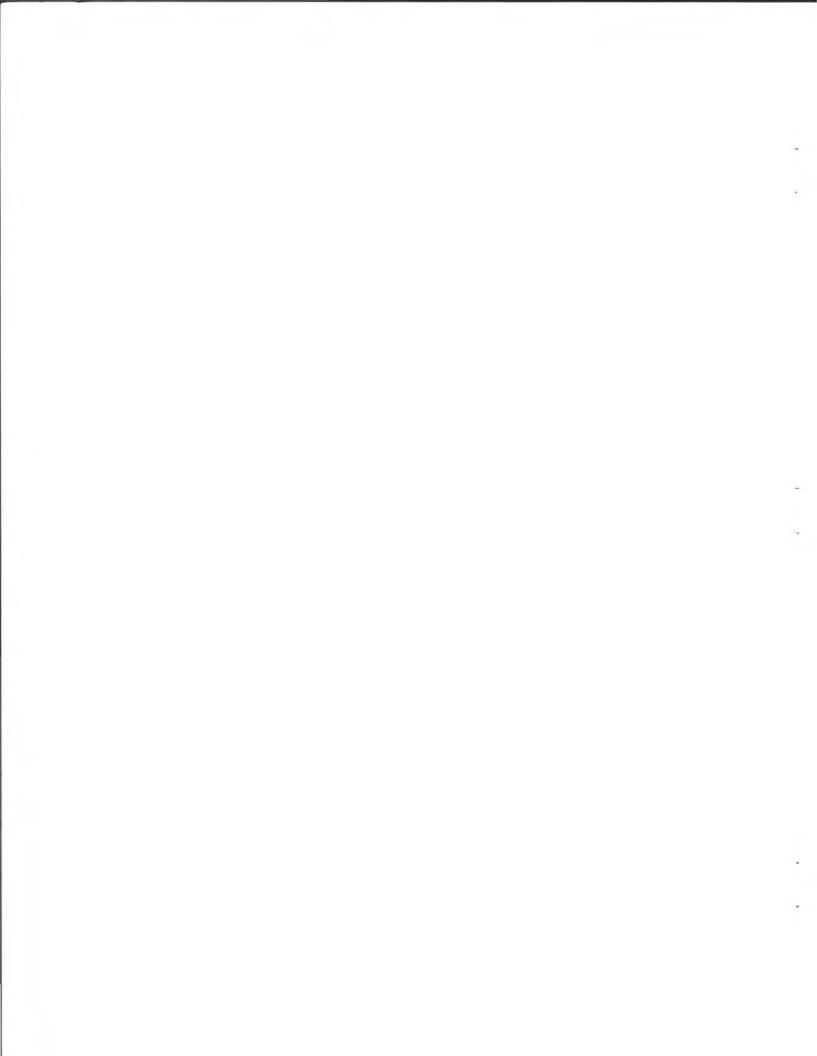
THE FOREST SERVICE IS TO DECIDE: Whether to allocate land use rights on National Forest System lands, if the project should cross them, for future right-of-way use.

THE BUREAU OF LAND MANAGEMENT IS TO DECIDE: Whether the proposed facilities are compatible with the BLM management objectives along the Snake River in the area selected/preferred for construction; and, whether to allocate land use rights on BLM-administered lands for future right-of-way use.

THE BUREAU OF RECLAMATION IS TO DECIDE: Whether to grant approval for right-of-way across Reclamation lands.

	SCHEDULE	
•	Issue Draft BIS	June 1985
•	Public Comment Period	June-July 1985
•	Issue Final BIS	<u>October</u> 1985
•	Issue Record of Decision	November 1985
•	Begin Preliminary Transmission Line Surveys	Summer 1985
•	Continue Transmission Line Surveys	Summer 1986
•	Acquire Right-of-Way Easements <u>begin early</u>	December 1985
•	Start Clearing and Access Road Construction	April 1988
•	Begin Construction of Transmission Facilities	April 1988
•	Energize Transmission Line	October 1988

EIS ΙH CHANGES AND ADDITIONS TO



CHAPTER 1 PURPOSE OF AND NEED FOR ACTION

<u>Page 1-1</u> - replace sections A and B with the following:

A. NEED

The proposed Fall River/Lower Valley Transmission System Reinforcement is needed to maintain service to electric <u>loads</u> in the Targhee, Drummond, Palisades, West Yellowstone, and Teton areas in southeastern Idaho (see figure 1-1). The existing lines are operated near capacity now during <u>peak loads</u> and are projected to increase 3.5 percent per year until 1990 and then 4.8 percent per year between 1991 and 1996 (see table 1-1). The proposed action would maintain electrical <u>stability</u> and <u>reliability</u> as loads in the area increase over the long term.

B. PURPOSES

The alternatives proposed to meet the need must also achieve certain <u>other</u>** purposes:

- (1) minimize cost;
- (2) meet BPA contractual obligations;
- (3) reduce amount of <u>radial service</u> to customers (improve service to customers by providing a second way to convey power where only one exists now);
- (4) <u>complete action by the winter of 1988-89 to avoid critically</u> <u>low voltages or overloads;</u>
- (5) minimize environmental impacts, as directed by the National Environmental Policy Act (1969);
- (6) save energy [reduce energy losses (system losses) on the existing lines];
- (7) allow Utah Power and Light connections to BPA's transmission system in the future; and
- (8) achieve consistency with other National policies. *

*Words italicized at their first appearance in the chapter are defined for the reader in Chapter 8, GLOSSARY.

**Text is underlined where words have been changed or added.

...

CHAPTER 2 ALTERNATIVES INCLUDING THE PROPOSED ACTION

<u>Page 2-1</u> - in <u>Proposed Action Box</u>, list of segments under proposed route should include segment <u>40</u>, not segment <u>30</u>. Part of <u>40</u> will be standard H-frame, part single-pole construction.

<u>Page 2-6</u> - third paragraph, second sentence should include segment <u>40</u>, not segment <u>30</u>. Part of segment <u>40</u> will be standard H-frame; part single-pole construction.

Sixth paragraph, <u>Snake River Network</u> segments should include segment <u>40</u>, not segment <u>30</u>.

Figure 2-2a (after page 2-6) - footnotes are revised as follows:

- *** Right-of-way width will be 100 feet.
- **** <u>Conductor and insulators from existing Swan Valley-Goshen line will</u> <u>be reused. This will offset material costs.</u>

<u>Figure 2-3</u> - about 1-1/4 miles in middle of segment <u>40</u> should indicate single pole construction rather than H-frame construction.

Page 2-7 - revise D. COMPARISON OF ALTERNATIVES as follows:

BPA has considered three basic alternative plans for reinforcing its transmission system in the region. The other two <u>BPA</u> plans are compared to Goshen-Drummond under <u>Alternatives Eliminated from Detailed Discussion</u>, later in this chapter. The Goshen-Drummond alternative is the only reasonable plan from an engineering/cost perspective. <u>The option of other utilities providing transmission facilities is discussed on page 2-30.</u> Below are compared the relative advantages and disadvantages of the two major alternatives--the Goshen-Drummond Plan and No Action. The comparisons focus on environmental impacts and resource tradeoffs and on project needs and purposes, including engineering and cost factors.

<u>Page 2-9</u> - paragraph two is revised as follows:

Building double-circuit would cost <u>more than</u> building a parallel line here. The existing line must first be completely torn down, and then a new line built to carry two lines rather than one. Most of the additional costs are for <u>tearing down the existing line and for taller</u> <u>poles</u>. Reusing the conductor and insulator from the existing line will offset the higher costs somewhat. Because both circuits serve the same <u>loads</u>, loss of both would mean <u>outages</u> for the entire Fall River-Lower Valley system. BPA generally tries to avoid such "double-contingency outage" conditions. The risks of double-outage, however, are somewhat lessened by the short distance involved (3.5 miles) and the good accessibility of the line on the valley floor. Overall, since the effects on important land uses here are intense, significant, and highly probable, BPA proposes to construct the double-circuit option on segment <u>1</u>. <u>Page 2-20</u> - last paragraph, revise as follows:

<u>Double-Circuit</u> (segments 1 and 2)

For the first 20 miles out of Goshen Substation (segments $\underline{1}$, $\underline{2}$), the existing line would be taken down and two circuits placed on one set of towers in its place. Originally, double-circuit was proposed only for the first 3.5 miles. The next 17 miles were <u>later</u> proposed for double-circuit in response to public concerns. The main benefits of this option will be to limit visual effects on and disturbance of residences and farming operations. With double-circuit construction, farmers would experience <u>less</u> long-term additional interference with their operations or loss of farmland <u>than</u> a new, parallel line would cause. (Disturbance will still occur during construction.) It may also be possible to locate some new structures to avoid the interference the existing line now causes with farming operations, such as irrigation systems. The existing level of visual intrusion for residences along segment <u>1</u> would remain about the same with double-circuit construction.

<u>Page 2-21</u> - revise paragraph on Bird Collisions as follows:

Where the proposed route would cross the Snake River (segment <u>28</u>), BPA studied removing the overhead groundwires to <u>reduce potential for bird</u> <u>collisions</u>. <u>Removal is not feasible, as it would decrease line</u> <u>reliability below acceptable limits due to the high incidence of line</u> <u>strikes by lightning in the area</u>. <u>Placing marker balls on the</u> <u>groundwires to increase visibility to water fowl and raptors is still</u> <u>being considered here and in other areas of high waterfowl use</u>. <u>A</u> <u>tradeoff of using marker balls would be increased</u> visibility of the line to recreationists along the Snake.

<u>Page 2-21</u> - third paragraph, list of segments proposed for single pole construction should include segment 40 (part).

<u>Page 2-21</u> - Sixth paragraph, revise as follows:

<u>Heise-Thornton Road</u> (segment 28)

<u>Cultural resource</u> survey for the Heise-Thornton Road (segment <u>28</u>), followed by mapping and photographing of any remaining unaltered portions, would reduce overall impact; avoidance would be necessary should any portions be determined eligible for National Register listing.

Page 2-21 - last paragraph, revise as follows:

<u>Airstrips</u> (segments <u>57</u> and <u>58</u>)

Where the line <u>might</u> have interfered with use of <u>a farmroad</u> as an airstrip, <u>adjustments to avoid crossing adjacent farmland have avoided</u> <u>potential conflict with the airstrip as well</u>. No adjustment seems possible for the northern airstrip (<u>on Byrman Road</u>) because the surrounding area is all farmland. <u>If</u> the owner of the service <u>confines operation</u> to the airstrip itself, there should be no interference. <u>Page 2-22</u> - second paragraph, add at the end:

BPA has identified a route adjustment into Drummond that mostly avoids building parallel along an existing line for the last 1-1/2 miles. This adjustment has been worked out with the affected landowner.

The figure showing this change follows p. 1-5 in this FEIS.

<u>Page 2-22</u> - revise fourth paragraph under <u>Mitigation Not Included in the</u> <u>Proposal</u> as follows:

Double-circuit construction would be considered on segments $\underline{75}$ and $\underline{76}$ leading up to Drummond Substation to <u>reduce</u> conflicts with farmland, and additional interference with operations or loss of farmland. Problems with taking the existing line out of service would have to be solved for this to be viable (also see p. 2-16).

<u>Table 2-1 after page 2-22</u> - Revise dollar figure in footnote 1 to read: \$9,126,910.

<u>Table 2-2, Title</u> - revised title: Transmission System Energy Loss <u>Savings</u>, by Plan

<u>Table 2-3</u> - has been revised to include information on the UP&L-build alternative.

Page 2-29 to 2-30 - Replace Conservation section with the following discussion:

CONSERVATION

The reliability problems for outages on the existing system would persist even with a load management program in place. Therefore, conservation was examined briefly as an alternative to reinforcing the existing transmission system. Apart from the question of whether conservation programs may be able to offset load growth, based on the official load forecast, there is not enough time to develop and implement a load management program before critical outage or overload problems develop. For these reasons, conservation was not considered a feasible alternative.

This project is being proposed to increase reliability of service on a system which is near capacity. The outage and/or overload problems will occur during both winter and summer peak load conditions.

Any conservation programs implemented must be designed to reduce peak loads. Winter loads are increasing due to planned residential and resort development; summer loads due to increased irrigation demand. Conservation measures can be used to reduce base winter heating loads, but their reliability in reducing winter peaks is still undocumented. BPA's Conservation staff is currently assessing the impact weatherization programs have on peaks.

Also, since peak load problems occur in both winter and summer, two sets of load management programs would be required. This need to plan for either condition may lower the chances that the overall programs would prove to be cost-effective. Finally, there is the issue of the amount of potential load either program for either season could realistically offset, particularly given the compressed time frame for implementation of a load control program. The southeast Idaho area experiences severe

winter weather. Many residences are already weatherized beyond local standards. Reducing summer loads entails making irrigation systems more efficient, primarily in the Fall River service area. Although Fall River has participated in BPA's existing pilot irrigation programs, the effort is just beginning. There are also technical problems with making wheel line irrigation systems (which make up 80% of the irrigation systems here) more efficient. These factors make it more difficult for programs reducing summer peak loads to be effective by the time this project would be needed.

If there were time to develop and implement a workable load management program in addition to current weatherization and irrigation conservation programs, it might be possible to defer building the project for a number of years. The benefit would be realized primarily from deferred interest savings. However, costs to implement the elements of a load management program might equal or exceed these savings.

BPA is just beginning a pilot program to assess the potential and costs of load management as an alternative to transmission construction. Because BPA staff will build its analytical capabilities on this pilot effort, a site was chosen that is free of the fringe service and reliability problems that are present in the project area.

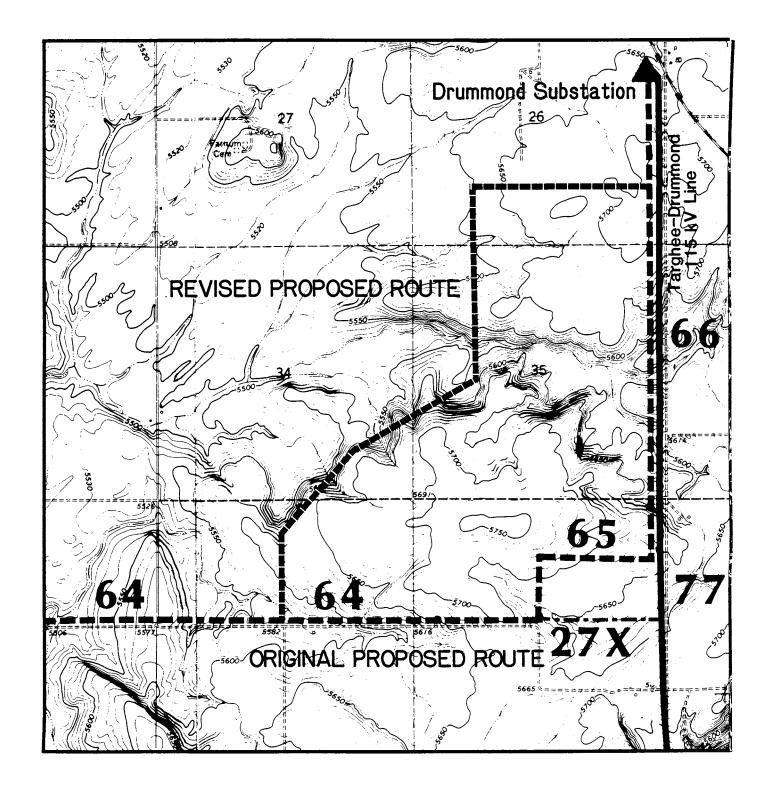
If some nonconstruction alternative were implemented, and the proposed line not built, the existing lines would still have to operate at near capacity. Consequent energy losses from the line would be greater than those for building and operating a line with higher design capacity. Saving energy through lower line losses is a benefit of building a more efficient system in this case.

