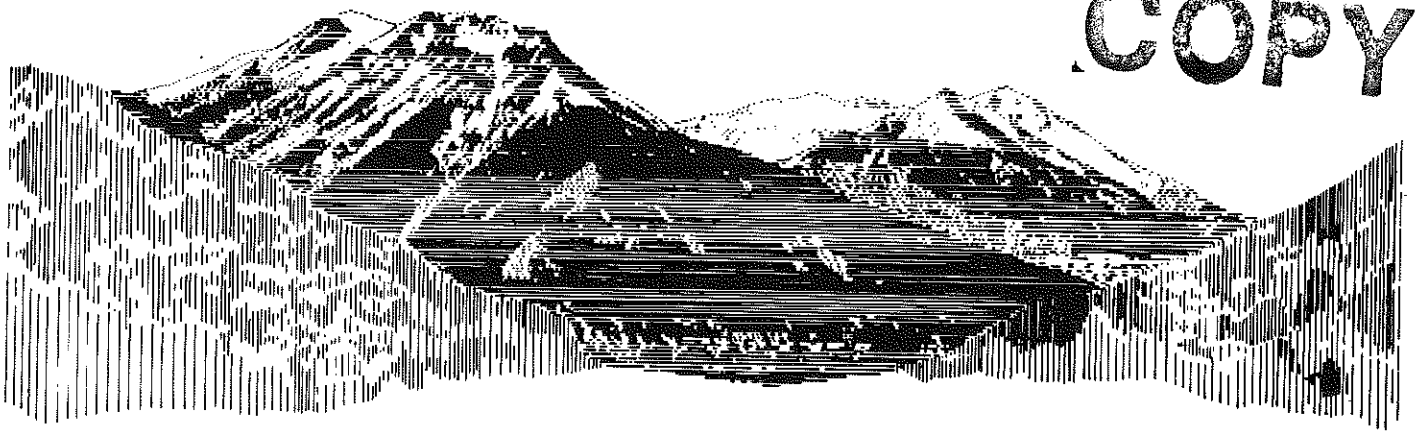
RIFLE TO SAN JUAN 345 - KV TRANSMISSION LINE AND ASSOCIATED FACILITIES



FINAL ENVIRONMENTAL IMPACT STATEMENT

LEAD AGENCY-RURAL ELECTRIFICATION ADMINISTRATION

COOPERATING AGENCIES:

FOREST SERVICE

BUREAU OF LAND MANAGEMENT

WESTERN AREA POWER ADMINISTRATION

MARCH 1984

USDA-REA-WAE-EIS (ADM) 84-1-F

Rifle-San Juan 345 kV Transmission Line and Associated Facilities

Final Environmental Impact Statement

Lead Agency:

U.S. Department of Agriculture - Rural Electrification Administration

Cooperating Agencies:

U.S. Department of Agriculture - Forest Service
U.S. Department of Energy - Western Area Power Administration
U.S. Department of the Interior - Bureau of Land Management

Colorado-Ute Electric Association, Inc., Public Service Company of Colorado, and the Western Area Power Administration plan to construct and operate approximately 451 km (283 miles) of single-circuit 345 kV transmission line between Rifle, Colorado, and the San Juan Generating Station near Farmington, New Mexico. Associated facilities would include the expansion of existing substations at Grand Junction, Montrose and Durango, Colorado; construction of a new substation (Long Hollow) near Durango; addition of transmission line termination facilities at the Rifle Substation and the San Juan Generating Station Switchyard; and the construction of approximately 11 km (7 miles) of 115 kV transmission line on double-circuit towers from the proposed Long Hollow Substation to the existing Durango Substation. The proposed project would traverse Garfield, Mesa, Delta, Montrose, Ouray, San Miguel, Dolores, Montezuma and La Plata Counties, Colorado, and San Juan County, New Mexico.

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The decision on this proposed action will not be made before 30 days after issuance of this Final Environmental Impact Statement. Comments will be accepted until the end of the 30-day time period.

The Supplemental Draft Environmental Impact Statement and this Final Environmental Impact Statement describe the expected environmental effects of the construction and operation of the Rifle to San Juan 345 kV transmission line and related facilities. This Final Environmental Impact Statement includes all comments received from Federal, state and local agencies and from the public. It is my judgment that the proposed action by the Rural Electrification Administration of providing financing assistance to Colorado-Ute Electric Association, Inc., of Montrose, Colorado, for construction of this project would be consistent with the policies set forth in the National Environmental Policy Act.

Harold V. Hunter

Administrator
Rural Electrification Administration

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List of Abbreviations and Acronyms

ac	alternating current
ACHP	Advisory Council on Historic Preservation
ACSR	aluminum conductor, steel reinforced
Agencies	Cooperating Agencies: REA, FS, BLM and Western
BLM	Bureau of Land Management
BOR	Bureau of Reclamation
CDOW	Colorado Division of Wildlife
CEQ	Council on Environmental Quality
Certificate	Certificate of Public Convenience and Necessity
CFR	Code of Federal Regulations
cm	centimeter
COE	Army Corps of Engineers
Colorado-Ute	Colorado-Ute Electric Association, Inc.
CRSP	Colorado River Storage Project
dbh	diameter breast high
DEIS	Draft Environmental Impact Statement
DOE	Department of Energy
EHV	Extra High Voltage
EPRI	Electric Power Research Institute
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FCC	Federal Communication Commission
FEIS	Final Environmental Impact Statement
FLPMA	Federal Land Policy and Managment Act
FS	Forest Service
gwh	gigawatt-hours (one million kilowatt-hours)
ha	hectares
Hz	hertz
ha/km	hectares per kilometer
IREA	Intermountain Rural Electric Association
km	kilometer
kV	kilovolt (one thousand volts)
kV/m	kilovolts per meter
kwh	kilowatt-hours
m	meter
MAPP	Mid-Continent Area Power Pool
mA	milliampere
mA/kV/m	milliamperes per kilovolt per meter
MW	megawatts (one million watts)
MHz	megahertz
NEPA	National Environmental Policy Act
NESC	National Electric Safety Code
NPS	National Park Service
NRHP	National Register of Historic Places
participants	Colorado-Ute, Western and PSC
Plains G & T	Plains Electric Generation Transmission Cooperative
Project	Rifle-San Juan 345 kV Transmission Line
PSC	Public Service Company of Colorado
PSNM	Public Service Company of New Mexico
PUC	Colorado Public Utilities Commission
REA	Rural Electrification Administration
ROW, ROWs	Right-of-Way, Rights-of-Way
SCS	Soil Conservation Service

List of Abbreviations and Acronyms Cont.

SDEIS	Supplemental Draft Environmental Impact Statement
SHPO	State Historic Preservation Officer
USDA	United States Department of Agriculture
USDI	United States Department of the Interior
USFWS	United States Fish and Wildlife Serivce
Western	Western Area Power Administration

1.0 Summary

1.1 Introduction

In 1979, Colorado-Ute Electric Association, Inc. (Colorado-Ute), proposed to construct and operate a 345 kilovolt (kV) transmission line project from Rifle, Colorado, to the San Juan Generating Station near Farmington, New Mexico. The Rural Electrification Administration (REA) contacted other governmental agencies and interested organizations to obtain their opinion and guidance in fields in which they may have special knowledge or authority. The public was formally requested to provide input at scheduled public meetings held in Rifle, Grand Junction, Delta, Montrose, Norwood, Dove Creek, Cortez and Durango, Colorado, and in Farmington, New Mexico.

A Draft Environmental Impact Statement (DEIS) was issued in July 1981, evaluating a double-circuit 345 kV transmission line and associated facilities from Rifle to the San Juan Generating Station. The double-circuit project as described in the DEIS was jointly proposed by Colorado-Ute and the Western Area Power Administration (Western). The preferred route extended from Rifle to the North Fork Valley, to Delta, to Montrose, to Norwood, to Lost Canyon, to Durango and then to the San Juan Generating Station and Western's Shiprock Substation. Alternatives to the proposed project and alternative routes were also identified and evaluated.

In August 1981, REA held three public meetings to obtain comments on the DEIS. These meetings were held in Montrose and Durango, Colorado, and in Farmington, New Mexico. Written comments were also received from Federal, state and local agencies and interested individuals. In the meantime, the Colorado Public Utilities Commission (PUC) denied approval of a Certificate of Public Convenience and Necessity (Certificate) for the proposed project. Consequently, REA decided not to issue a Final Environmental Impact Statement (FEIS) on the proposed project.

In issuing its denial of a Certificate, the PUC suggested that Colorado-Ute and Western revise their plan and include Public Service Company of Colorado (PSC) as a participant. Colorado-Ute then developed a coordinated transmission system plan with Western and PSC. Project modifications in the coordinated proposal included PUC staff recommendations and input from Federal, state and local agencies and the public. The modified proposal, consisting of a single-circuit 345 kV transmission line and associated facilities from Rifle, Colorado, to the San Juan Generating Station near Farmington, New Mexico.

After studying the modified project proposal, REA, in conjunction with the cooperating agencies - Western, Bureau of Land Management (BLM), and Forest Service (FS), determined that the modifications constituted a substantial change from the originally proposed project. As a result, under the Council of Environmental Quality (CEQ) Regulations, 40 Code of Federal Regulations (CFR) Parts 1500-1508, the lead and the cooperating agencies decided that a Supplemental Draft Environmental Impact Statement (SDEIS) should be prepared. The purpose of the SDEIS was to evaluate the

revised project, alternative corridors and other reasonable options, and allow adequate opportunity for public review of and comment on the revised project. As noted in the Federal Register - Notice of Intent to Prepare a Supplemental Draft Environmental Impact Statement, dated March 18, 1983, specific comments received on the DEIS are not directly responded to in this FEIS. However, all information and comments received on the original DEIS that are applicable to this new proposal were considered and incorporated in the preparation of the SDEIS. It was REA's intention that the SDEIS be reviewed essentially on its own as a single integrated document. The SDEIS contains all maps and basic project descriptions necessary for review of all reasonable alternatives under consideration. Material from the applicant's Environmental Analysis was also incorporated into the SDEIS. REA, FS, BLM and Western made an independent review of and accepted the environmental information used in the preparation of the SDEIS.

The PUC issued a Certificate for the revised project. The nine involved Colorado Counties either have already issued required permits or are/will be reviewing applications for the necessary permits. The public has had an opportunity to comment on the revised project at hearings before the PUC and at several meetings held in Garfield, Mesa, Delta and Montezuma Counties. The public was also invited to submit additional comments to REA during public information meetings hosted by the applicant in Rifle, DeBeque, Palisade, Durango, and Montrose, Colorado, in March 1983, and in a Federal Register Notice issued by REA on March 18, 1983. The public had further opportunity to comment on the revised project and the SDEIS at public comment meetings held in Grand Junction, Montrose, Durango and Cortez, Colorado, from July 25 through July 28, 1983. In addition, REA received 33 comment letters on the SDEIS. These letters are presented in Appendix A of this FEIS.

1.2 Scope of the Project

The three participants - Colorado-Ute, Western, and PSC - propose to design, construct, operate, and maintain approximately 451 kilometers (km) (283 miles) of single-circuit 345 kV transmission line from Colorado-Ute's Rifle Substation in Garfield County, Colorado, to the San Juan Generating Station in San Juan County, New Mexico. Associated facilities included in the proposal involve expansion of existing substations at Grand Junction, Montrose, and Durango; construction of a new substation (Long Hollow) near Durango; addition of transmission line termination facilities at Colorado-Ute's Rifle Substation and at the San Juan Generating Station Switchyard; and the construction of approximately 11 km (7 miles) of 115 kV transmission line on double-circuit towers from the proposed Long Hollow Substation to the existing Durango Substation.

The cost, maintenance and capacity of the proposed line would be shared among the three participants in the project. For the line section between Rifle and Grand Junction, the line would be shared as follows: Colorado-Ute--37.5 percent, Western--37.5 percent, and PSC--25 percent. For the line section between Grand Junction and the San Juan Generating Station, the line would be shared as follows: Colorado-Ute--50 percent, and Western--50 percent.

The natural and socioeconomic resources within the study area have been investigated and detailed information was presented in the SDEIS. Analyses in the SDEIS included soil characteristics, vegetation, wildlife, land use, cultural resources, socioeconomic resources, visual resources and special interest areas. Additions to certain resource information contained in the SDEIS are presented in Section 2.0 of this FEIS.

Several corridors and line segments between Rifle and San Juan have been identified and evaluated in the environmental process. As a result of these evaluations, the participants chose the corridor in Figure 1-1 as their recommended corridor. The participants believe this corridor is the most overall acceptable alternative for construction and operation of a 345 kV line between the Rifle Substation and the San Juan Generating Station to meet their transmission system needs. The location of the recommended corridor presented in the SDEIS reflected input, to the extent possible, from Federal land managers, county officials, and the public. The preferred corridor presented in the SDEIS has been modified slightly as a result of further review by the cooperating agencies and county permitting activities. The modified preferred corridor now consists of alternative segments 3a, 3c, 3h, part of 3f and 3i, 3g, 5a, 5b, 12, 14a, 14d, 14c, 17a, 19a, 21, 29a, 29b, 30a, 30e, 32a, 32c, 33, 35a, 35c, 36b and 39 (see Figures 3-9, 3-11 and 3-13 of the SDEIS). The preferred corridor was chosen to avoid known cultural resources and to minimize the impacts on important and prime farmlands, floodplains, wetlands, mineral resources, other special features as discussed in the SDEIS and to avoid land use conflicts in certain counties. In addition, existing rights-of-way (ROWs) were paralleled where practicable to further minimize the environmental impact of the project.