<u>Page 2-30 to 2-31</u> - replace discussion of OTHER UTILITIES PROVIDING TRANSMISSION FACILITIES with the following:

Utah Power and Light Company (UP&L) could construct a 43-mile 161-kV transmission line from their Rigby Substation to Drummond. (A potential route is shown on figure 2-4 of the DEIS.) This proposal would also require that UP&L reinforce their facilities at Rigby Substation from their Bonneville Substation or Jefferson Substation to the west. The UP&L system would have to be further reinforced later from Goshen to Rigby to avoid overloads. Specific assumptions about UP&L's proposal are as follows:

New Line, Rigby to Drummond, 47 Miles (Energize 1988)

 Reconstruct to 161-kV the existing 69-kV line from Rigby to Sunnydell Tap to Webster to Teton to St. Anthony. This route could require expanding the existing right-of-way to accommodate 161-kV H-frame design. Single pole construction could be used instead to remain within the 69-kV right-of-way. (Approximately 18 miles)



REVISED LOCATION OF PROPOSED ROUTE TO DRUMMOND SUBSTATION

. ----

TABLE 2-3

PLAN COMPARISON: DATA SUMMARY (IN MILES EXCEPT AS NOTED)		SLOPE		ЧТІА L	LAND USE						WILDI	LDLIFE HABI		
		15 - 30 %	30 - 55 %	55 %	HIGH EROSION POTENTIAL	RRIGATED AGRICULTURE	NON IRRIGATED AGRICULTURE	PRIME FARMLAND	RANGE	FOREST	RESIDENCES WITHIN 500 FT	BIG GAME HABITATS 1/	EAGLE WINTERING AREAS	
ROUTES SEGMENTS		ļ				=	Ő Z				RE		Ш 	ļ
$\underline{3}/$ GOSHEN-DRUMMOND1, 2, 3, 4, 10, 11, 12, 28, 29,(Proposed Plan)40, 46, 47, 48, 54, 55, 57, 58,59, 63, 64, 65, 66	72.7	5.5	.2		16.0	19.2	29.3	9.0	14.5	9.9	58	5.1	1.1	
GOSHEN-TARGHEE 1, 2, 23, 30X, 32X, 33X, 37X 38X	75.0	11.4	3.9	.7	10.4	10.2	39.2	3.0	10.7	14.7	9	18.2	9.7	1
GOSHEN-SWAN VALLEY- 1, 29X, 35X, 37X, 38X TARGHEE	70.5	17.3	6.9	.8	12.0	10.2	18.8	3.0	19.9	21.6	8	34.7	6.2	1
4/ UP&L Proposal	78.5	1.0	 		29.1	49.5	15.4	20.1	8.1	1.8	292		1.4	

- 1/ Big game includes deer, elk, and moose. Mileages reflect combined habitats.
- 2/ Linear features include such features as hiking trails, fishing streams, or recreational rivers. Intensive use areas include picnic sites, campgrounds, scenic overlooks, boat launches, etc.
- 3/ Segment <u>12</u> refers to segments 12a, 12c, 12e, 12f, 12g, the preferred option in the Ririe area.
- 4/ Includes new line from Rigby to Drummond (part rebuild/part new right-ofway, about 47 miles) and reconductoring of existing 161-kV line between Goshen and Rigby necessary to support Rigby Substation (31 miles). Reconductor/Rebuild of an existing 46-kV line between UP&L's Bonneville and Rigby Substations (about 32 miles)--also needed to support Rigby Substation--is not included because resource data is not available for that area.

BITATS	L	AND	OWNE	RSHIP	VISU	REC -AT	SITES		
RAPTOR NESTING AREAS FISHERY STREAMS (CROSSINGS)		FEDERAL	STATE	PRIVATE	HIGH VIEWER SENSITIVITY	LOW VISUAL COMPATIB'LITY	LINEAR FEATURES (CROSSINGS)	INTENSIVE USE (WITHIN 1/4 MILE)	KNOWN CULTURAL SITES
2	2 2 T	2.1	4.9	65.8	.3	.9	3	3	1
1.9 9	1 5 T	15.5		59.5	16.3	4.1	7	1	
1.2 1	4 4	27.1	1.0	42.3	23.9	3.5	13	1	1
	3	1.0	0.3	76.0	1.3	2.5	7		6

4 s I ,

\$

٠

• Construct a 161-kV line with H-frame wood pole structures from St. Anthony to Drummond on new right-of-way. (Approximately 29 miles)

Additional Future Construction Required to Support Rigby

- Bither rebuild existing facilities from Jefferson (UP&L Substation) to Rigby or from Bonneville (UP&L Substation) to Rigby. UP&L has indicated that they may build from Jefferson, but we have assumed that they would most likely build from Bonneville because it would be shorter, would cost less, and would provide the same electrical service. Both options have existing rights-of-way. The additional support would be required by 1995. (Approximately 32 miles)
- Long-range plans indicate that around the year 2000, additional support would be required into Rigby from Goshen. This would consist of reconductoring the Goshen-Rigby 161-kV line or the Goshen-Sugar Mill-Rigby 161-kV line. Both lines are 161-kV H-frame wood pole and would not require additional right-of-way. (Approximately 31 miles)

The UP&L Rigby-Drummond and BPA Goshen-Drummond plans were compared based on: how well they would meet the need; how much they would cost to build, operate and maintain; and what kind of environmental tradeoffs they would have. The following discussion summarizes these comparisons.

Need/Reliability Comparison

This discussion assumes that BPA and UP&L would use equivalent operating procedures and maintenance practices for the line.

Electrical performance of the UP&L option is reasonably close to that of the preferred BPA plan. The UP&L plan would be a shorter line (47 miles) from a weaker source (Rigby Substation). However, if facilities at Rigby Substation were also reinforced, the line would be considered very reliable. The primary support for Rigby is Goshen Substation. Since the UP&L option passes through some of their load centers and near existing substations, the line would probably be tapped in many places, somewhat reducing reliability. The BPA plan is a longer line (72 miles), but its connection to a strong source (Goshen Substation) is more direct. The first 20 miles out of Goshen are constructed double-circuit wood pole, which is nearly as reliable as double-circuit steel construction (very high reliability). UP&L would probably seek fewer taps to the line because it would be farther away from their loads, so its reliability would be maintained at a higher level.

Because the project is being proposed primarily to improve reliability to Fall River Rural Electric Co-op and Lower Valley Power and Light, there is an advantage to having only one ownership of all sources of power serving these customers. Mixed ownership of facilities presents problems both in terms of future reinforcement responsibilities and coordination of operation and maintenance of facilities. Under the Goshen-Drummond plan, UP&L would be able to tap the Goshen-Drummond line near Rigby in lieu of reinforcing their existing system. In consideration of the above, there seems to be no appreciable difference in reliability between the UP&L option or the BPA Goshen-Drummond plan.

Cost Comparison

Based on the latest economic information for the BPA and UP&L options, only the unknown future costs of wheeling, rebuilding, etc., separate the two plans. Based over the 43-year expected life of facilities, either plan (including substation facilities for the initial installation) would cost approximately \$11 million. Under the UP&L option, UP&L would charge BPA for exclusive use of facilities for the Rigby-Drummond 161-kV line. These charges would continue until UP&L area loads increase north of Rigby (in the Rexburg and St. Anthony areas) to the extent that UP&L would require use of the line. The portion of the line between St. Anthony and Drummond would most likely remain under exclusive-use-offacilities charges for the foreseeable future, because it would serve BPA customer loads solely.

UP&L would also charge BPA for the proportion of the facilities to reinforce Rigby Substation enough to maintain adequate service to Drummond. Although these charges are uncertain over the life of the line, the total costs for this alternative could increase BPA's cost substantially over that for the Goshen-Drummond plan, based on data provided to BPA by UP&L. UP&L would charge BPA for sending power over their existing facilities between Goshen and Rigby ("wheeling charges").

Environmental Comparison

An environmental impact comparison between this option and the BPA Goshen-Drummond plan considered impacts arising from any UP&L actions to support this project.

For each element of the UP&L proposal, the following assumptions about nature and level of impact were made:

- <u>Rebuild Existing 69-kV Line, Rigby-St. Anthony to 161-kV</u> (18 miles). Impacts would be largely confined to construction season. If H-frame rather than single-pole were used, however, additional land use and agricultural effects would result.
- 2) <u>New 161-kV Line, St. Anthony-Drummond</u> (29 miles). Long-term loss of farmland and interference with irrigation systems are possible. Opportunities are available to mitigate by following linear features, thus reducing access needs and associated disturbance.
- 3) <u>Reinforce Existing 161-kV line Between Goshen and Rigby</u> (31 miles; reconductoring). Effects would involve minimal, short-term disturbance of nearby residents and land uses during construction. Mainly inconvenience impacts.
- 4) <u>Rebuild Existing 46-kV Line Between Rigby and Jefferson or</u> <u>Bonneville - (32 miles).</u> Long-term loss of farmland and

interference with irrigation systems similar to those for Rigby-St. Anthony. Mapped resource data unavailable to analyze specific effects.

The following discussion, keyed to table 2-3, compares important results of the environmental analysis for the two plans. As shown in table 2-3, the UP&L plan would encounter more than twice as much irrigated land (49 miles vs. 19 miles) and would pass near far more residences (292 vs. 58). Most of these are in areas where minimal effects from supportive actions (see 1, 3, 4 above) would occur. If only the new route were considered (not the necessary supportive actions), the UP&L plan would still interfere with eight more miles of irrigation (27 vs. 19) and would inconvenience more residences (79 vs. 58) during construction. The UP&L plan crosses more prime farmland, but BPA's Goshen-Drummond plan would affect more dryland agriculture.

Considering all aspects of both plans, the Goshen-Drummond plan has greater effects, however, on natural resources. It encounters significantly more big game habitat (5 vs. 0 miles) with corresponding greater impacts from loss of habitat and increased access. It would also require more forest clearing than the UP&L plan.

Both plans encounter the same number of fishery streams (although the UP&L plan could cross Fall River in two places) and about the same amount of bald eagle habitat. No significant impacts on either resource would be expected for either plan. Goshen-Drummond encounters more steep terrain, but the UP&L plan crosses almost twice as much erodible soil. Depending on access needs, effects from soil erosion could balance out.

The UP&L plan could have a greater effect visually. It crosses more viewer-sensitive landscape; the line would be less compatible visually and would be visible from about the same number of recreation sites and more cultural sites. Both plans also encounter about the same extent of BLM, ACBC, and SRMA areas managed by the BLM (see DEIS, figure 4-4) and cross similar amounts of floodplains.

In summary, the UP&L plan could create impacts that on balance would be similar in nature, intensity, and significance to those of the Goshen-Drummond plan. This plan crosses a more heavily settled and more intensively farmed part of the Snake Valley than the BPA plan. With the UP&L plan, there would be more tradeoffs for developed land use and irrigated agriculture, and fewer for natural resources and dryland farming than with Goshen-Drummond.

Overall, the UP&L plan would be similar to Goshen-Drummond in electrical reliability and in environmental impact. However, it would require additional BPA investments, with less benefit to Fall River Rural Electric Co-op or to Lower Valley Power & Light, the end-of-the-line customers. For this reason, it is less favored than the proposed, BPA's Goshen-Drummond plan. <u>Page 2-31</u> - replace the last paragraph with the following:

INTRODUCTION

Other energy or utility projects may sometimes occur in the region at the same or nearly the same time. This section focuses on other projects and discusses the potential for cumulative environmental impacts from more than one transmission project occurring in the same area. It also defines the relationship, if any, of other projects to this one.

<u>Page 2-32</u> - replace the <u>Palisades Generation</u> section with the following:

The Bureau of Reclamation is no longer proposing to add 110 MW of generation at Palisades Dam. However, they are planning to rewind the four existing generators as a necessary maintenance operation. The Bureau determined that 47 MW of additional generation capacity could be made available through this action. BPA and the Bureau are working together to complete the rewind/uprate by 1990. As part of BPA's responsibility, we are studying whether the existing 115-kV transmission system between Palisades and Swan Valley will be able to accommodate additional power. Modifications of BPA's system would constitute a separate project with distinct and noncumulative effects because it would be confined to a small, separate location. Availability of additional peaking generation during the spring and summer will not eliminate the need for the proposal.

CHAPTER 3 AFFECTED ENVIRONMENT

No changes or additions.

. •

CHAPTER 4 ENVIRONMENTAL CONSEQUENCES

<u>Page 4-2</u> - revise as follows:

<u>Right-of-way (ROW) acquisition</u> involves obtaining specified access road and/or line easements from the landowner or land managing agency. The Government seeks the right to enter property and to construct, maintain, and operate the electric transmission line. These easement rights are just for the ROW, not for the entire land parcel. Right-of-way required for the proposed line is about 95 feet wide for <u>H-frame</u> (two poles), 60 feet wide for single pole. If any temporary use of land outside the right-of-way is required, separate arrangements with the landowner would be made. Rights within the right-of-way may be acquired through negotiated purchase or, if agreement cannot be reached or if a clear title cannot be obtained, through an "eminent domain" action. If the agency and the landowner cannot agree on compensation for easement rights, a court determines just compensation based on evidence presented by the landowner and by the agency seeking such rights.

<u>Table 4-1, after page 4-8</u> - under segment <u>22</u>, entry for <u>residences within 100</u> <u>feet</u> should be "0"; <u>total</u> should be "1."

Page 4-10 - Substitute, for the last two sentences of the third paragraph:

Interference with radio and T.V. reception will normally not be a problem. However, if the line should develop a broken or loose insulator or other piece of hardware, interference with reception might result for nearby residents within several hundred feet of the area. These problems are readily mitigated by replacing the defective part, which BPA will do on receipt and validation of a complaint.

Page 4-17 - third paragraph should be revised as follows:

Where the line in the <u>North Sector</u> (segments <u>57</u> and <u>58</u>) could interfere with continued use of <u>roads for</u> airstrips (see figure P-5), the line has been adjusted around the southernmost landing strip so as to avoid interfering with flight operations. However, no such adjustment seems possible for the <u>northernmost</u> strip because of tradeoffs for surrounding fields; the service provider may have to use the adjoining field instead.

<u>Page 4-17</u>, last paragraph, delete last sentence and add:

BPA has identified a route adjustment into Drummond that mostly avoids building parallel along an existing line for the last 1-1/2 miles. This adjustment has been worked out with the affected landowners.

See figure following p. 1-5 in this FBIS.

Page 4-22 - add the following paragraph at the end of Air Quality section.

All six study area counties fall within the Bastern Idaho Interstate Air Quality Control Region. Construction activities from the proposed action will not be affected by the emission limitations of that Region. Page 4-23 - revise first sentence, third paragraph as follows:

Construction noise and human activity would particularly affect big game (<u>black bear</u>, deer, moose, and elk) found in the study area, by temporarily displacing them.

Page 4-25 - add the following after first paragraph:

The segment <u>13</u> crossing (part of an alternate route) would pass adjacent to an active osprey nest. The activity during construction would likely cause the nest to be abandoned for at least one nesting season. Segment <u>28</u> (the proposed crossing) would be approximately one-half mile away and should not cause nest abandonment.

Page 4-26 - revise "Mitigation Measures" section as follows:

Last sentence, first paragraph:

Brosion will be controlled through such measures as water bars (see <u>Soils/Geology/Water Resources</u>, below); where streams with fishery values, <u>or their tributaries</u>, would be affected, sediment from disturbance will be trapped during construction by placing bales of hay down stream from the crossing. <u>These streams will be identified in the mitigation plan</u>.

Add at end of second paragraph:

Raptor nesting platforms will be placed <u>in</u> the <u>vicinity of</u> towers on either side of the Snake River <u>Crossing</u>. <u>Number and location will be</u> worked out with <u>BLM</u>.

<u>Page 4-38</u> - add the following as first paragraph under <u>Impact Measures</u>:

For purposes of this BIS, definitions of low, moderate and high potential for sites are: low = less than 1 site per square mile, moderate = 2-5 sites per square mile, and high = 6 or more sites per square mile. Site density estimates were derived by examining corridor segments plotted on USGS maps. High, moderate, and low rankings were determined by comparing environments known to contain sites with those environments along the alternative routes. Data on recorded sites were derived from existing cultural resource overviews for the study area and from archival research.

Page 4-40 - revise last sentence of Corona section as follows:

If problems are <u>caused by the transmission line</u>, BPA will correct the problems.

<u>Page 4-40</u> - revise first paragraph under <u>Blectric and Magnetic Fields</u> as follows:

ELECTRIC AND MAGNETIC FIELDS

All wires carrying electric power produce electric and magnetic fields in the area surrounding the wires. This includes household wiring and transmission line conductors. The proposed 161-kV line would produce a maximum electric field of up to 2 to 3 kilovolts per meter (kV/m) on a small portion of the right-of-way. At the edge of the right-of-way, the maximum electric field strength would generally be 1 kV/m or less. In comparison, BPA 500-kV lines produce maximum electric fields of 7-9 kV/m on the right-of-way and 2-3 kV/m at the right-of-way edge. There are no national standards for transmission line fields, and the State of Idaho has no such standard.

<u>Page 4-43</u> - add the following paragraph at the end of the <u>Permit for Struc-</u> <u>tures in Navigable Waters</u> section:

The proposed action will not cross any navigable portions of any rivers in the study area; thus, no impacts would occur from oil spills of nontransportation-related facilities.

<u>Page 4-43</u> - revise <u>Permit for Discharge into Water of the United States</u> section as follows:

Based on experience on similar projects, <u>any</u> discharge of dredged or fill material into the waters of the United States from this project would <u>likely</u> be permitted under the nationwide permits for specific activities (33 CFR Part 330.5) pursuant to Section 404 of the Clean Water Act (33 U.S.C 1344). If the final design should call for a discharge of dredged or fill material beyond that allowed in the nationwide permit, individual Section 404 permits <u>will</u> <u>be</u> necessary.

<u>Page 4-45</u> - revise the last sentence of the <u>Noise Control Act</u> section as follows:

Noise from operating the proposed transmission line and associated substations will be <u>well</u> below this level.

<u>Page 4-46</u> - replace last paragraph with the following:

Following the requirements of 36 CFR 800, an intensive archeological survey of the complete transmission line will be done. Sites located during this survey would be evaluated to determine their eligibility for inclusion in the <u>National Register of Historic Places</u>. Test excavations may be required at many of the located sites in order to determine their eligibility. A mitigation plan will be prepared for resources determined eligible for the <u>National Register</u>. Following Section 106 of the National Historic Preservation Act, the Advisory Council on Historic Preservation will be consulted if any of the eligible sites would be adversely affected. If the survey produces finds that could be of religious significance to the the Fort Hall Shoshone/Bannock Tribe, BPA will undertake additional consultation to confirm this and to determine appropriate mitigative action. These actions will be taken well before construction.

Page 4-47 - replace <u>Discovery Situations</u> section with the following:

If, after completion of a cultural resources intensive field survey and all other compliance responsibilities and initiation of construction, previously unidentified cultural resources are identified which will be adversely affected by the project, BPA will follow the procedures outlined below:

(a) the agency (BPA) shall halt construction affecting the resource; (b) the agency shall notify the Departmental Consulting Archeologist (DCA), Department of the Interior, Washington, DC; (c) the DCA, within two work days, will contact the SHPO staff archeologist about the project, discovered resource, and status of compliance, and will arrange for a field inspection if necessary; and (d) the DCA, in consultation with the SHPO staff archeologist, will decide on the importance of the discovery and recommend to the agency any data recovery necessary. The DCA may decide that the circumstances of the discovery warrant Advisory Council involvement (36 CFR 800.7).

Page 4-48 - replace <u>Farmlands</u> discussion with the following:

In compliance with Public Law 97-98, the Farmland Protection Policy Act (FPPA), BPA submitted Form AD-1006, the Farmland Conversion Impact Rating form, to the U.S. Conservation Service (SCS) for determination of effects on prime, unique, and important farmlands. The Act is designed to ensure that federal agencies identify and account for any adverse effects their projects may have on farmland; that these agencies consider alternatives that could reduce any adverse effects; and that agency programs are compatible with state, local, and private policies to protect farmland.

The proposed route of the Fall River/Lower Valley Project crosses 5 counties and would be 72.6 miles in length. The average 95-foot-wide right-of-way would comprise an area approximately 880 acres in size. Of these 880 acres, less than 5 acres of farmland would be converted either directly or indirectly by this project. Eighty-eight acres were designated by SCS to be "prime farmland," while 502 acres were considered "important farmland." Less than one acre of prime farmland would be converted to other uses. The overall percentage of farmland in the area to be converted for the entire line would be 0.000002%.

The overall project rating for conversion of farmland and impacts on farm support services, irrigation systems, non-urban land, etc., was well below the threshold for consideration for protection and for evaluation of additional sites.

Page 4-51 - Replace the Noxious Weed discussion with the following.

All six counties within the project study area (Bingham, Bonneville, Fremont, Jefferson, Madison, and Teton) have an active weed control program. They have cooperative working agreements with other area agencies (BLM, FS, State Department of Transportation, Bureau of Reclamation, and Fort Hall Indian Reservation) to control weeds along rights-of-way. Each county expressed concern over the continuing spread of noxious weeds and the lack of funds to control them. Weeds of special concern are (1) Leafy Spurge, (2) Spotted Knapweed, (3) Canadian Thistle, (4) Must Thistle, (5) Bull Thistle, (6) Plumeless Thistle, and (7) Scotch Thistle. A Leafy Spurge infestation presently exists along the preferred route at Henry Creek, approximately 1/2 mile north of the Bingham and Bonneville county boundary. Must and Canadian Thistles are found regularly along the preferred route between Goshen Substation and the town of Ririe. All the major noxious weeds listed occur along the remaining portion of the preferred route.

A noxious weed survey will be done before and after construction. The pre-construction survey will occur sometime during the spring and summer of 1987. It will provide base data which will be used to develop a weed control plan as part of the ROW maintenance plan for the project. The weed control plan will specify mitigation measures BPA will use to minimize the spread of noxious weeds both during and after construction. The post-construction survey will be scheduled no sooner than one year after construction. BPA will work closely with each county in planning the surveys and in developing appropriate weed control plans.

<u>Page 4-52</u> - add the following to the fifth paragraph:

None of the project alternatives will be affected by Federal or State regulations or guidelines on the transportation of hazardous or solid waste. With numerous BPA electrical facilities and projects throughout the Pacific Northwest, including the State of Idaho, BPA is currently generating, collecting, and transporting solid hazardous waste. Any registration, certification, and registration for transporting solid and hazardous waste for this project not already in BPA's possession will be secured by BPA.

<u>Page 4-54 - add the following to the third paragraph.</u>

Based on the discussion above, the project is not expected to affect any public water system under the terms of the National Interim Primary or Secondary Drinking Water Regulations (40 CFR, Part 141, 143).

, . . . -

CHAPTER 5 LIST OF PREPARERS

Add before first entry:

Information in this list is arranged in the following order:

(Name) (Profession) (Responsibilities for this project) (Education) (Related experience).

CHAPTER 6 LIST OF AGENCIES, ORGANIZATIONS, AND PERSONS TO WHOM COPIES OF THE STATEMENT ARE SENT

- <u>Add</u> FORT HALL BUSINESS COUNCIL, SHOSHONE-BANNOCK TRIBES, FORT HALL, ID
 - FORT HALL AGENCY, USDI BUREAU OF INDIAN AFFAIRS, FORT HALL, ID
 - JAMES SANCHEZ 2615 SOUTH MISSION TUCSON, AZ 85713
 - L. BECKER ROUTE 1, BOX 3745 DRIGGS, ID 83422
 - GROVER AND WALKER PO BOX 36 RIGBY, ID 83442
 - GARY GARDONIA PO BOX 314 TETON, ID 83451

1

•

CHAPTER 7 REFERENCES

Add the following references:

Franzen, John G.

1981. Southeastern Idaho Cultural Resources Overview, Burley and Idaho Falls Districts. Commonwealth Associates, Inc. Jackson, MI.

Idaho Department of Fish and Game.

1982. Best Management Practices for Road Activities. Vols. I and II. Division of Environment, Boise, Idaho.

Idaho State Historic Preservation Office. 1983. Statewide site files.

McDonald, James A.

1982. Targhee National Forest Cultural Resources Overview. Second Draft. Manuscript on file, Targhee National Forest.

U.S. Department of Agriculture.

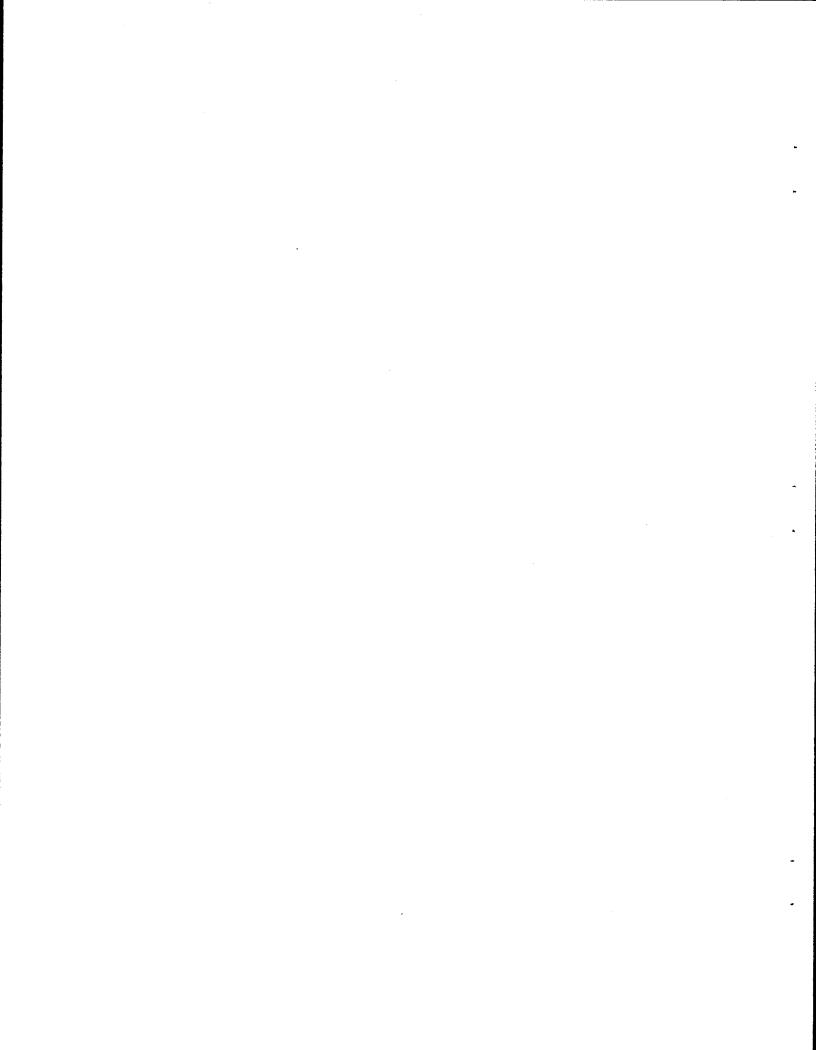
1982. Cultural Resource Inventory. Manuscript on file, Targhee National Forest.

• . •• • CHAPTER 8 GLOSSARY

No changes or additions.

.

.



CHAPTER 9 INDEX

This index provides references for major discussions of topics in the BIS. Listings are noted by chapter and page (2:4-5). Any resource potentially affected by the line will also be found under each resource discussion in Chapter 4, ENVIRONMENTAL CONSEQUENCES. Individual discussions of sections of the line (<u>Goshen Entry</u>, <u>Snake River Network</u>, <u>Crossovers</u>, <u>North Sector</u>) will be found on the following pages:

Goshen Entry	2:6,8-10	4:2,8,14,27-8,36
Snake River Network	2:6,10-14	4:2,8,14-15,19-21,24-5,28-9,36,38
Crossovers	2:6,7,14-15	4:2,11,15,21,25,29,37,38
North Sector	2:6,7,15-18	4:2,9,11,16,21-2,25-6,29-30,37,38

CHECK ANY LISTING FOR MODIFICATIONS OR CORRECTIONS IN THE CHANGES AND ADDITIONS TO THE DELS PART OF THIS DOCUMENT.