The proposed 345 kV transmission line would begin at Colorado-Ute's existing Rifle Substation and extend approximately 90 km (56 miles) southwest to the Grand Junction Substation. The line would then extend in a southerly direction approximately 83 km (52 miles) to the Montrose Substation. This segment of the line would parallel an existing Colorado-Ute 115 kV line for much of the distance. The 345 kV line would then extend southerly approximately 67 km (42 miles) to a proposed future substation site near Norwood, Colorado. A portion of this line section would parallel an existing Colorado-Ute 115 kV line and an existing Western 230 kV line. The line would then continue southerly approximately 78 km (49 miles) paralleling Western's existing 230 kV transmission line to approximately 32 km (20 miles) south of the San Miguel/Dolores County line where the line would depart from the 230 kV line and extend 36 km (23 miles) in a southeast direction to the Montezuma/La Plata County line. From the Montezuma/La Plata County line, the line would extend southeast approximately 27 km (17 miles) to the proposed Long Hollow Substation site southwest of Durango, Colorado. The line would then extend in a southwesterly direction approximately 70 km (44 miles) to the existing switchyard at the San Juan Generating Station near Farmington, New Mexico.

FIGURE 1-1

See Map behind Appendix D

The proposal includes construction of a single-circuit 115 kV line placed on double-circuit towers from the proposed Long Hollow Substation near Hesperus, Colorado, 11 km (7 miles) east to Colorado-Ute's existing Durango Substation.

The basic transmission line structures for the 345 kV line would be nonspecular steel lattice towers (see Figures 3-1 and 3-2 of the SDEIS) and would be approximately 35 meters (m) (115 feet) in height. The tower height would vary with terrain. The towers would have a base dimension of approximately 84 square meters (900 square feet) and would be anchored by four concrete pier foundations. Typically, there would be 2 to 4 structures per km (3 to 6 structures per mile) with an average span of 366 m (1200 feet). The conductor would consist of a two conductor bundle of nonspecular aluminum cable reinforced with steel. The diameter of each subconductor would be about 3-4 centimeters (cm) (1.2-1.5 inches). Two overhead shield wires would be placed on top of the tower structure to provide protection from lightning. Insulators approximately 24 cm (10 inches) in diameter would be used in assemblies to separate the conductors from the support structures.

The proposed 115 kV line would consist of single steel pole double-circuit structures (see Figure 3-3 of the SDEIS) approximately 27 m (90 feet) in height. Alternate structure types would be considered during the permitting process. Tower height would vary with terrain. Nonspecular conductor, approximately 3 cm (1 inch) in diameter and consisting of aluminum strands reinforced with steel would be used for each of the six phases.

The right-of-way (ROW) width for the 345 kV line would be a minimum of 46 m (150 feet). Actual ROW width may vary depending on actual location, design span length, design conductor sag, and other governmental requirements. Standard transmission line vehicular construction methods would be used to construct both lines unless otherwise indicated. Holes for structure foundations would be augered or dug in soil and drilled or blasted in rock. Conductors on both lines would be installed with standard tension stringing equipment and practices.

Expansion of the existing substations at Grand Junction, Montrose and Durango, Colorado would require about 8 hectares (ha) (20 acres) of land clearing. The new Long Hollow Substation would require about 4 ha (10 acres) of land clearing. Additions to the existing substations would include installation of circuit breakers, reactors, and transformers. Equipment at the new substation would include circuit breakers, switches, transformers, and a control house (see Appendix F of the SDEIS). All new facilities would be of a low profile design and be entirely enclosed by chain link fences with locked gates.

Construction is tentatively scheduled to begin in 1984 and be completed in 1986.

1.3 Federal Actions

A number of Government agencies may require licensing actions or have to issue permit approvals during the planning and construction of the proposed project.

The REA action would be the possible approval of financing assistance to Colorado-Ute for its share of construction costs of the proposed transmission facilities. REA has determined that such an approval would constitute a major Federal action significantly affecting the quality of the human environment. REA, therefore, has required the preparation of an environmental impact statement (EIS). The SDEIS and this FEIS have been prepared by REA pursuant to the requirements of Section 102(2)(c) of the National Environmental Policy Act (NEPA) of 1969, as amended.

REA is acting as the lead agency for the preparation of the EIS. The alternatives to the project were evaluated in the environmental process to assure that reasonable safeguards would be included in any project plans to protect the welfare of the public and to assure that all practicable environmental protection concerns would be incorporated into the project. The environmental protection concerns will avoid avoidable adverse effects and mitigate, to a minimum, unavoidable adverse effects. REA's environmental review procedures for consideration of a loan application require Colorado-Ute to comply with all pertinent environmental requirements imposed by Federal, state, and local authorities. Federal considerations regarding preparation of an EIS include, but are not limited to, the National Historic Preservation Act; Executive Order 11593: Protection and Enhancement of the Cultural Environment; Federal Clean Air Act; Clean Water Act; the Endangered Species Act of 1973 as amended; Farmland Protection Policy Act; the Fish and Wildlife Coordination Act; the Wild and Scenic Rivers Act; Executive Order 11990: Protection of Wetlands; Executive Order 11988: Floodplain Management; and the U.S. Department of Agriculture Department Regulation 9500-3 of March 22, 1983.

Other agency actions related to the proposed project include:

- BLM must decide whether to approve or deny issuance of a Grant of ROW to participants for the portions of the proposed project that would cross lands administered by BLM. BLM is also a cooperating agency in the preparation of the EIS for this project.

- FS must decide whether to approve or deny issuance of an Authorizing Document to participants for the portions of the proposed project that would cross National Forestlands. The FS is also a cooperating agency.

- Western, as a participant, would fund its share of the project. Since Western is a Federal agency, Western has chosen to also be a cooperating agency to fulfill its NEPA requirements.

- The Bureau of Indian Affairs with the consent of respective tribal councils must decide whether to issue easements to participants for portions of the proposed project that would cross Indian lands.

- The Federal Aviation Administration (FAA) must review and decide to approve or deny a Notice of Proposed Construction or Alteration (Form 7460-1) submitted by participants for portions of the proposed project located near airports.

- The U.S. Fish and Wildlife Service (USFWS) reviewed the project proposal and in accordance with Section 7 of the Endangered Species Act indicated that several threatened and/or endangered species may be present in the area. A biological assessment concerning these species and the areas where construction of the project is proposed was prepared and submitted to USFWS. The USFWS reviewed the assessment and subsequently advised REA that the proposed project is not likely to affect any species currently listed as threatened or endangered by the USFWS (see Appendix C).

- If the proposed project is authorized, a cultural resource survey must be conducted on the transmission line ROWs and substation sites and access roads. New Mexico and Colorado State Historic Preservation Officers (SHPO) and responsible Federal land managers would be consulted for eligibility determinations and determinations of effect pursuant to 36 CFR 800.

- The Corps of Engineers (COE) would be consulted to ensure compliance with the requirements of Section 404 of the Clean Water Act.

1.4 State and Local Actions

The Colorado Department of Highways must make a decision to issue or deny the participants a utility license for each location where the proposed transmission line crosses a State or Federal highway.

The Colorado State Board of Land Commissioners must decide to grant or deny a perpetual easement for all portions of the proposed project which would be constructed on any Colorado state land under its jurisdiction.

The Colorado Division of Wildlife (CDOW) must decide to grant or deny an easement for all portions of the proposed project which would cross any land under its jurisdiction.

The Colorado Division of Parks and Outdoor Recreation must issue an easement for all portions of the proposed project which would be constructed on land that it administers.

A Certificate of Public Convenience and Necessity for the proposed single-circuit 345 kV and associated facilities was granted by the PUC on September 20, 1983.