Access Roads Affected Environment Agriculture (See also Center Pivot Irriga-	2:4 3:1-4
tion; Double-Circuit/Parallel; Farmland of Statewide Importance; Farmland Pro- tection Policy Act) Air Strips	2:3,8-9,10-12,16; 3:2; 4:12-17,33-34 2:21
Air Quality Analysis Methods	4:22 Appendix B
Alternatives Eliminated from Detailed Discussions Alternatives Including the Proposed Action Archeology (See Cultural Resources)	2:24-31 2:1-33
Background of Project Biological Assessment and Clearance	l:2 Appendix C
Bird Collisions	2:21
Center Pivot Irrigation	2:22
Clean Air Act (Section 306 (c), 42 USC 7606(c)	4:43-4
Clean Water Act (Section 404, 33 USC 1344)	4:52
Coastal Management Program Consistency	4:42
Comparison of Alternatives	2:7-18
Conservation	2:29-30
Consultation, Review, and Permits Requirements	4:42-55
Corona	4:40
Cultural Resources	4:37-39
Decisions to be Made	1:4
Description of Construction Actions	4:2-5
Description of the Project	2:5-7
Double-Circuit/Parallel	2:3,20-2
Economic Effects	4:32-3
Blectric and Magnetic Fields	4:40-1
Electrical and Biological Effects	4:40-42
Electrocution Hazard	4:40

Endangered and Threatened Species - Animals and Plants (Endangered Species Act,	
16 USC 1536) Energy Conservation at Federal Facilities (Energy Policy and Conservation Act,	4:47-8
Title V, USC 8241)	4:55
Environmental Consequences	4:1-55
Environmental Policy (NEPA 42 USC 4321 et seq.)	4:42
Esthetics (See Visual/Recreation)	1.12
Evaluation Criteria	2:4
Farmland of Statewide Importance	4:48
Farmland Protection Policy Act	4:48-9
Federal Aviation Administration (FAA)	
Requirements	4:55
Federal Insecticide, Fungicide, and	
Rodenticide Act (7 USC 135 et seq.)	4:50-1
Fish and Wildlife Coordination	4:48
Floodplains (Floodplain Management, E.O. 11988)	4:49
Forestry	4:10-12
Forest Productivity	4:33
Future Related Actions	2:33
Glossary	8:1-7
Goshen-Drummond Plan	2:7-22
Hazardous Waste	4:54
Health and Safety (See Electrical and	
Biological Effects)	
Heise-Thornton Road	2:21
Heritage Conservation (National Historical	
Preservation Act, 16 USC 470; B.O. 11593;	
and other laws and regulations protecting	
historic and archeologic resources)	4:45-7
Historic Resources (See Cultural Resources)	
Housing/Public Services	4:31-2
Land Use	4:6-10
Land Use Planning	4:6
List of Agencies, Organizations, and Persons	4.0
to Whom Copies of Statements are Sent	6:1-6
List of Preparers	5:1-4
Mitigation Measures	2:18-20
Mitigation Not Included in the Proposed Action	2:22
	2.22
National Trail System (National Trails System	
Act, 16 USC 1241 et seq.)	4:44
Natural Resources	4:22-30
Need for/Benefit from the Power and for the Line	1:1-4
No Action	2:23-4
Noise Control Act (42 USC 4901 et seq.)	4:45
Noxious Weeds	4:51
Nuisance, Trespass, and Vandalism	4:35
Other Alternatives Considered	2:3
Other Plans	2:25-28
Other Projects in Region	2:31-35

.

-

•

.

*

Other Routes	2:28-29
Other Utilities Providing Transmission Facilities	2:31-35
Parks	4:45
Permit for Discharges Into Waters of the	
United States (Clean Water Act, Section 404,	
33 USC 1344)	4:43
Permits for Right-of-way on Public Land	
(Federal Land Policy and Management	
Act, 43 USC 1701 et seq.)	4:45
Permit for Structures in Navigable Waters	
(Rivers and Harbors Act, Section 10,	
33 USC 403)	4:43
Pollution Control at Federal Facilities	4:50-55
Prime Farmland	4:13, 4:48
Process of Decisionmaking (see Analysis Methods)	
Property Values	4:35
Public Involvement	Appendix A
Public Lands	4:45
Purpose of and Need for Action	1:1-4
Recreation	4:18-22
References	7:1-4
Resource Conservation and Recovery Act	
(Subtitle C, 42 USC 6921)	4:52
Risk (see Electrical and Biological Effects)	
Ririe Route Adjustment (See also Public	
Involvement)	2:3,21
Safe Drinking Water ACt (42 USC 300f et seq.)	4:52
Scoping (See Public Involvement)	
Single-Pole Transmission Structures	2:21
Site-Specific Mitigation Measures	2-20
Snake River	2:3
Social and Economic Considerations	4:31-37
Soils/Geology/Water Resources	4:26-30
Solid Waste Disposal Act	4:52
Standard Mitigation Measures	2:18-20
State, Areawide, and Local Plan and Program	
Consistency (Intergovernmental Cooperation	
Act, 42 USC 4233)	4:42
Tax Effects	4:32
Toxic Substances Control Act (15 USC 2601 et seq.)	4:54-5
Urban and Residential Land Use (See Land Use)	4.10.00
Visual Effects	4:18-22
Water Resources (See Soils/Geology)	4:12, 4:51
Weeds Weed Control	4:12, 4:51
Weed Control Wetlands (Protection of Wetlands, E.O. 11990)	4:51
Wild and Scenic River System (Wild and Scenic	4.30
Rivers Act, 16 USC 1271 et seq.)	4:44
Wilderness Areas	4:45
Wildlife	2:3, 4:23-6
Workforce	4:31
WORKLOFCE 1-29	7.JL
1-27	

APPENDICES

No changes or additions.

WP8524E:10-02-85

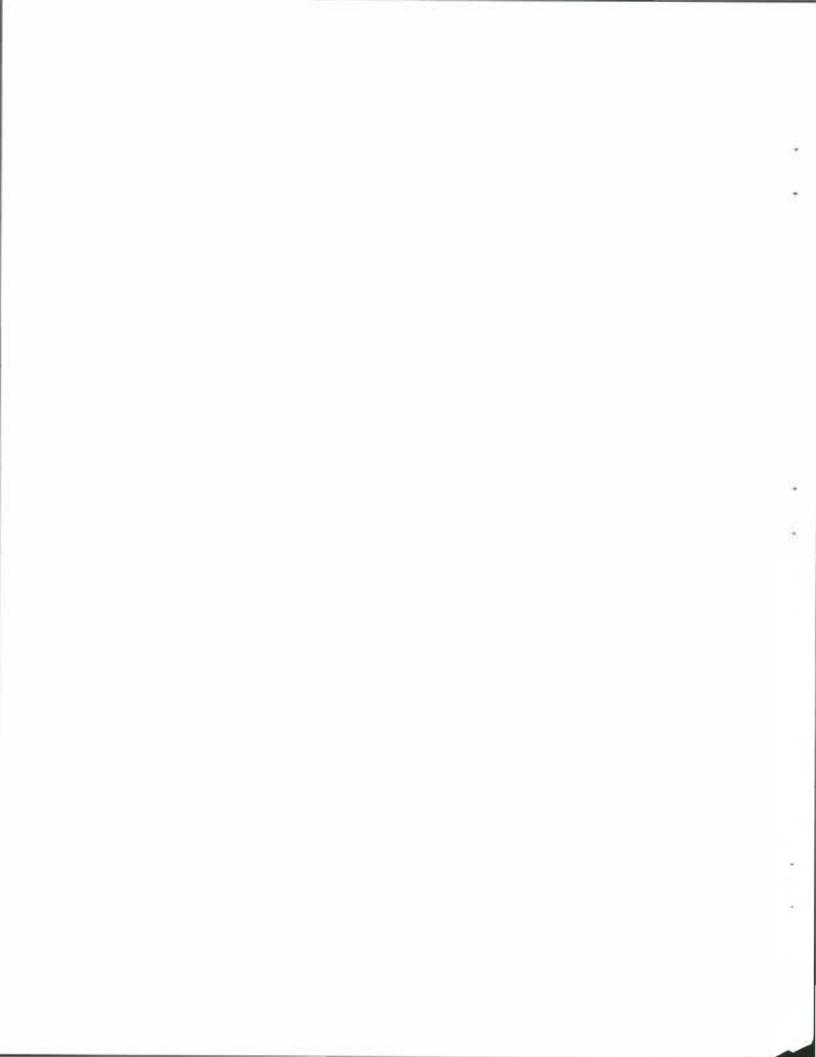
*

-

4

-

S Ш 5 Ζ SPO SPO ШШ 24 AND MINI MINI



INTRODUCTION

The first section of comments and responses consists of:

- comment letters on the DEIS (16) and comment forms submitted during the July open houses (1); and
- responses to substantive comments contained therein.

Letters are shown on left-side pages and responses on the right. Substantive comments are those which, in BPA's determination, require changes or additions to the DEIS or additional explanation or clarification. Substantive comments and their responses are coded in the margin for ease of identification. The number to the left of the hyphen is the number the letter was assigned; the numbers to the right identify separate comments within each letter.

The second section is a short summary of comments and inquiries received during the three Open Houses held in July, 1985. Information in brackets provides responses to these generalized comments.

ł

COMMENT LETTERS/FORMS AND RESPONSES

The following letters/forms are numbered according to when they were received.

- 1. Lew Becker, Private Citizen
- 2. Larry A. Hippler, Bureau of Aeronautics, State of Idaho
- 3. State of Idaho, Department of Lands
- 4. U.S. Department of Interior, BLM
- 5. State Archaeologist, Idaho State Historical Society
- 6. U.S. Department of Agriculture, Soil Conservation Service
- 7. State of Idaho, Department of Health and Welfare
- 8. Luther B. Squires, Hollow Hills Company
- 9. James C. Reed and 13 other signatures
- 10. U.S. Department of Agriculture, Forest Service
- 11. Blair Grover, Grover and Walker Law Offices
- 12. State of Idaho Department of Fish and Game
- 13. U.S. Department of the Interior, Office of the Secretary
- 27.* Jack Reed, Citizens to Save Heise (comment form)
- 33. U.S. Environmental Protection Agency
- 34. U.S. Department of the Interior, Bureau of Indian Affairs

^{*} Number 14-26 and 28-32 were assigned to comment record note sheets used by BPA personnel to note concerns of open house visitors. These comments and responses to them are summarized on p. 2-28.

Rtal Box 3745 Alto, wyning vie Drigge, Id. 83422 Jure 28, 1925 I have a few comments to make on the dreft EIS for the Fall River / Lever Villey Transmiss Syster Reinforcement. Firet I an happy that so mak consideration we give the potential repecte on willife that different bestie would have. The preferred route ilentified in the DEIS appeare to make the best trade - off with the least impact on agriculture, residences, and wildlife. I we happy to see that the preferred nonto a worse the finde Rives wet of Herice and these works important big gene winter range and held sagle habitet. Also, the preferred monte avoide voring Congos a. and calenty Cr. which are important des, more, and else writer ranges, 1-1 The mitigation measure induded in the summing DEIS are gard. but I shock some sheald be a little stronger: 1. where were treems, sediment trops a where hall be used if the stairm is a tributory of constant atreem. with fishing values. O deriver, sediment from the tributory will eater the men stream and dimage downstream fish habitat. 2. I am conversed about reptor (hawks eggles etc.) deaths 1-2 by electraction. I between the BLM and perhaps BPA has a tower design which introlling eliminates the possibility 3745 Via 3422 of reptors de trouting themselves when herding a leaving 80 the twice. The design sometimes locates the power lines as the bide carrent touch two west at a time. This L. Beck Route / Alta, W Driggs oralection re important for most of the distance of the Thank for the apportunity to const on the DEIS. O will it looks your. ENVIRONMENT No. Simerely, E. Leure Becker Date 51-R-DEIS-01 7/3/85

2-4

- 1-1 This will be done.
- 1-2 The conductors are far enough apart so that the two cannot be touched simultaneously. Therefore, electrocution is not possible. See Appendix C and page 4-25 in the draft environmental impact statement (DEIS).

STATE OF IDAHO

JOHN V. EVANS GOVERNOR IDAHO TRANSPORTATION BOARD CARL C. MOORE — CHAIRMAN LLOYD F. BARRON — VICE CHAIRMAN JOHN M. OHMAN — MEMBER E. DEAN TISDALE DIRECTOR

TRANSPORTATION DEPARTMENT

BUREAU OF AERONAUTICS AND PUBLIC TRANSPORTATION 3483 RICKENBACKER ST. BOISE. IDAHO 83705 PHONE 12081334-3183

June 20, 1985

Robert N. Laffel Idaho Falls District Manager Bonneville Power Administrator Idaho Falls District P.O. Box 2558 Idaho Falls, ID 83401

Dear Mr. Laffel:

We have reviewed the draft EIS for the Fall River/Lower Valley Transmission System Reinforcement.

2-1 It would appear that you have chosen the Goshen-Drummond Plan as the preferred line routing. As I mentioned in my letter of 6-4-85, the State of Idaho will require submittal of certain line routing data before construction begins.

I would suggest that you may want to coordinate the data submission with Jack Storm from Bonneville Power Administration's Portland Office. Jack is familiar with both the State of Idaho and Federal Aviation Data requirements.

Sincerely,

WORTHIE M. RAUSCHER, Chief Bureau of Aeronautics & Public Transportation

LARRY A. HIPPLER Airport Development

WMR/LH/vp cc: L.H. Bob Brown - FAA-SEA

Menager	/	Diel Bogr	Ē
Secretary	1	Salet Bogr	:
Clarx		East Corr	
Economist	:		
E (anumis)			
		P.43	

SJ-FR-DEIS-02

NO.

ENVISONMENT

Date

7/15/85

SAFE	TRANSPORTATION	MEANS	PROGRESS
------	----------------	-------	----------

EQUAL OPPORTUNITY EMPLOYER

2-1 The material will be provided to the State of Idaho and the FAA when final engineering details are known.

STATE OF IDAHO

DEPARTMENT OF LANDS

Eastern Idaho Area Office Route 1, Box 400 (Beeches Corner) Idaho Falls, Idaho 83401

June 24, 1985

Robert N. Laffel Idaho Falls District Engineer 531 Lomax Street Idaho Falls, Idaho 83401

Dear Mr. Laffel:

We have reviewed your Draft Environmental Impact Statement for the Fall River/Lower Valley Transmission System Reinforcement dated June 1985.

3-1 One concern we would have with your choice of options is the placement of your line in Madison County. We would hope that your choice of line location would cause the least possible obstruction to future irrigation of croplands on the Rexburg Bench. A lot of this land is being sold by the Idaho Department of Lands to private individuals under land sale contracts. We would not want to see any hinderance to their present or future capabilities of paying off and completing their contracts.

Thank you for this opportunity to comment.

Sincerely yours,

L. D. BENEDICK Area Supervisor

LDB/mjh

IDAH	O FALLS DIST. OFFICE	_ <u>_</u>
Menager	Dial Engr	_ A
Secretary	Elect Engr	. <u> </u>
Clerk	Elect Engr	
	UN 25 1985	
Economist		
	PUS	
	I PUS	



ENVIRONN	IENT
No.	Date
SJ-FR-DEIS-03	7/15/85

EQUAL OPPORTUNITY EMPLOYER

3-1 As stated in the DEIS (p. 2-4), a primary objective of this project is to minimize conflict with existing and future agricultural land use. Measures we have employed include locating along field or property lines or along roads, use of single-pole construction, and limiting access needs (see DEIS p. 2-18). We are aware of the transfer of State lands currently taking place on the Rexburg Bench and have been working closely with the landowners there to find a location which minimizes effects on their current and future use of the land.



IN REPLY

REFERTO:

United States Department of the Interior

BUREAU OF LAND MANAGEMENT Idaho Falls District 940 Lincoln Road Idaho Falls, Idaho 83401

July 15, 1985

Mr. Jay G. Marcotte Senior Environmental Specialist Department of Energy Bonneville Power Administration P.O. Box 3621 Portland, Oregon 97208-3621

Dear Mr. Marcotte:

2800

4-1 We have reviewed the Fall River - Lower Valley Reinforcement project Draft Environmental Impact statement, and are pleased with the route selected for the line, particularly across the South Fork of the Snake River. The proposed alignment near the railroad bridge northeast of Ririe will have the least impact on recreation use of the river and wildlife habitat.

When powerline support structures are constructed at the river crossing, ospreys are likely to select them as a resting site. Therefore, your staff may want to plan for the nesting platforms where support poles are located at the river bank. We will probably make this a stipulation as one of the terms and conditions of the right-of-way grant.

We appreciate the opportunity to comment on the project, and to be involved in a very thorough "scoping" process.

Sincerely,

O'dell A. Frandsen District Manager

cc: SD (933)

ENVIRONM	ENT
No	Date
SJ-FR-DEIS-04	7/17/85

4-1 It may not be possible to place such platforms on the actual river crossing structures themselves because of design constraints. We will continue to work with BLM as part of the development of the mitigation plan to identify the appropriate locations for and number of osprey nesting platforms.

1DAHO STATE HISTORICAL SOCIETY 610 NORTH JULIA DAVIS DRIVE BOISE, 83702



July 22, 1985

Mr. Anthony R. Morrell Environmental Manager Bonneville Power Administration P.O. Box 3621-SJ Portland, Oregon 97208

Dear Mr. Morrell:

Thank you for sending us a copy of the draft EIS on Bonneville Power Administration's proposed Fall River/Lower Valley Transmission System Reinforcement. We are concerned that the project may affect archaeological or historical properties in the area.

- 5-1 Following the requirements of 36 CFR 800, an archaeological survey of the complete transmission line is needed. Sites located during this survey should be evaluated to determine their eligibility for inclusion in the National Register of Historic Places. Test excavations may be required at many of the located sites in order to determine their eligibility. Following Section 106 of the National Historic Preservation Act, the Advisory Council on Historic Preservation must be consulted if any of the eligible sites will be adversely effected. The EIS should clearly state that these actions will be taken well in advance of construction.
- **5-2** The Fort Hall Shoshone-Bannock Tribes should be consulted concerning the occurrence of religious and sacred areas.

If you have any questions concerning our comments, please contact us.

Sincerely, 1.X

Thomas J. Green State Archaeologist State Historic Preservation Office

TJG/bhd

cc: Ron Corbyn, National Park Service, San Francisco

ENVIRONM	ENT
No.	Date
SJ-FR-DEIS-05	7/26/85

- 5-1 The FBIS has been revised to reflect these comments (see Part 1, p. 1-9).
- 5-2 The Fort Hall Shoshone-Bannock Tribes have been consulted concerning the occurrence of traditional religious and sacred areas along the preferred alternative. As indicated in letter 34 (see p. 2-52), the Tribe has no present concerns for effects on these resources. BPA would undertake additional consultation with the Tribe should sites of religious significance be discovered during the survey (see Part 1, p. 1-11).

United States Department of Agriculture Soil Conservation Service

Room 345, 304 North 8th Street Boise, Idaho 83702

July 25, 1985

Anthony R. Morrell Environmental Manager Bonneville Power Administration P.O. Box 3621-SJ Portland, Oregon 97208

Dear Mr. Morrell:

We have no comments to make on the DEIS on Bonneville Power Administration's proposed Fall River/Lower Vally Transmission System Reinforcement to construct facilities that would assure reliability of electrical service to loads in the Targhee, Drummond, Palisades, and Teton areas in southeastern Idaho.

Sincerely,

ames M. Habiger (Acting)

Stanley N. Hobson State Conservationist

cc:

Gary A. Margheim, National Env. Coordinator, Ecological Sciences, SCS, Washington, D.C.

ENVIRONMENT		
No.	Date	
SJ-FR-DEIS-06	7/29/85	



No comments requiring response.

STATE OF IDAHO	
DEPARTMENT OF HEALTH AND WELFARE	DIVISION OF ENVIRONMENT Statehouse Boise, Idaho 83720
July 26, 1985	• •
Anthony R. Morrell, Environmental Manager Bonneville Power Administration Portland, OR 97208	
Dear Mr. Morrell:	
The Idaho Department of Health and Welfare, Division of has reviewed the Draft Environmental Impact Statement f posed Fall River/Lower Valley Transmission System Reinf would like to submit the following comments:	or BPA's pro-
7-1 1. Pages 2-18 through 2-22. The final EIS should h mitigation or construction measures proposed by route is finalized. This will assure that resou time, and personnel) have been allocated in adva water quality impacts.	site when the rces (financial,
7-2 2. Pages 2-18 through 2-22. Mitigation measures sh viewed by IDHW-Division of Environment on a site Particularly sensitive are the proposed stream c ments <u>13</u> , <u>27</u> , <u>38</u> , <u>41</u> , and <u>42</u>) as well as road co	-by-site basis. rossings (seg-
We appreciate the opportunity to comment on this DEIS.	
Sincere Py,	
Terlin the	
Lee W. Stokes, Ph.D Administrator	.
LWS/kks	
cc: Daniel Steinborn, EPA-Region X Walt Poole, IDHW-DOE Carla Levinski, IDHW-DOE	ENVIRONMENT No. Date SJ-FR-DEIS-07 7/31/85

2-16

EQUAL OPPORTUNITY EMPLOYER

7-1 Because specific structure sites and designs will not have been finalized when this FBIS is released, we cannot include such information. After the route has been selected, an interagency mitigation committee will develop site-specific mitigation and monitoring measures.

BPA will endeavor to reduce water quality impacts by following mitigation measures (such as those outlined in Idaho Department of Health and Welfare's <u>Best Management Practices for Road Activities</u>) to reduce erosion and sediment production.

7-2 The State of Idaho Division of Environment will be invited to be on the interagency committee.

466 Higbee Circle Idaho Falls, ID. 83401 July 30, 1985

Anthony R. Morrell, Environmental Manager Bonneville Power Administration P. O. Box 3621-SJ Portland, Oregon 97208

Dear Sir:

The new proposed Fall River/Lower Valley Transmission System Reinforcement pole line runs on a diagonal angle through two 40-acre pieces of ground more specifically described as $SE_4^1SW_4^1$, Sec. 27, and the $NE_4^1NW_4^1$, Sec. 34, T. 1 N., R. 38 EBM, owned by the Hollow Hills Company, a family partnership.

This 80 acres of ground lies between 1/2 and 3/4 of a mile from the Idaho Falls Country Club area, where steady progressive residential development is taking place. At the time this property was acquired a professional appraisal was obtained on this ground and other ground owned by the Hollow Hills Company between two and three miles south of this eighty acres. When it was appraised, a much higher value was placed upon the ground surrounding the Country Club area because of its potential for residential usage. While at the present time it appears there is only a remote possibility that this ground will be developed within the next twenty years, it is probable that in the early part of the coming century this land will be platted and developed for residential usage.

- 8-1 While it is recognized that there is an existing easement through this land, plans for the future must indicate that this power grid system, when development of the land does take place, would have to be changed and relocated either on section lines or development lines, as the demand dictates at that time. For this reason, this letter is written to protest additional development under the proposed system, and to place the Bonneville Power Administration on notice that relocation of this line will be required in the foreseeable future in order to properly develop this property.
- 8-2 Should Bonneville Power Administration further develop this grid system, owners of the land now in cultivation should be reimbursed for an annual rental fee on the ground utilized by the power structures located on cultivated ground. It is hoped that as this improvement progresses, there will be allocations made for reimbursement to landowners of ground through which the system passes, including that owned by Hollow Hills Company

Sincerely,

REGISTERED MAIL RETURN RECEIPT REQUESTED LBS:kb Luther B. Squires, Operating Partner for Hollow Hills Company

ENVISONMENT		
No.	Date	
SJ-FR-DEIS-08	8/1/85	

- 8-1 There is an existing line through this land. Rather than to build a parallel line which would take a much larger easement and which would increase impacts, BPA proposes to replace the existing line with a double-circuit line which will have poles in approximately the same places. A potential developer would therefore have to plan around certain pole/line locations whether this project is carried out or not. If that person, wishing to develop this land in the future, should find the line a hindrance to develop, s/he might choose to pay BPA the costs to relocate the line elsewhere on the property.
- 8-2 Whenever BPA changes the use of a right-of-way or adds to its right-of-way, we compensate for the increased use and for any damages to crops or property that may be incurred by the change. BPA makes a one-time payment (rather than annual payments) for land interests that it buys. This is the practice in the industry as a whole. It is also required in Federal land acquisition by Department of Justice regulations, unless the interest being purchased will be needed for only a short time.

Route 2, Box 281 Rigby, Idaho 83442 July 31, 1985

UNITED STATES DEPT. OF ENERGY Bonneville Power Administration P.O. Box 3721 Portland, Oregon 97208

Dear Sirs:

After reviewing your draft Environmental Impact Statement (DEIS), we concur that option "G" (The preferred route) is the best alternative for extending the proposed power line through and north of Ririe and across the Snake River.

9-1 Existing right-of-ways, roads and railroad right-of-ways should be used, consistent with the Idaho Code.

This would minimize the agricultural impact and environmental degredation.

Bisecting prime farm land and disrupting existing irrigation systems are of great concern to us.

You will recall that at the February open house in Ririe, it was unanimously agreed by all present that the power line should use the existing railroad right-of-way through Ririe, and north until it crossed the S_nake River.

We trust that you will construct along your Preferred Route Option "G".

Sharan R. Jong Evelyn Bropping

ENVIRONMENT NO. Date SJ-FR-DEIS-09 8/6/8

ue Delos

9-1 See response to comment 27-1 (p. 2-47).

United States Department of Agriculture

TARGHEE NATIONAL Forest

P.O. Box 208 St. Anthony, ID 83445

2720 1950

August 1, 1985

Mr. Anthony R. Morrell Environmental Manager Bonneville Power Administration P.O. Box 13621-SJ Portland, OR 97208

Forest

Service

Dear Mr. Morrell:

We appreciate the opportunity to comment on the Draft Environmental Impact Statement (DEIS) for the Fall River/Lower Valley Transmission System Reinforcement.

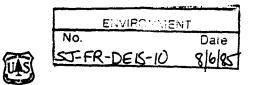
Our concerns concerning the route options crossing the northwestern flank of the Big Hole Mountains involving National Forest lands were made known to the Bonneville Power Administration in earlier correspondence (reference our letters of April 11, 1983, January 23, 1985, and February 28, 1985). Apparently, these concerns were noted and reflected in the environmentally preferred option, which avoids National Forest lands entirely in the area identified as the North Sector. Another area of concern was in the Snake River Crossing Sector Near Heise. Likewise our concerns were noted as the preferred route option avoids the South Fork of the Snake River Area of Concern, which is a relatively undeveloped area containing high value wildlife habitat.

In summary, we support the preferred options as noted below:

Goshen Entry Sector - Option B Snake River Crossing Sector - Option G Crossover Sector - Option K North Sector - Option M

Considering the nature and scope of the project, we find the DEIS for the Fall River/Lower Valley Transmission System Reinforcement a very descriptive, comprehensive document. We thank you for the opportunity to review this draft copy.

Sincerely, MANTINIA M /STEPHEN M. RUSHTON Branch Chief, R&L



FS-8200-28(7-82)

No response required.

GROVER & WALKER CHARTERED LAW OFFICES P.O. 80X 36 BIGBY, IDAHO 83442-0036 (208)745-6653 July 31, 1985

BLAIR J. GROVER BEITH M. WALKER T. HAROLD LEB (1914-1976)

Mr. Anthony R. Morrell Environmental Manager Bonneville Power Administration P.O. Box 3621-SJ Portland, Oregon 97208

> Re: Grover Farms, Ltd., Steve Sutton and Lee Sutton, and Tim Parkinson

Dear Mr. Morrell:

The above named entities and persons have requested this firm submit the comments which follow in regard to the Draft Environmental Impact Statement for the Fall River/Lower Valley Transmission System. All of the above are owners or lessors of agricultural lands on the north side of the Snake River on the bench above Heise. The proposed route goes diagonally across one of the Parkinson fields, and then along a road which separates Grover Farms from Parkinsons and then from Lee Sutton. You have maps and aerial photographs showing the exact location and it has been discussed at the public hearings. Objection to the route in the area described is made for the following reasons:

- (1) FARMING AROUND POWER POLES: It is always difficult to farm around power poles. The bigger the machinery the harder it is to get close to the poles. Consequently, they are a collecting spot for weeds and debris. If the H-frame 2-pole system is used, it leaves a large area that cannot be farmed.
- 11-2 AERIAL SPRAYERS: Power lines are a significant hazard to aerial spraying of fertilizers, herbicides and pesticides, and consequently increase the cost of application. Under marginal circumstances, such as weather and/or visibility, delays are often encountered because of the danger presented. There is already a power line on two sides of Grover Farms. By adding this line it will be impossible for aerial applicators to fly in a direction where there are no power lines.

(3) IRRIGATION SYSTEMS: It is proposed that the power poles be placed in the fields belonging to Grover Farms. The land is currently irrigated with hand lines. High voltage power lines pose a danger to pipe movers who never seem to remember the lines are there. If a pipe

ENVIRONME	NT
No.	Date
SR-FR-DEIS-IL	8/6/85

11-1 The DBIS recognizes these effects (p. 4-12, 13). Attempting to minimize agricultural impacts has been a primary goal in locating and designing this line. One way to mitigate such effects is to use single-pole structures, located as close to roads as possible. Single poles are proposed for the property in question here, as well as for most of the new route where cultivated land is crossed.

In the few agricultural areas where H-frame structures are used, up to 200 square feet may not be tillable; in practice, we have found that the actual unfarmable area is often much smaller. Weeds and/or debris buildup is indeed a concern. BPA works with landowners to control weeds at structure sites. Our procedures are outlined on p. 4-51 of the DEIS. We are also coordinating with local weed control districts to develop procedures for control of noxious weeds along BPA rights-of-way (see Part 1, p. 1-12, 13).

11-2 The Federal Aviation Administration (FAA) has not determined this transmission line to be a "hazard" to air navigation. FAA has been sent a copy of the draft BIS on this project and has not recommended any flight markers or other measures to avoid adverse effects on air transportation. Therefore BPA does not agree that the transmission line poses a "significant hazard to aerial spraying" in the sense of a hazard to air traffic. FAA will be sent a detailed submission on the line after it is designed. BPA will then follow FAA's recommendations as a matter of policy.

Interference with aerial crop spraying is described in the DEIS (p. 4-13).

It is true that a field at Grover Farms presently has distribution lines on two adjacent sides and that the proposed line would parallel a third side. However, our research shows that aerial spray services typically charge by the job, basing their costs on the amount of spray to be used or acreage to be covered, not on degree of difficulty. Therefore, BPA believes that the presence of this powerline will not add to the cost of aerial spraying.

11-3 The DEIS notes the existence of such hazards (p. 4-40) and their very slight risk of occurrence with lines of this size. BPA provides a free booklet that describes precautions that should be taken when working around powerlines: Living and Working Around High-Voltage Power Lines.

On this property (Grover Farms), structures are proposed to be located on the access side of the irrigation mainline, along either a road or field lines. This location should minimize the extent of pipe movement near or under the line itself. Page 2 Anthony R. Morrell July 31, 1985

mover touches the line with an aluminum pipe, instant death is almost certain.