The New Mexico Land Office must issue a perpetual ROW easement for any portion of the proposed project which is constructed on the State lands that it administers.

The counties in Colorado have been granted land use planning authority by the State. Although the procedures vary among the counties, the county pianning commission generally recommends a course of action to the Board of County Commissioners. In turn, the Board of County Commissioners generally issues a decision on the location of a proposed project. To date, Garfield, Mesa, Delta, Montrose, Ouray and Dolores Counties have given approval to the project routing.

Colorado-Ute applied to San Miguel County for a special use permit for the 345 kV transmission line proposal in 1980. A permit was issued for the project, but it contained stipulations that were unacceptable to Colorado-Ute. The permit conditions were appealed by Colorado-Ute and no court decision has been rendered (see Section 3.3.10 of this FEIS for additional discussion). Colorado-Ute is continuing discussions with San Miguel County officials in an attempt to resolve the county problems in permitting the line.

Colorado-Ute has submitted an application for a special use permit in Montezuma County for the change in the project routing in this county.

Colorado-Ute applied to La Plata County for a special use permit in 1980. As a result of comments on the original route proposed in La Plata County, Colorado-Ute has been negotiating with the Southern Ute Indian Tribe for an alternative route location. Colorado-Ute will submit an application to La Plata County for a special use permit for the revised project when the line route is more clearly defined.

In San Juan County, New Mexico, no permitting requirements exist which apply to facilities like the Rifle-San Juan transmission line project.

1.5 Summary of the Alternatives

1.5.1 Federal Action Alternatives

Alternatives available to REA in this Federal action include: 1) approval of financing assistance for the proposed project, 2) approval of financing assistance for the proposed project with conditions, and 3) disapproval of financing assistance for the proposed project. Likewise, the FS and BLM alternatives are to approve or deny crossing Federal lands; and if approval is provided, FS and BLM must determine the location of the corridor on these Federal lands. A BLM Grant of ROW or a FS Authorizing Document would be issued with various stipulations for construction, operation and maintenance of the facilities on the respective lands.

1.5.2 Project Alternatives

In planning the proposed project, Colorado-Ute and its consultant contacted numerous Federal, state and local agencies and the public to identify areas of concern and possible alternative routes. A wide range of alternatives were investigated and based on an evaluation of these alternatives, Colorado-Ute, Western and PSC concluded that the proposed 345 kV transmission line (and associated facilities) is the best alternative for meeting their combined present and future needs (see Section 2.0 of the SDEIS). REA has reviewed and evaluated the

alternatives and concurs with the participants' conclusions. This project would meet Colorado-Ute's, Western's and PSC's system requirements (Section 2.0 of the SDEIS) and would comply with applicable laws and regulations for protecting the quality of the environment. Reasonable alternatives were presented in Section 3.0 of the SDEIS.

1.6 Major Concerns and Issues

Through the NEPA process, REA has identified environmental consequences of the proposed action and reasonable alternatives. Appropriate mitigation measures have been developed that would avoid, minimize, or eliminate adverse impacts from the proposed facilities. Input from Federal, state and local governments and the affected public has been considered in the project evaluation and the determination of mitigation measures to minimize impacts.

The proposed project would require approximately 2086 ha (5155 acres) of land with the 345 kV line ROW requiring 2025 ha (5000 acres), the 115 kV line ROW requiring 50 ha (125 acres) and the substations requiring 12 ha (30 acres). The total amount of land occupied for the life of the project would be approximately 10 ha (24 acres) for 345 kV transmission line structures and 12 ha (30 acres) for substations. One kilometer (0.6 mile) of access road per kilometer (0.6 mile) of transmission line could be required to construct the project, of which 320 km (200 miles) may be located off the transmission line ROW. Assuming a road 4 m (14 feet) wide, about 0.5 ha/km (2.0 acres/mile) would be disturbed for access roads. Some of these roads would occupy the land for the life of the project.

A small amount of agricultural land would be removed from production. Transmission towers along the preferred corridor would occupy less than 0.2 ha (0.5 acres) of prime farmland, 0.8 ha (2 acres) of irrigated cropland, and 0.4 ha (1 acre) of nonirrigated cropland. The proposal would remove approximately 364 ha (900 acres) of forestlands with potential to produce commercial timber.

Socioeconomic impacts might include effects from construction-worker presence, local expenditures, and fiscal effects that would result from the construction of the proposed facilities. Temporary accommodations for construction workers could be met with existing facilities in each community and present community services would be adequate. Potential indirect-tax revenues from the proposal would be minimal, but would be a beneficial impact of the proposed project. Increases in property-tax revenues during operation would be a significant long-term beneficial impact. Personal income in the region for the duration of construction would rise as a result of project expenditures, which would be a small beneficial impact for the region.

The scenic quality of the area could be reduced wherever transmission towers or substation facilities are visible to an observer. Visual intrusion of the transmission line because of structure contrast (no similar existing structures), landform contrast (new or upgraded access roads and tower-pad construction) and vegetation contrast (vegetation

removal), could continue throughout the life of the proposed project. The greatest visual impacts would occur where the line is placed in areas of natural scenic quality, in areas in close proximity to residences, travel routes, recreational use areas or in other sensitive viewing locations.

Destruction of cultural resources, which are nonrenewable, could be permanent impact. The preferred form of impact mitigation for cultural resources is avoidance. This procedure is especially suited for construction of a transmission line. Coordination between the archaeological data collection, the planning of construction and maintenance roads, and the location of tower structures would occur. If avoidance is not possible and a site is listed or determined to be eligible for listing on the National Register of Historic Places (NRHP), a mitigation plan, as provided by 36 CFR 800, would be developed and executed. No action by the participants will be permitted that could result in an adverse effect on such a cultural resource or that would foreclose alternatives that could avoid or mitigate such effects unless the plan is acceptable to the responsible land manager, to the respective SHPO and to the Advisory Council on Historic Preservation (ACHP).

A thorough literature search to determine known cultural resources has been completed (Nickens 1981 and 1982) and an "on-the-ground" survey of the ROWs, access roads, and substation sites by a qualified archaeologist would be performed, and site-specific mitigative measures would be developed following the discovery of any sites eligible for listing in the NRHP.

No significant potential impact to air quality would occur. Radio and television reception beyond 90 m (300 feet) of the centerline is not expected to be impaired. The 345 kV line should not pose a biological or health hazard. No published scientific studies to date have shown adverse effects on humans from electrostatic and electromagnetic fields produced by 345 kV lines.

1.7 Agency Preferred Alternative

REA's review and evaluation of the participants' transmission system proposal and alternatives concludes that the environmentally preferred alternative is construction of a single-circuit 345 kV transmission line and associated facilities from Rifle, Colorado, to the San Juan Generating Station near Farmington, New Mexico. The proposal is a desirable and necessary project that can be constructed without adverse environmental impacts.