- **11-4** There are plans to replace the hand lines with pivot irrigation. The power lines will reduce the length of the pivot, thereby reducing the acreage all the way around the field.
- 11-5 The most serious obstruction to irrigation is where the lines go diagonally through the Parkinson field. Parkinsons plan to install either a pivot or wheel lines. That is simply not feasible with power poles in the field.
- **11-6** Bonneville Power has expressed its concern about interference with irrigation systems on Page 2-11 in Discussion of Option C, and used it as a reason for avoiding that route.
- (4) RECREATION USE: There are no fences in the area and the open fields have become a regular and popular area for winter snowmobiling. Not only do power poles interfere with the winter scene, they present a real hazard to snowmobilers riding through the fields. The road is not opened in the wintertime so that it does not form any sort of a boundary for snowmobilers.
- (5) WILDLIFE: Concern has been expressed for wildlife from the bluff to the river. Big game, at least deer, elk and moose, frequent the fields of the above named parties. They are particularly fond of grazing on fall grain in both the fall and early spring. They are also in the area during the winter months until the snow becomes too deep for grazing. During the past few winters, the Department of Fish & Game has fed big game along the proposed route.
- (6) FUTURE DEVELOPMENT: If agriculture continues to develop as it has in the past, it is likely farm operations will become larger and some of these parcels may ultimately have the same ownership. It may then be much more economical and feasible to make significant changes in the irrigation pattern. That cannot be done if there are large power poles in the way. The probability of that becomes even greater if there continues to be improvements made to the irrigation delivery systems.

- 11-4 Although transmission lines and center pivots are not easily compatible, BPA works with landowners to minimize impacts. Generally, we try to avoid placing poles where they will interfere with passage of the pivot arm. Instead, we try to locate poles where they do not obstruct the pivot path. In addition, we may suggest modification of the center pivot system using higher pressure and/or corner sweep systems to avoid a decrease in irrigable acreage.
- 11-5 The line would cross the middle of the field in question along a section line, with 1 or 2 structures placed in the field. We recognize that the presence of one or more structures in this field will affect the configuration and operation of future irrigation systems. In designing and locating the proposal, we have tried both to take planned irrigation development into consideration and to avoid directly crossing cultivated land. However, in some places, it will be necessary to place structures in fields where further irrigation systems may be planned. We have tried to keep the number of structures in fields to a minimum. We believe that irrigation systems could be designed around the structures for the field in question. We will continue to work with the landowners to find the least disruptive location for the structures.
- 11-6 As noted above, avoiding interference with agricultural land (particularly with irrigation systems) has been a primary objective of the design and location process. We also note, in the DEIS (pp. 2-4/5; 2-11), our goal of balancing this concern with many other resource considerations, including recreational, visual, and wildlife resources. Option C was less preferred than the proposed option for many reasons, including its much higher probability and severity of interference with existing irrigation systems. Option G (proposed) was preferred in part because of opportunities to avoid or otherwise reduce similar types of effects. On balance, Option G was judged to have the least overall impact, although the DEIS does recognize that "there would be some interference with irrigation and other farming operations, and small amounts of farmland would be removed at structure bases" (p. 2-14).
- 11-7 The power poles will change the visual character of the winter landscape but should not affect the use of this area for snowmobiling. The poles themselves will present no more of a hazard for snowmobiles than any tree. However, a hazard could exist from guywires attached to the structures. The mitigation plan developed for this project will address this issue and possible mitigation measures. Multi-colored guywire shields have been used successfully to contrast with the background color and may be appropriate here.
- 11-8 We realize that big game use farmland. As indicated in the DEIS, where most of the cultivated land is encountered by this line, the line is along existing access. Therefore, neither farmlands nor access to them will be significantly altered by the transmission line; effects on big game will be negligible.
- 11-9 BPA plans its facilities as carefully as possible in consideration of existing and near-future land uses. As noted in previous responses and in the DEIS, we have used existing linear features such as roads, property lines, and field lines to minimize disruptions to land uses such as agriculture. Far-future actions will have to plan around features that exist then, including the transmission line.

Page 3 Anthony R. Morrell July 31, 1985

(7) SERVICE: Realistically, there will not be a road along part of the route. That means fields and farm roads will be used for access. Moreover, the county road ends before it goes up the steep hill dividing Grover Farms and Parkinsons. The hill is so steep it would take substantial improvements to the existing private road for construction and access to the line above the hill.

(8) ALTERNATIVES: The parties hereto think there are two better alternatives. The first is only slightly different than what has been proposed. Enclosed is a reproduction of Figure P-3 on which there is a red line drawn along the edge of the farmland at the top of the bluff until it gets into the grazing ground and then goes straight north to pick up the proposed route. Following along that route would avoid any conflict with the agricultural lands described. It would remain on waste or grazing land. There would be very little difference in the impact on wildlife between this route and the one proposed by Bonneville Power. Indeed, poles might be strategically placed so the impact could be virtually eliminated.

11-12 Another alternative would be to follow existing power lines across Ririe Reservoir and then come straight north along the Poplar Road, crossing the river north of Heise and straight over the bluff. That route would avoid interference with the City of Ririe and the strong feelings that have been generated because of its location in the vicinity of Ririe. If people are as important as animals, serious consideration should be given that route.

(9) PUBLIC INTEREST: There is clearly a national interest in protecting and preserving wildlife, but there is a similar national interest in protecting and preserving prime agricultural lands. Indeed, President Reagan has just signed legislation aimed at promoting conservation and preservation of agricultural lands. It is pointed out that man-made encroachments on the land, such as the proposed power line, are every bit as destructive as wind and water. It would appear Bonneville Power has selected its route to avoid any conflict with BLM, and has not adequately weighed the impact on agricultural lands. Both recreation, wildlife and agriculture could be served by following the route recommended in this letter.

(10) CONDEMNATION: These parties feel very strongly about the position taken herein, and it is unlikely any would agree to the proposed right-of-way. Condemnation would almost certainly be required.

11-14

None of these parties object to progress and none are qualified at this time to dispute the need for the proposed transmission line. How-

- 11-10 Improvements of the existing road will probably be necessary to allow access to structure sites. The extent of improvement will be determined when design and location are completed. Access criteria are discussed in the DBIS on pp. 4-2, 3.
- 11-11 BPA has reviewed this proposal and reached the following conclusions. A line located along the top of the bluff to avoid cultivated land would require about six additional angle structures and would be about three miles longer. Access would be significantly poorer and structures would have to be placed on steep, erodible soil to avoid cultivated areas. Costs would therefore be increased. Loss of soil from erosion due to increased access would be greater. The line will be more visible, with structures silhouetted against the sky in views from the valley below and to hikers on the Cress Creek Nature Trail. It could also interfere with raptors which nest in the rock outcrops at the top of the bluff and soar above it. Given our determination that impacts along the original proposed routing may not be severe or significant, the tradeoffs for cost and other environmental impacts associated with your proposal make it a less desirable alternative.
- 11-12 As noted in the DBIS (p. 2-10), the agricultural/residential resources and wildlife/recreational/esthetic resources coincide in the Ririe-Heise area, making it difficult to find acceptable ways for transmission lines to cross the Snake River Plain. BPA has spent much time and effort studying alternatives to crossing the Snake River Plain in the Ririe-Heise area.

BPA initially considered the route alternative suggested here and concluded that it presents more potentially serious impacts than does the proposal. First, using the existing road to Ririe Reservoir would add a transmission line opposite an existing distribution line and would increase visual intrusion for recreationists traveling to the reservoir (see DEIS, p. 4-20). To head straight north after crossing Ririe Reservoir would require crossing directly through cultivated fields, as no roads are available to follow. Then, both sides of Poplar Loop road are well developed with residences and shade trees. To avoid displacing either would require placing the line well back into adjacent fields, again directly interfering with agricultural operations. Finally, where this route would cross the Snake River, significant conflicts with recreation, esthetic, and wildlife resources would arise.

The proposed location reflects an attempt to minimize effects on all resources--both "people" resources (agriculture, residential, recreational) and "natural" resources (wildlife, vegetation, soils). By proposing single-pole structures along existing linear features such as roads, canals, and railroads, we believe we have reduced visual effects for residents in the area. The Snake River crossing avoids significant recreational and wildlife resources along the bluff, and is satisfactory to agencies and groups with responsibility to represent these interests (also see response to next comment). We will continue to work with individual landowners to locate the best sites for structures on their property. Page 4 Anthony R. Morrell July 31, 1985

11-14 ever, all are lifetime residents of the area and believe they are qualified to make judgments about the impacts on the environment of the alternative routes. It is therefore urged the route be modified slightly so that it is kept in brush and grazing land and does not cross prime agricultural lands.

Yours very truly,

GROVER WALKER

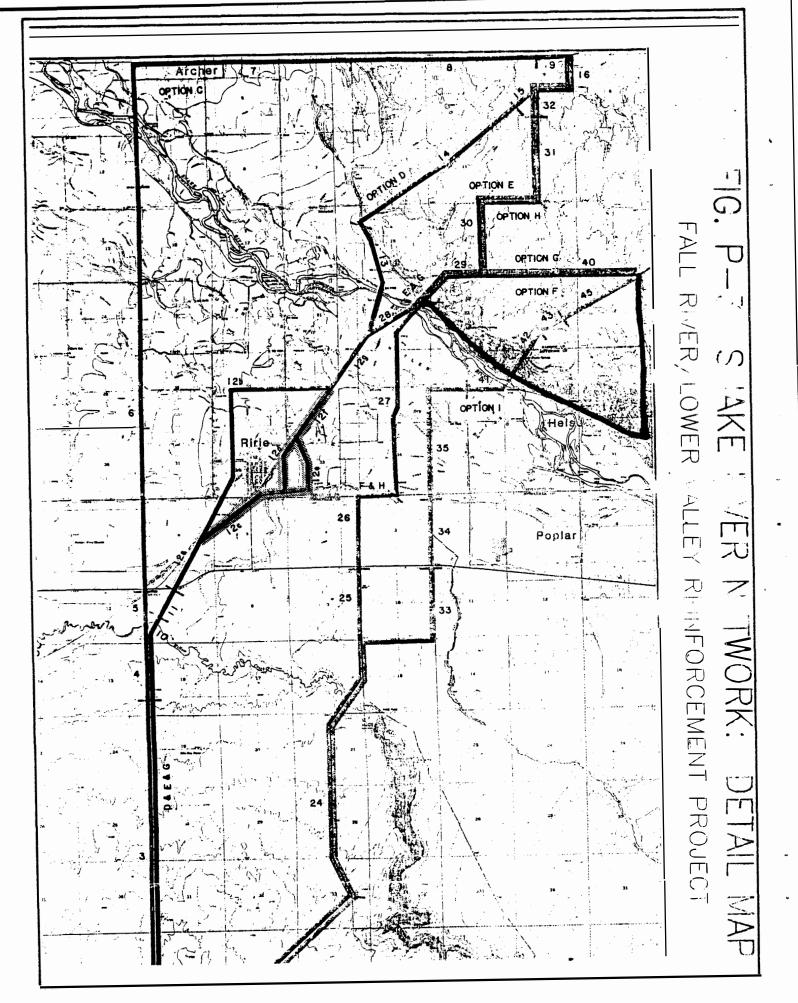
BLAIR GROVER

BG:pa Enclosure cc: Grover Farms Steve Sutton Lee Sutton Tim Parkinson 11-13 Avoiding farmland effects, including those on prime agricultural land, was a primary objective in designing the project (see DEIS p. 2-4, 5; table P-1). Many alternatives to mitigate effects on farmland were considered; the proposal is the lowest-impact alternative, on balance, for all resources.

In compliance with Public Law 97-98, the Farmland Protection Policy Act (FPPA), BPA submitted Form AD-1006, the Farmland Conversion Impact Rating form, to the U.S. Soil Conservation Service (SCS) for determination of effects on prime, unique, and important farmlands. Of the 880 acres involved in right-of-way, less than 5 acres of farmland would be converted either directly or indirectly by this project over the longterm. As indicated in the DEIS, a much larger portion of the this 880 acres could be disturbed during construction; BPA compensates directly for lost production. Bighty-eight of the 880 acres were designated by SCS to be "prime farmland." while 502 acres were considered "important farmland." Less than one acre of prime farmland would be converted to other uses. The overall percentage of farmland in the counties crossed by the proposal that could be converted would be 0.000002%. The overall project rating for conversion of farmland and impacts on farm support services, irrigation systems, non-urban land, etc., was well below SCS's threshold for consideration for protection and for evaluation of additional sites. (See Part 1, p. 1-12.)

Considering the fact that much of the project area is cultivated land, the proposal largely avoids significant effects on prime farmland. BPA feels that the proposal not only complies with the letter of the law regarding the protection of prime farmlands but also is in keeping with the spirit of preserving these resources as much as possible. At the same time, we believe that the proposal satisfies the concerns of many commenters to avoid significant effects on esthetic, natural, and recreational values along the bluff area of the Snake River. For example, comments and letters we have received indicate that agencies such as the BLM, Idaho Fish and Game, groups such as the Audubon Society, and the Idaho Environmental Council represent a segment of the public that feels these values should be preserved.

11-14 BPA recognizes the importance of seeking local expertise in location and design studies. As discussed in the DEIS (Appendix A), the environmental team contacted resource and land use experts at local, county, and state offices such as county commissions and the Soil Conservation Service. As the initial routes were being evaluated during summer 1983, we talked with as many landowners--particularly farmers--as we could contact about design choices and location options and their potential effects on land uses and farming operations. We incorporated all this information into the study process. The proposed route which emerged balances concerns for a variety of environmental impacts and was judged to have the lowest overall effect of all the alternatives.



i .



IDAHO DEPARTMENT OF FISH AND GAME REGION 6 1515 Lincoln Road Idaho Falls • Idaho • 83401

August 5, 1985

Mr. Anthony R. Morrell Environmental Manager Bonneville Power Administration P.O. Box 3621-SJ Portland, OR 97208

Re: Comments on the Draft E.I.S. for Fall River/Lower Valley Transmission System Reinforcement

Dear Mr. Morreil:

Our Department personnel have reviewed the draft E.I.S. and have few negative comments. We commend your agency for working with the many diverse interest groups to minimize conflicts. We offer the following comments:

- 1. We support the preferred route because it will have the least impact on fish and wildlife habitat, wildlife populations, and wildlife management alternatives.
- 12-1 2. We favor the construction of spur roads instead of loop or continuous roads, but request that all new roading be kept to the minimum necessary. We recommend atl new roads longer than one mile be closed with a locked gate.
- 12-2 Steep canyon topography exists at crossings on Lyons Creek, Moody Creek and Teton River. Roading and tower construction on these canyon rims should be kept to a minimum and disturbed areas reseeded immediately after construction. No roading should be done into the canyons of these streams due to vulnerability to erosion and high visual impact. If new road crossings are required on the Moody Creek drainage, we request bridge construction instead of culverts to minimize fish migration barriers. Side casting of spoils in cut and fill road constructon adjacent to stream corridors is unacceptable due to long-term sedimentation problems in spawning streams. Road construction in steeper terrain should include water bars to minimize erosion from roads.

ENVIRONMENT No. Date SR-FR-DEIS-JA 816185

EQUAL OPPORTUNITY EMPLOYER

- 12-1 The DEIS (pp. 2-18 to 2-19) states BPA's plan to minimize new roading. Locked gates will be considered in the mitigation plan, where appropriate; however, final say on where they are used will depend on the preferences of the individual landowners.
- 12-2 As stated in the DEIS, roading in the areas of these canyon crossings will be kept to a minimum and reseeding will be done. Location of individual roads will not be known until final design is complete. Generally, BPA installs water bars on steeper roads, depending on landowner preference. End hauling of soils (rather than sidecasting) in sensitive spawning areas may be incorporated into the construction specifications. The interagency mitigation team will review these suggestions and make specific recommendations.