Alternatives to construction and alternate corridors were given consideration throughout the planning process including the EIS process. The Agency preferred corridor is shown in Figure 1-1 of the FEIS. It is similar to the preferred corridor as described in Section 1.0 in the SDEIS; however, the preferred corridor has been modified or changed in two sections. The corridor between Rifle and Grand Junction, Colorado, has been modified as a result of the Garfield and Mesa Counties permit

processes (refer to Section 2.2.1 and Figure 2-1 of the FEIS). Between the Norwood Substation site and the Montezuma/La Plata County line, the preferred corridor is Alternative C (see Section 2.2.1 and Figure 2-2 of the FEIS). Alternative B was identified as the preferred corridor for this section in the SDEIS.

The environmentally preferred corridor between Rifle and Grand Junction, Colorado, is Alternative H as modified by Garfield and Mesa Counties. The corridor is preferred by REA, FS, BLM and Western. The environmentally preferred corridor between Grand Junction and Montrose, Colorado, is SDEIS Alternative B. This corridor is preferred by REA, BLM and Western; the FS has no preference. The preferred corridor between Montrose and Norwood Substation site is SDEIS Alternative A. This corridor is preferred by REA, FS, BLM and Western. The environmentally preferred corridor between the Norwood Substation site and the Montezuma/La Plata county line is SDEIS Alternative C. This corridor is perferred by REA, FS, BLM and Western. The environmentally preferred corridor between the Montezuma/La Plata county line and Long Hollow, Colorado, is SDEIS Alternative C. This corridor is preferred by REA, FS, BLM and Western. The environmentally preferred corridor between Long Hollow and the San Juan Generating Station is SDEIS Alternative B. This corridor is perferred by REA, BLM, and Western; the FS has no preference.

2.0 Errata, Changes, Additional Information, Mitigation Plan

The SDEIS evaluated the proposed project, alternative corridors and other reasonable options. The SDEIS was prepared to function as a single integrated document that allowed for a comprehensive review of all reasonable alternatives under consideration. Notice of the SDEIS availability was published in the Federal Register on June 28, 1983, and copies of the SDEIS were sent to or otherwise made available to Federal, state and local government agencies and the public for review and comment. It is intended that the SDEIS remain the comprehensive source document for this project. This section presents errata, changes to information presented in the SDEIS, and additional information needed to clarify points made in the SDEIS. The presentations in this section are the result of careful review and evaluation of the comments received on the SDEIS. This section also includes an updated (as a result of comments) mitigation plan that was presented in Section 5.15 of the SDEIS.

2.1 Errata in SDEIS

- P. 1-4, sixth line from top of page - change sentence to read "The line would continue southerly approximately 91 km (57 mi) paralleling Western's 230 kV transmission line approximately 48 km (30 miles) south of the San Miguel/Dolores County line then extending to the Montezuma/La Plata County line."

- Figure 3-3. The title block should read - Long Hollow - Durango 115 kV Line Double-Circuit Structure.

- P. 3-10, Section 3.2.3, 1st paragraph. Delete the sentence, "Up to 91 m (300 feet) would be acquired where private landowners are willing to grant additional easement rights sufficient to allow construction of a possible future second 345 kV line." The PUC decision that authorized the project limits allowed expenditures for future lines. Colorado-Ute does not intend to purchase additional ROW unless exceptional circumstances, such as governmental requirements or special physical characteristics of the land, indicate or require it.

- P. 5-28, Section 5.17, 2nd paragraph. Delete the sentence, "The short-term is defined as 35 years (the estimated life of the project)." To clarify this point, the depreciation period for the proposed transmission line is approximately 35 years; however, the useful life of the line is expected to be considerably longer.

- P. 3-69, last paragraph, second line - change reference to Table 3-16 to Table 3-12.

- Table 5-4. San Juan-Shiprock.
  Western's Shiprock to Four Corners 230 kV line was recently rebuilt for 345 kV operation. Colorado-Ute is also requesting some financing assistance for payment for a portion of the capacity of this line.

Western prepared an Environmental Assessment and issued a Finding of No Significant Impact for this 345 kV uprate on August 13, 1982.

2.2 Changes to Information Presented in the SDEIS

2.2.1 Corridor Modifications

A change to the preferred corridor identified in the SDEIS occurred in Garfield and Mesa Counties (Figures 1-1 and 2-1). The SDEIS was used by these Counties as the basic resource document in their proceedings. These Counties also sought public input on land use issues before making a decision on the preferred corridor. REA finds these corridor modifications acceptable and adopts them as its preferred corridor in this FEIS.

An expansion of Corridor 14d occurred in Montrose County (see Figures 1-1 and 2-1a). The corridor for the line in this area was evaluated by BLM and Colorado-Ute. BLM determined that fewer impacts would occur on BLM lands if the line were routed within the expanded protion of this corridor. REA finds this corridor modification acceptable and adopts it as part of the preferred corridor in this area.

Another change to the preferred corridor identified in the SDEIS occurred in the San Juan National Forest northeast of Cortez, Colorado (Figures 1-1 and 2-2) in the section between the Norwood Substation site and the Montezuma/La Plata County line. The FS prepared an Environmental Assessment on alternative corridors in this section of the forest. FS determined that the preferred corridor for this section should follow Alternative C (Segments 29a, 29b, 30a, 29c, and 29d) as described in the SDEIS rather than Alternative B (Segments 29a, 29b, 30b, 30d and 30e - SDEIS preferred). REA accepts the FS Environmental Assessment on this section of the line and adopts Alternative C as the Agencies' preferred corridor in this FEIS.

2.2.2 Changes in Land Use Resource Data Item

Commercial forest information for state and private lands in the study area has been obtained from the Colorado State Forest Service office at Colorado State University in Fort Collins, Colorado. The information is included in four booklets entitled "Private and State Timber Resources" for Archuleta and La Plata Counties (T.R.I. Release No. 9, 1967); Montrose, Ouray and San Miguel Counties (T.R.I. Release No. 11, 1968); Montezuma and Dolores Counties (T.R.I. Release No. 10, 1968); and Mesa, Garfield, and Delta Counties (T.R.I. Release No. 17, 1973). No such inventory has been done for San Juan County in New Mexico. Included in these booklets are small-scale forest-type maps of each of the counties. Based on these maps, potential commercial forest on private/state land has been identified within corridors passing through Garfield, Montrose, Ouray, Dolores, San Miguel, Montezuma, and La Plata Counties. The mileages of commercial forest for each alternative were totaled and these values were added to the "Land Use" values displayed in the SDEIS comparison tables. Table 2-1 is a summary of the new land use mileages and scores for those alternatives affected by incorporating the new commercial forest information. It should be noted that the values