Mr. Anthony R. Morrell August 5, 1985 Page 2

- 12-3 We also question why it is necessary to clear the entire 50 foot easement for new 12 foot wide roads. We can understand the need to clear areas for turn-arounds and corners, but reiterate all clearing for roads and right-of-way be kept to a minimum.
- 12-4 3. Because of the high value of riparian areas to wildlife, all clearing and treatment of vegetation in these areas should be kept to a minimum. At the Snake River crossing, towers should be constructed out of the stream corridor far enough to ensure no impact will occur to the structure during high water or ice movement. If removal of cottonwood or aspen is required, efforts should be made to minimize destruction of understory vegetation. Protection of the riparian understory should be mandatory in the flood zone to provide maximum shoreline stabilization against future high water erosion.
- 12-5 Herbicides should not be used in riparian areas or where they may translocate into water sources. We would also prefer they not be used on other non-cropland because they kill forbs and shrub species important to wildlife. We suggest thought be given to planting "low-growing" species that compete with undesirable species to reduce the frequency of treatment. Vegetation control in the canyon zones of Lyons Creek, Moody Creek and the Teton River, if necessary, should be limited to mechanical methods only and restricted to overstory species.
- 12-6 4. We request timing of helicopter flights and ground inspections to minimize disturbance to wildlife, i.e. reproduction, wintering, hunting seasons, etc.
- 12-7 The E.I.S. fails to mention the following wildlife resources or wildlife related impacts. They were probably an oversight, however, they should be included in the final draft.
 - 1. There is no mention of the active osprey nest on the railroad bridge across the Snake River. Construction activity during the nesting period could cause abandonment of the nest.
 - 2. Another predator common to the Big Hole area is black bear. The Big Hole area is also a locally important elk calving area.
 - 3. Trumpeter swan, a species of special concern, are important winter inhabitants of the Teton Valley. These birds are susceptible to powerline collisions.

- 12-3 A 50-foot right-of-way does not necessarily mean that clearing will be that wide. Enough clearing will be done to maintain safe sight distances around corners of the road, and to allow for the construction of the roads including cuts, fills, and ditches. No felled timber, stumps, or trees are to be part of or covered by the fill material.
- 12-4 Some removal of cottonwoods will probably be necessary, but every effort will be made to retain the understory. The towers will be designed to withstand the environmental conditions at these sites.
- 12-5 BPA's vegetation control practices are designed to prevent entry of herbicides into water sources. Specific buffer zones around water are prescribed. In addition to mechanical control methods, we may use selective control methods such as the Frill or Basal method and specific herbicide formulations approved by EPA for use near bodies of water. (Also refer to BPA's August 1983 TRANSMISSION FACILITIES VEGETATION MANAGEMENT PROGRAM EIS (DOE/EIS-0097-F.))

Vegetation control on the right-of-way is directed only toward those tall-growing brush and trees which may--if left uncontrolled--grow too close to energized conductors and jeopardize safe and reliable operation of the line. Low-growing species will not be controlled, except at structure/tower sites and on access roads. With appropriate chemical control methods, target species can be controlled with essentially no effect on low-growing species.

Because the canyons you mention will be spanned, there will be little if any need for vegetation control. Depending on final design and location of the line (and roads if needed), it may be practical to use only mechanical methods. Specific recommendations will be made by the interagency mitigation committee. BPA has found that planting of low-growing species to compete with undesirable tall trees and brush can be effective. However, it can be costly. Also, residual vegetation may be able to establish adequate cover to suppress unwanted species. The interagency mitigation committee will consider this technique along with a range of other control methods.

- 12-6 Timing of inspections depends on many factors such as the weather, emergencies, maintenance schedules, and helicopter availability. It may not be possible to schedule maintenance activities to avoid wildlife disturbance. The interagency mitigation planning committee can address this issue and make specific recommendations for consideration in maintenance scheduling.
- 12-7 The text has been changed to reflect the presence of the osprey nest and of the black bear. No route under consideration goes through the Teton Valley or through elk calving areas in the Big Holes, so impacts on the Trumpeter swans or elk calving areas are unlikely.

Mr. Anthony R. Morrell August 5, 1985 Page 3

- 12-8 4. There is no mention of the South Fork Interagency Memorandum of Understanding (1981). This document states that all signatories (Targhee National Forest; Idaho Falls District of Bureau of Land Management; U.S. Water and Power Resources Service, Boise; U.S. Fish and Wildlife Service, Portland; Idaho Falls Region, Idaho Department of Fish and Game and Idaho Department of Water Resources, Boise) "...plan to manage the public land and resources within our existing authorities, responsibilities and limitations to maintain existing uses and values and improve them when possible." Any development alteration or management decision that would change any of the resources or values of the South Fork must be mutually agreed upon by all agencies.
- 12-9 5. The section on social and economic considerations fails to include any social or economic impacts on wildlife or the effects on wildlife related recreational opportunity. Although actual impacts are difficult to quantify, our Department in conjunction with the Forest Service and the University of idaho recently completed an economic survey of idaho's wildlife and the value of a wildlife user day. A copy of this report can be obtained from our Boise Office, 600 South Walnut Street, P.O. Box 25, Boise, idaho 83707. A discussion of the social and economic impacts on wildlife and wildlife related recreational opportunity should be included in the E.I.S.

Sincerely,

Herbert A. Pollard II Regional Supervisor Region 6

HAP:JN:SE:ai cc: USFWS Bureau of Program Coordination Bureau of Wildlife Bureau of Fisheries

- 12-8 Little mention is made of this Memorandum of Understanding because early routes which crossed the South Fork area were eliminated for their unacceptable conflict with the values for which the South Fork Joint Management area is being managed. The area is mentioned on page 2-3 and on pages A-3, A-4, and A-5, all of which detail the evaluation of resource issues, public involvement, and the consideration of alternatives. On page A-14, the joint management area is mentioned as a consideration in the environmental comparison of alternative plans.
- 12-9 The proposed route largely avoids important wildlife habitat, crossing mainly farmland instead. For example, out of a total of 72 miles, the route crosses a little more than 5 miles of key big game habitat. In this area we estimate that approximately less than 50 acres of habitat would be altered by clearing. The conclusion in the DEIS was that overall impacts on wildlife will not be significant (see Table P-1), particularly considering mitigation, such as limiting access to wildlife habitat. Because direct impacts themselves are limited, BPA believes that any socioeconomic component of wildlife impacts will be negligible.



United States Department of the Interior

OFFICE OF THE SECRETARY PACIFIC NORTHWEST REGION 500 N.E. Multnomah Street, Suite 1692, Portland, Oregon 97232

August 6, 1985

ER 85/966

Mr. Anthony Morrell Environmental Manager Bonneville Power Administration P.O. Box 3621-SJ Portland, Oregon 97208

Dear Mr. Morrell:

We have reviewed the draft environmental impact statement for the proposed Fall River/Lower Valley Transmission System Reinforcement. The following comments are offered for your consideration:

General

The Bureau of Reclamation's Minidoka Project Office in Burley, Idaho, had some concern about possible impacts on agriculture and visual/recreational resources in segment 59 of the north sector. They have worked directly with Bonneville Power Administration personnel on these concerns and have reached agreement on changes in the transmission structures in this segment. They are supportive of Option 1 routing for the area.

The Bureau of Land Management notes that the proposed alignment near the railroad bridge northeast of Ririe will have the least impact on recreation use of the river and wildlife habitat.

Cultural Resources

The DEIS is incomplete and in some cases procedurally incorrect in its consideration of cultural resources. Listed below are a number of concerns that should be addressed before the final environmental impact statement (FEIS) is issued:

13-1 1. An archaeological survey of the entire transmission line corridor will be required. At a minimum, the FEIS should state that (a) the preferred route will be intensively surveyed, (b) any cultural resources located will be professionally evaluated for their significance and National Register eligibility, (c) located resources may in some cases require physical testing for evaluation, (d) the effects of the project will be assessed, (e) a mitigation plan will be prepared for resources determined eligible for the National Register, and (f) the Advisory Council on Historic Preservation will be given an opportunity to comment on the effects of the project and the mitigation plan.

ENVIRONMEN	T
No.	Date
SR-FR-DEIS-13	8'7'85

13-1 As noted in the response to letter 5, the FEIS indicates that BPA will undertake items (a) through (f).

- **13-2** We understand that a cultural resource overview, or some form of background research, has been done for the Bonneville Power Administration (BPA) by Eastern Washington University. The FEIS should briefly discuss the nature and scope of this research and reference the resulting planning documents. This is in addition to the summary on page 3-4, which we assume is the result of the research. Between the overview and the archaeological survey, sufficient background research should have been conducted to address the potential contributions, i.e., significance of any cultural resources located along the preferred transmission route. However, given the size of the project area, it is conceivable that additional background/archival research could be required of some sites to further assess their significance and national Register eligibility.
- **13-3** 2. The FEIS should reflect consultation with the State Archaeologist (State Historic Preservation Office, Boise) about these specific requirements. The only consultation mentioned in the DEIS deals with known cultural resources and project effects within the transmission line corridor.
- **13-4** The FEIS should also incorporate the results of the consultation with the Fort Hall Shoshone/Bannock and the Wind River Shoshone Indian Tribes to determine if either has traditional sacred areas that lie in the path of the preferred alternative. We suggest consultation before the start of survey field work. However, if the survey results in finds that could be of religious significance to these groups, we suggest additional consultation to confirm this and determine appropriate mitigative action.
- **13-5** 3. The procedures for "Discover Situations" listed on page 4-47 of the DEIS are being confused with the full Section 106 ACHP comment process described in Title 36, Code of Federal Regulations, Part 800 (36 CFR 800), and need to be rewritten. Emergency discovery of cultural resources during construction is covered in 36 CFR 800.7, as well as in various policies and guidelines of the Department of the Interior under Section 4(a) of the Archaeological and Historic Preservation Act of 1974 (Public Law 93-291).

Basically, when a cultrual resource is found after construction has begun and 36 CFR 800 has been complied with, (a) the agency (BPA) shall halt construction affecting the resource; (b) the agency shall notify the Departmental Consulting Archaeologist (DCA), Department of the Interior, Washington, D.C.; (c) the DCA, within two work days, will contact the SHPO staff archaelogist about the project, discovered resource, and status of compliance and arrange for a field inspection if necessary; and (d) the DCA, in consultation with the SHPO staff archaeologist, will decide on the importance of the discovery and recommend to the agency any data recovery necessary. The DCA may decide that the circumstances of the discovery warrant Advisory Council involvement.

- **13-6** 4. The FEIS should reference the source for the division of the transmission line segments into areas of low and moderate potential for cultural resources and, to be consistent, should expressly identify any areas considered to have high potential.
- **13-7** 5. With reference to the discussion of cultural resource impacts on pages 4-38 and 4-39 of the DEIS, we recommend a modification of the P-2 through P-5 transmission line sector maps. First, they should show the exact route of the

2

2-42

- 13-2 A separate overview was not prepared for this project, as several suitable ones for this area were already available. Information from these sources was used to predict impact, and to determine significance of potential cultural resources within the study area. BPA feels that the level of detail in the Summary on p. 3-4 and in Chapter 4 (pp. 4-37, 39) is adequate to understand the effects of the alternatives, particularly considering the low likelihood of serious impacts and the opportunity to mitigate effects. BPA will perform any additional research or consultation necessary to assess further the significance of any discovered resources. Additional bibliographic references have been added to the FEIS (see Part 1, p. 1-19).
- 13-3 BPA has continued consultation with the Idaho State Archeologist, as shown in comment letter #5. Inclusion of this letter in the FEIS constitutes documentation of the consultation.
- 13-4 We have consulted with the Fort Hall Shoshone/Bannock Tribes to determine whether they have any traditional sacred areas along the preferred alternative. Their response letter (see letter 34, p. 2-52) makes no mention of the presence of traditional, religious, or sacred areas along the preferred route. We believe that the Wind River Shoshone are too far removed geographically to warrant consultation; the State SHPO concurs with this determination (per contact 8-9-85). The BIS has been revised to reflect the fact that BPA would undertake additional consultation should sites of religious significance be discovered during the survey (see Part 1, p. 1-11).
- 13-5 The section on <u>Discovery Situations</u> has been revised to reflect these comments (see Part 1, p. 1-11, 12).
- 13-6 The following definition has been added to the BIS (see Part 1, p. 1-10):

For purposes of this EIS, definitions of low, moderate and high potential for sites are: low = less than 1 site per square mile, moderate = 2-5 sites per square mile, and high = 6 or more sites per square mile. Site density estimates were derived by examining corridor segments plotted on USGS maps. High, moderate and low rankings were determined by comparing environments known to contain sites with those environments along the alternative routes. Data on recorded sites are derived from existing cultural resource overviews (see response to comment 13-2) for the study area and from archival research.

As indicated in the DEIS, (pp. 4-38, 39) the highest potential for sites along the proposed route is "moderate."

- **13-7** preferred alternative. They do not differentiate the route among the various options and alternatives. Second, they should show numbered locations of all transmission line segments involving cultural resource considerations discussed on pages 4-38 and 4-39. The small-scale P-1 map is inadequate for this purpose. For example, segment numbers 17, 36, 37, 38, and 71 are said to have moderate potential for cultural resources, but are not found on the P-2 through P-5 maps. Segment numbers 18, 20, 21, 39, and 44 are said to have low potential but are not found on these maps.
- **13-8** 6. <u>Site-Specific Impacts, page 4-38</u>. Will the Hawley Ditch be impacted from access road construction in connection with the preferred route even though this feature is intersected by segments 38 and 42, which are shown off the route? If so, the FEIS should describe the Hawley Ditch and discuss its significance and National Register eligibility.
- **13-9** 7. <u>Mitigation Measures, page 4-39</u>. Why, if segment 38 is the only one containing a portion of the Heise-Thornton Road with integrity, is a survey, mapping, and photography evidently being proposed for that portion of the road found in segment 28? If it is not eligible for the Register and is not considered to have integrity, no work of any kind should be necessary.

Mineral Resources

- **13-10** The final document should address the following questions regarding mineral resources:
 - 1. Will this project affect the potential development of any underground mining properties, or have an impact on any current mining operations?
 - 2. If the properties themselves are not affected, is it possible that access to them will be?
 - 3. Will any towers be constructed on gold placer deposits, sand and gravel deposits, or any other deposits minable by open pit techniques?

A search of the Bureau of Mines' Mineral Industry Location System (MILS) revealed several pumice and sand and gravel properties along or near the proposed routes. Careful route selection through mineral areas could alleviate potential conflicts with the mineral industry.

Fish and Wildlife Resources

13-11 Ospreys are likely to select powerline support structures at the river crossing as resting sites. Plans to construct nesting platforms where support poles are located at the river bank should be considered. The Bureau of Land Management will probably include platform placement as a requirement of the right-of-way grant.

The Bonneville Power Administration has worked closely with the Fish and Wildlife Service in developing the preferred alternative. In their review of the Biological Assessment for the proposed project (letter to BPA dated February 13, 1985) the Fish and Wildlife Service concluded that if the transmission line route was located west of Heise, Idaho, then formal consultation under the Endangered Species Act would not be required. The preferred alternative in the DEIS does have the route located west of

3

13-7 Although it is not readily apparent on the pocket maps (figures P-2 through P-5), the preferred alternative can be determined by using information from the text about preferred options and/or segments (pages 2-1 and 2-6 to 2-7).

The pocket maps (figures P-2 through P-5) show only the highest-ranked route options. Segments that don't appear on these maps are lower-rated and were dropped from further consideration during the route comparison process. We realize that not showing these segments on figures P-2 through P-5 make it more difficult to review these maps from a particular resource standpoint. However, as their title ("detail maps") indicates, they were designed to provide larger-scale, less cluttered detail about the geographic location of key alternatives. We decided that including less-preferred segments would complicate unnecessarily what we wanted to show. The resource maps in Chapter 4, though at smaller scale, show all segments and also provide mapped information about important environmental resources, including cultural resources (see figure 4-4).

- 13-8 Construction for the proposed route, including access roads (segment $\underline{28}$), will not be in the vicinity of Hawley Ditch remains in segment $\underline{42}$ or $\underline{38}$. Therefore, Hawley Ditch will not be affected by the project.
- 13-9 Integrity of the Thornton-Heise Road is not known at present. Assessments of segments were based on the likelihood of site integrity for any given segment, based on a generalized knowledge of the project area and on site information at hand. In this case, description of possible mitigation measures was based on the "worst case" scenario, which would be if the road segment were eligible for the <u>National Register</u> and if a transmission structure site or assess road were to be located on the Thornton-Heise Road.
- 13-10 The proposed route location will not affect any potential or existing mining operations. A large pumicite pit, used in making building blocks, is located about 7 miles southeast of Idaho Falls and approximately 3 miles west of the preferred transmission line.

The greatest likelihood of impact on mineral resources comes from transmission lines located adjacent to gravel and borrow pits. However, due to the small size of these features, the transmission towers can easily avoid any sites along the preferred route. No effects on access to these sites are likely because structures will not be located to interfere with existing access roads.

Gold placers are located along the Snake River and appear to be inactive at the present time. The preferred route does not cross any areas where there are placers; thus no impacts will occur from the transmission line.

Overall, the line will not affect any mineral resources or associated activities.

13-11 See response to comment 4-1.

Heise and as such should not adversely affect any endangered or threatened species.

13-12 The Fish and Wildlife Service has no objections to the location of the preferred alternative route at this time. They recommend that the overhead groundwire be removed in areas of high waterfowl and raptor use. This would include the Snake River as well as other river and stream crossings.

Thank you for the opportunity to review and comment on this draft environmental impact statement.

Sincerely,

Charles S. Polityka Regional Environmental Officer

13-12 The removal of overhead groundwires would decrease the reliability of the line below acceptable limits due to the high incidences of lightning strikes in the area. BPA will consider placing marker balls on the overhead groundwires in areas of high waterfowl use.

- "Citizens to Save Heise" has provinishy provided a list of nemes to EPA of those who have spoken the concerne Itatic below. 27-

PROJECT COMMENTS (FOR DEIS)

Please tell us of specific concerns, suggestions, or comments regarding the Fall River-Lower Valley transmission line project. For instance, you might tell us of ways that we can improve the project, apparent errors or omissions you may have noted in the EIS, or any objections you may have. The more <u>specific</u> you are, the better. Suggestions for solutions to problems you see are especially valuable.

THE BPA HAS LISTENED WELL to the Comments AND SUGGESTIONS MADE BY THE PEOPLE WHO HAVE MET WITH THE BPA IN OUR HOME, IN IDAHO FALLS, AND IN THE RIRIE MEETINGS AND OPEN KLOUSES. THE MAJOR CONCERNS EXPRESED BY THOSE WITH WHOM WE ARE AFFILIATED HAVE BEEN TWOFOLD:

1) PRESERVING THE UNIQUE ENVIRONMENT OF THE HEISE-CRESS CREEK RECREATIONAL AREA-WHICH BENEFITS THE NATURE-LOVING RESIDENTS OF SEVERAL COUNTIES (AND TOURISTS)

2) MITIGATING IMPACTS TO THE FARMERS OF THE AREA BY MINIMIZING THE CROSSING OF FARMLAND WITH THE LINES.

OUR ORGANIZATION BELIEVES THAT THE BAA WAS THEN DILIGENT AND LOGICAL IN ESTABLISHING ROUTE G AS THE PREFERED ROUTE NEAR RIRIE (PARALLELING THE RAI(ROAD). ON THE EVENING THE BOA NEW its FEBRUARY MEETING AT THE RIVE WIGH SCHOOL, A MOTION WAS MADE AND VOTED ON TO ESTABLISH ROUTE G (Railroad Youte) as THE PREFERED ROUTE, AS YOUR VIDEOTAPE OF THAT MEETING WAS RELIEDED, THE VOTE ON THAT MOTION WAS UNANIMOUS IN FAUR OF THE RAILROAD ROUTE.

YES YOU HAVE l'ISTENED WELL AND SERIOUSLY Attempted to mitigate impacts By your ADUSTMENTS TO ROUTE & SINCE THAT MEETING. ACK RES

ONE QUESTION 27-1 WHY HAS THE LEGAL ISSUE OF RIGHTS OF WAY NOT BEEN ENTERED IN THE DELS? ACCORDING TO IDATED CODE, IDATED ROADS ARE FEXISTING POWER COORIDOR RIGHTS OF WAY. CONDEMNATION OF PRIVATE PROPERTY WOULD BE IMPINGED BY NON-USE OF NEARBY ROADS.

27-1 The issue of using existing road rights-of-way for locating the proposed transmission line is complex. Although Idaho statutes grant utilities the right to locate facilities on county roads (upon obtaining permission from the appropriate county commission; I.C. 62-701 and 62-705), no Federal statute or regulation requires BPA to use county roads rights-of-way in lieu of purchasing easements across private property. Whether BPA chooses to use available road rights-of-way depends on such factors as the lack of permanent property rights, the cost of relocating, and BPA's responsibilities under the National Environmental Policy Act (NEPA).

BPA has attempted to use existing rights-of-way as much as possible in locating this line, in order to reduce new access needs and take advantage of existing corridors. One objective of using existing rights-ofway was to reduce or avoid impacts wherever possible. In fact, of the amount of new route for this line, about two-thirds follows existing road or railroad right-of-way. However, it was not practical to locate the entire line in this manner because of both cost and impacts. In many places, using county road rights-of-way would require additional angle structures and additional length, both of which increase costs. Also, many road rights-of-way are intensively used, with either irrigation systems or houses and trees located adjacent to the road edge. Structures and guywires could seriously interfere with these land uses.

In an effort to balance resource impacts and to reduce costs, it was often more practical to locate the route elsewhere on private property. Even in such situations, however, every effort was made to avoid or reduce impacts. BPA's approach has been to follow other linear features such as field or property lines. Above all, we have attempted to work with the landowners to find the most suitable location for the transmission line.

U.S. ENVIRONMENTAL PROTECTION AGENCY

REGION X



1200 SIXTH AVENUE SEATTLE, WASHINGTON 98101

AUG 9 1985

ATTN OF: M/S 443

Anthony R. Morrell, Environmental Manager Bonneville Power Administration P.O. Box 3621-SJ Portland, Oregon 97208

Dear Mr. Morrell:

In accordance with our responsibilities under the National Environmental Policy Act and Section 309 of the Clean Air Act we have reviewed the Draft Environmental Impact Statement (DEIS) for the Fall River/Lower Valley Transmission System Reinforcement. The DEIS proposes to add capacity to electric transmission facilities between Idaho Falls and Ashton, Idaho.

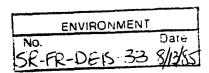
The DEIS is well organized and the environmental impacts of the proposal appear to have been fully discussed. We noted that the DEIS selected the environmentally preferred route for new transmission facilities as the proposed route. As long as the land use and construction mitigation proposed in the DEIS is implemented, the environmental impacts should be minimal.

Based on our review, we have rated this DEIS LO (Lack of Objections). We appreciate the opportunity to review this report. The contact person for this review is Wayne Elson in the EIS and Energy Review Section at (FTS) 399-1463.

Sincerely,

RalmTM and

Robert S. Burd Director, Water Division



No comments requiring response.



United States Department of the Interior

BUREAU OF INDIAN AFFAIRS FORT HALL AGENCY FORT HALL, IDAHO 83203

September 5, 1985

Anthony R. Morrell Environmental Manager Bonneville Power Administration P.O. Box 3621-SJ Portland, OR 97208

Dear Mr. Morrell:

We have reviewed the subject statements and offer the following comments:

34-1 General Comment

In the DEIS, the Shoshone-Bannock Tribes were not specifically identified as having treaty rights. The Tribe's have significant treaty rights under the 1868 Treaty of Fort Bridger, Article IV.

"... So long as any of the lands ceded, granted, and relinquished under this treaty remain part of the public domain, Indians belonging to the above-mentioned tribes, and living on the reduced reservation, shall have the right, without any charge therefor, to cut timber for their own use, but not for sale, and to pasture their livestock on said public lands, and to hunt thereon and to fish in the streams thereof."

After clearing the Right-of-Way, "Would the Tribe be notified when and where they could obtain firewood, this should also be addressed.

34-2 Thank you for allowing us to comment on the DEIS, and for the extension of time in which to comment. Also, we would like to recommend that maps of the treaty area be outlined and included within the report.

Superintendent

ENVIRONME	NT
No.	Date
SJ-FR-FEIS-34	9/9/85

34-1 The proposed route would not encounter significant amounts of timbered land within the public domain. Of the total 2.1 miles of Federal land crossed by the proposal, only about 3/5 of a mile would require tree removal. This area is in the floodplain on the south side of the Snake River crossing. Since this land is managed by BLM, BPA suggests the tribes consult with the BLM Idaho Falls District Office to make arrangements for use of cleared timber. BPA and BLM will then incorporate this arrangement in the Project Plan or Land Use Grant.

With regard to potential impacts on game species in the project area, BPA has determined that the Fall River project will have no significant impacts (refer to page 4-23 of the DEIS). Consequently, the proposed project will have no significant impacts on Indian use of public land for treaty hunting and fishing.

34-2 Concerning your request that maps of the treaty area be outlined and included within the report, please note that the Fall River/Lower Valley project is located entirely within the boundaries of the lands ceded by the 1868 treaty.



United States Department of the Interior

BUREAU OF RECLAMATION PACIFIC NORTHWEST REGION FEDERAL BUILDING & U.S. COURTHOUSE BOX 043 - 550 WEST FORT STREET BOISE, IDAHO 83724

IN REPLY REFER TO: PN 420 770.

AUG 28 1985

Ms. Angela Wykoff Project Engineer Facility Siting Section - ETJF Bonneville Power Administration P. O. Box 3621 Portland, Oregon 97208

Dear Ms. Wykoff:

Your letter of June 20, 1985, to our Minidoka Project office concerning the Goshen-Drummond 161-kV transmission line project has been referred to this office for comment. Option 1 appears to be the better alternative for all concerns and is Reclamation's preferred choice. We believe this option would have the least impact to the local land users and that it will not affect the existing spillway at the Teton Dam site, if it should ever be used again.

35-1 Right-of-way for the line located across Reclamation lands can be provided pursuant to the December 23, 1944, Memorandum of Understanding between Reclamation and BPA. A standard supplement to this agreement, together with appurtenant construction plans, should be submitted to this office for approval. Before approval can be given, it will be necessary for Reclamation to complete NEPA compliance and a cultural resource survey. If further assistance is needed from this office, please contact Nancy Vinsonhaler at 554-1158 (FTS).

Sincerely yours,

Hand Maner

ACTING Regional Director

cc: Project Superintendent, Burley, Idaho

erincendent, buriey, ida

35-1 The BIS has been changed to reflect the fact that the Bureau must grant approval for the right-of-way across Reclamation land. BPA will continue to work with the Bureau in developing the Record of Decision to insure that the conditions for NEPA compliance and cultural resource survey necessary for approval are satisfied. .

SUMMARY OF DEIS OPEN HOUSE COMMENTS

Three open houses were held in the study area in late July 1985 to answer questions, to receive comments, and to provide more information about the project and the draft environmental impact statement. About 30 people attended at Ririe, about 6 at Idaho Falls, and about 18 at Rexburg. Questions raised at those meetings were either answered on-the-spot or arrangements were made with landowners to continue to work out specific location or design problems on their land. Included below, for the reader's interest, is a summary of the concerns raised at the three meetings. Bracketed references are included to guide the reader to related responses and discussions. Only one phone call was received by the project hotline: the commenter observed that the route looked "very good." In the summary below, responses to general comment areas are italicized, in brackets, following comments.

Several commenters expressed strong positive support for the EIS's proposal of double-circuit construction for the first twenty miles of the line out of Goshen Substation (the line passes through about 3.5 miles of irrigated farmland, then through about 17 miles of dryland farming). The idea of building parallel instead (and thereby disrupting farming practices and taking somewhat more land out of production) was strongly rejected as unacceptable. [The proposal in the FEIS remains double-circuit for the first twenty miles out of Goshen Substation. BPA hopes to announce the decision for this proposal in the Record of Decision.]

Individual questions were raised on: disruption of planned irrigation circles in the future [see response to comment 11-5, p. 2-27]; safety of irrigation pipe handling around transmission lines [see DBIS, p. 4-40]; on safety considerations for water spray hitting the lines [as discussed at the open houses, this is not a problem because water spray is too dissipated to act as a conductor of electricity]; methods of compensation for easements as well as for crop or other damage incurred during construction [BPA compensates for easements based on appraisal of fair market value of the land rights needed. The appraisal forms the basis of BPA's negotiation for land rights. Once agreement with the landowner is reached, BPA prepares all documents necessary to establish its easement across the property, and pays any recording fees. Payment would then be authorized to the parties of interest. Landowners have the right to be paid before BPA begins construction on their property. Crop damage from BPA construction activities is assessed after all construction is over. Compensation is based on the prices of the crops affected at that time in that area. A one time payment for crop damage is made after construction is completed. If property damage occurs from BPA construction work on or off the right-of-way, BPA would either correct the problem or pay for the damage. Every BPA land acquisition legal document contains this promise. Such damage payment is figured in addition to compensation for the land rights already acquired.]; and on concerns for possible impacts on property value [see DBIS, p. 4-35].

Some commenters reiterated suggestions for other route locations, such as over toward Ririe Reservoir, and crossing the Snake River near Heise to avoid farmland [see response to comment 11-11, p. 2-29]; or passing through the Swan Valley to Targhee [see DEIS, p. 2-25]. Several commenters expressed satisfaction with the route north of the Snake River, particularly where the location successfully avoided conflicts with irrigation systems. Positive comments were made on the cooperative efforts the BPA team had made with landowners. Some commenters also felt that the route should have been located along the Teton River, instead of crossing farmland. Some felt that due consideration had not been given to wildlife habitat or to visual effects from the proposed route north of the Snake River. One was concerned that maintenance roads would increase access into the area [see DEIS, pp. 2-18, 19; p. 4-26; p. 4-37]. Another asked about potential for other utilities underbuilding the BPA line in the future. [Underbuilds have to be planned for in the initial design of the line, and therefore, could be possible only in the specific areas that are being considered now.]

Several landowners had specific questions/concerns about where the line would be on their property, what types of effects it might have (e.g., disruption of planned irrigation circles) and to what extent could be located or designed to meet their needs. [BPA is continuing to work with affected landowners to resolve any problems and find the most acceptable designs and locations on their property.]

One commenter questioned the need for the project [see DEIS, pp. 1-1, 4].