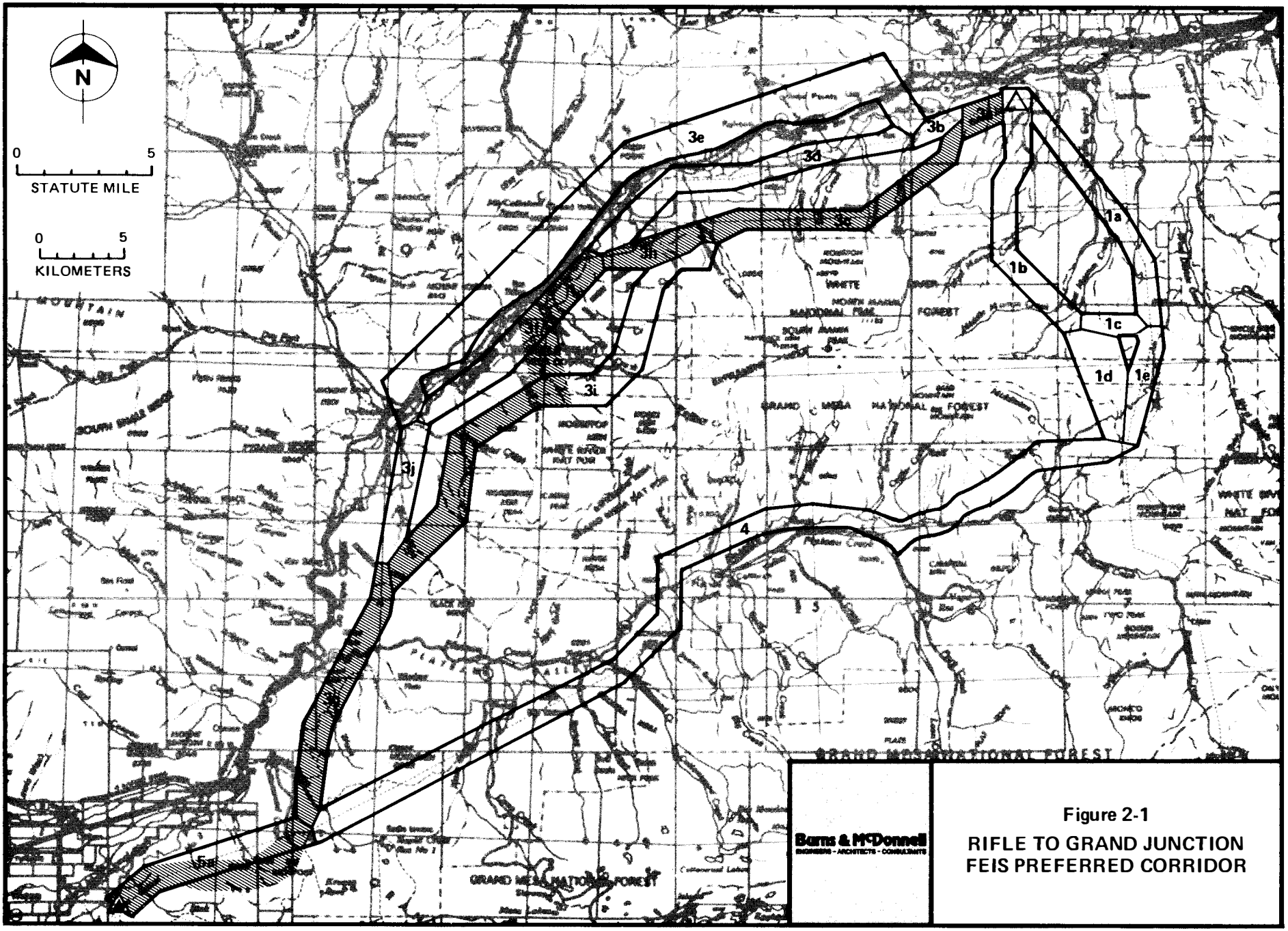


Figure 2-1

RIFLE TO GRAND JUNCTION
FEIS PREFERRED CORRIDOR

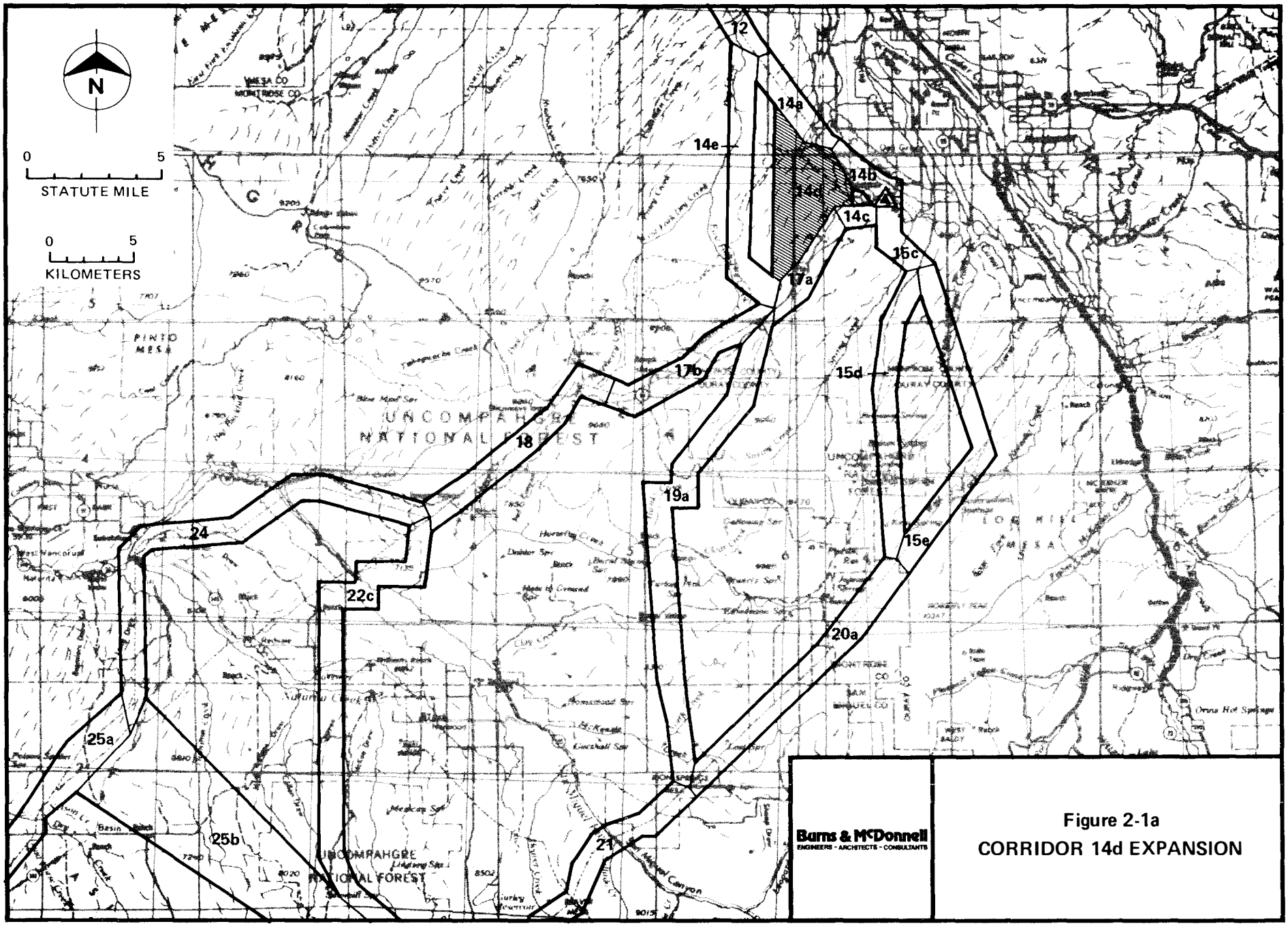


Figure 2-1a
CORRIDOR 14d EXPANSION

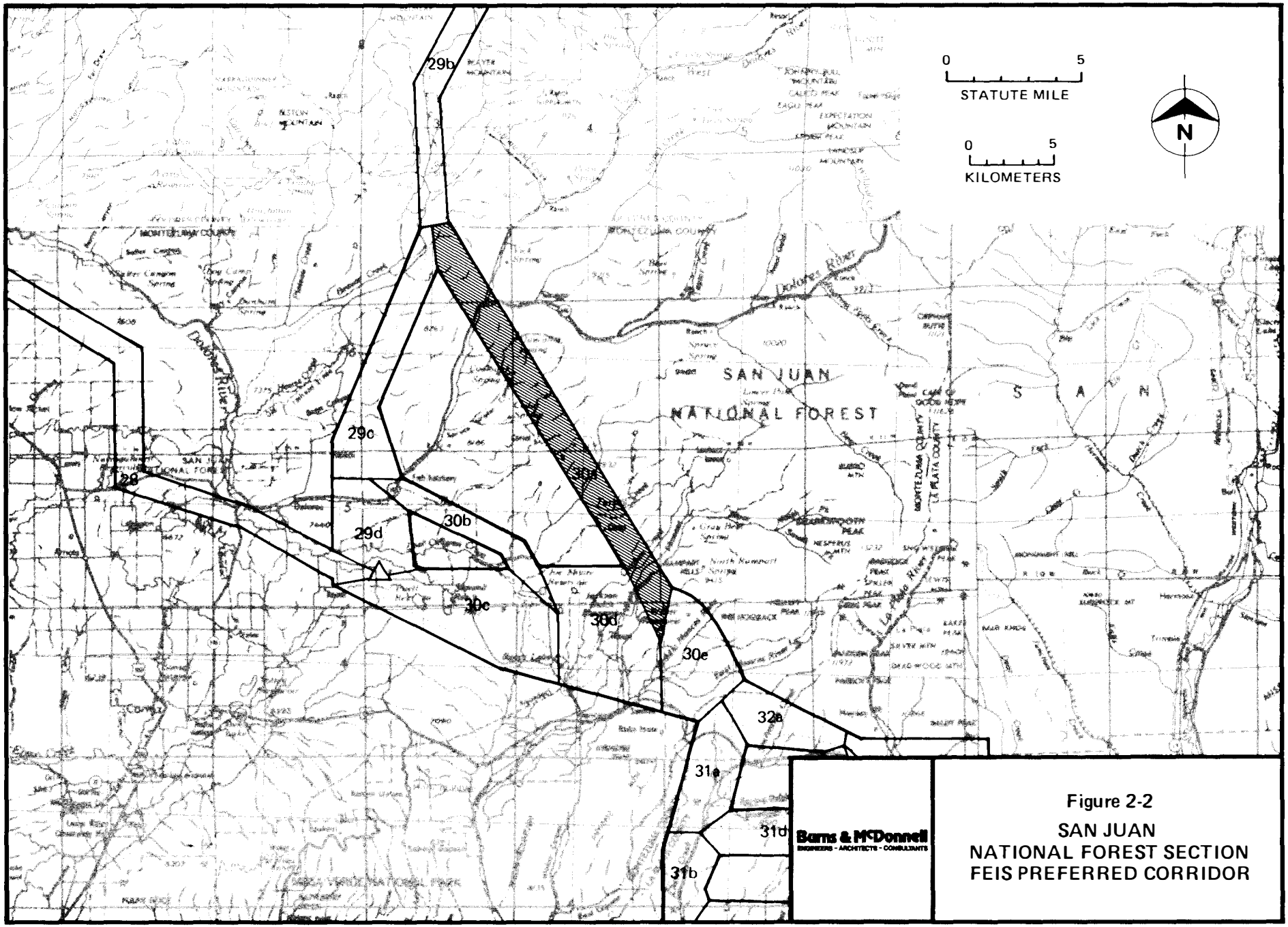


Figure 2-2

SAN JUAN
NATIONAL FOREST SECTION
FEIS PREFERRED CORRIDOR

Table 2-1
REVISED LAND USE VALUES
For SDEIS Tables 3-7 through 3-12

Rifle-Grand Junction

Land Use	Alternative A Miles	Alternative A Score	Alternative H* Miles	Alternative H* Score
Commercial Forest	1.0	4.0	1.0	4.0
Total		39.4		13.8

Montrose-Norwood

Land Use	Alternative A* Miles	Alternative A* Score	Alternative B Miles	Alternative B Score	Alternative C Miles	Alternative C Score
Commercial Forest	9.0	36.0	8.5	34.0	18.3	73.2
Total		41.6		39.6		83.2

Land Use	Alternative D Miles	Alternative D Score	Alternative E Miles	Alternative E Score
Commercial Forest	14.8	59.2	5.5	22.0
Total		69.2		28.8

Montrose-Montezuma/La Plata Co. Line

Land Use	Miles	Score
Commercial Forest	29.6	118.4
Total		193.6

Norwood-Montezuma/La Plata Co. Line

Land Use	Alternative A Miles	Alternative A Score	Alternative B Miles	Alternative B Score	Tap with Alternative B Miles	Tap with Alternative B Score
Commercial Forest	25.3	101.2	24.3	97.2	2.0	8.0
Total		119.6		115.0		12.0

Land Use	Alternative C Miles	Alternative C Score	Tap with Alternative C Miles	Tap with Alternative C Score
Commercial Forest	30.9	123.6	11.8	47.2
Total		127.6		51.2

Montezuma/La Plata Co. Line-Long Hollow

Land Use	Alternative C* Miles	Alternative C* Score	Alternative D Miles	Alternative D Score	Alternative E Miles	Alternative E Score
Prime Farmland	0.0	0.0				
Irrigated Cropland	1.7	6.8				
Nonirrigated Cropland	0.5	1.0				
Commercial Forest	8.4	33.6	11.0	44.0	7.5	30.0
Total		41.4		52.4		52.4

Long Hollow-Durango

Land Use	Miles	Score
Commercial Forest	1.2	4.8
Total		19.2

*Participant's Proposed Corridor in SDEIS.

reflect the number of miles of commercial forest-types crossed by the corridor (i.e., ponderosa pine, aspen, spruce-fir, and mixed conifer). These areas may or may not be considered "commercial" by strict definition. The Colorado State Forest Service defines commercial forest land as: Forest land producing or physically capable of producing usable crops of industrial wood (usually sawtimber of at least 1,500 board feet per acre at maturity) which is being used for that purpose: the land is either economically available now or available for future production. Samples used to determine commercial forest land also meet the following qualifications: (1) either 1,500 board feet or 600 cubic feet per acre, and (2) 40 square feet of basal area per acre of trees 5 inches diameter breast high (dbh) and larger. Table 2-2 summarizes the amount of commercial forest on state and private land in each county, as well as the total amount of land occupied by forest-types that generally qualify as commercial forest. These two categories are not separated on the State Forest Service maps. Therefore, the amount of commercial forest on private and state lands measured from the State Forest Service maps for each corridor may result in a slight overestimate of the actual amount of commercial forest within the corridor.

2.2.3 Changes to SDEIS Figures 3-15 and 3-16 (FEIS Figures 2-3 and 2-4)

The location of the Long Hollow Substation site has been corrected on these figures. The purpose of Figures 3-15 and 3-16 was to present the alternatives for a section of line being evaluated on a single page for the reader's convenient reference in the SDEIS. No other use was intended for these figures.

2.2.4 Changes to SDEIS Figure 4-29 (FEIS Figure 2-5)

Several changes were made to Segment 32c shown on Figure 4-29 in the SDEIS. Several comments were made regarding the correctness of resource information presented in this figure. A careful review of the resource information presented on this figure led to several changes to the elevation, vegetative communities, and land ownership information.

2.2.5 Additional Information

2.2.5.1 Electric Fields and Electrical Effects

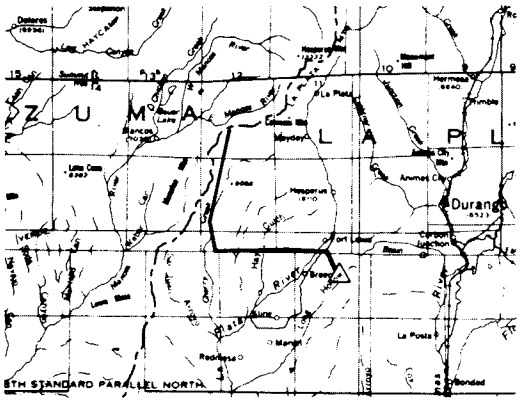
Information on this subject is presented in Section 5.13 and Appendix D of the SDEIS. Comments were received on the SDEIS requesting additional information on electrostatic effects of the proposed 345 kV transmission line. This section provides additional information on this subject. REA has conducted an extensive review of the literature which supports its statement made in the SDEIS that "no published scientific studies to date have shown adverse effects on humans from electrostatic and electromagnetic fields produced by 345 kV lines." Appendix B of the FEIS includes a bibliography of some of the publications reviewed. The following publications present information on biological effects of transmission lines. These publications include review of numerous sources of literature on the subject.

Table 2-2
SUMMARY OF COMMERCIAL FOREST
ON STATE AND PRIVATE LANDS
BY COUNTY

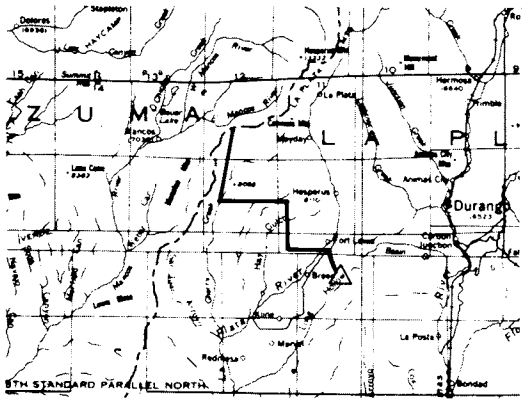
County	Private and State Land (acres)	Commercial Forest Land (acres)	Commercial Forest Type Lands* (acres)
La Plata	474,389	52,000	66,700
Montrose	461,351	26,200	29,600
Ouray	180,007	36,900	43,600
San Miguel	345,510	44,300	52,400
Montezuma	407,914	31,800	34,000
Dolores	270,809	22,400	27,200
Garfield	689,373	41,400	53,200

Sources: Colorado State Forest Service, Timber Resource Inventory Releases Nos. 9, 10, 11 and 17.

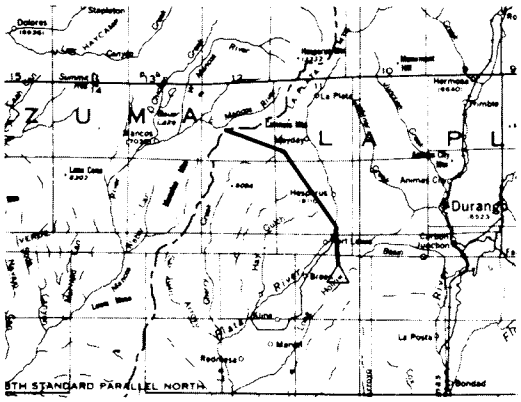
*Total includes commercial forest land plus land covered by forest-types that are generally included as commercial forest but do not meet other criteria for "commercial forest land" (see definition).



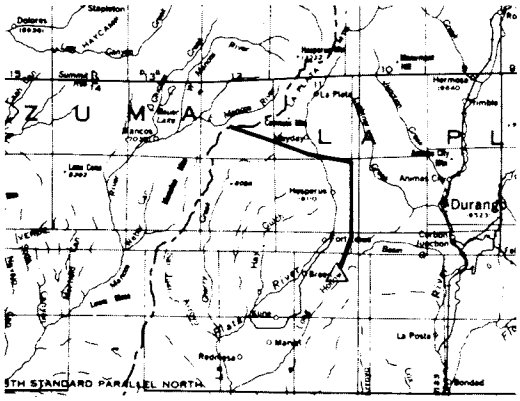
ALTERNATIVE A
SEGMENTS 31a, 31b, 31e, 31f



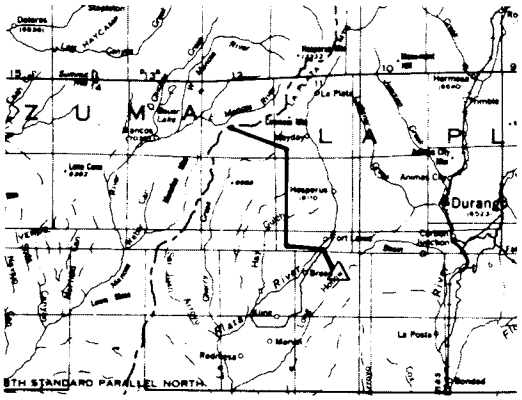
ALTERNATIVE B
SEGMENTS 31a, 31d, 31g, 31f



ALTERNATIVE *C
SEGMENTS 32a, 32c



ALTERNATIVE D
SEGMENTS 32a, 32b



ALTERNATIVE E
SEGMENTS 32a, 31h, 31g, 31f

5 0 5 10 15
Statute Miles

5 0 5 10 15
Kilometers

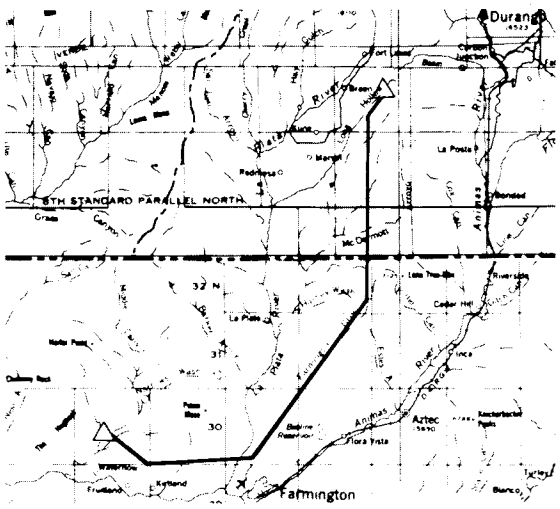
* Participants' proposed corridor

N

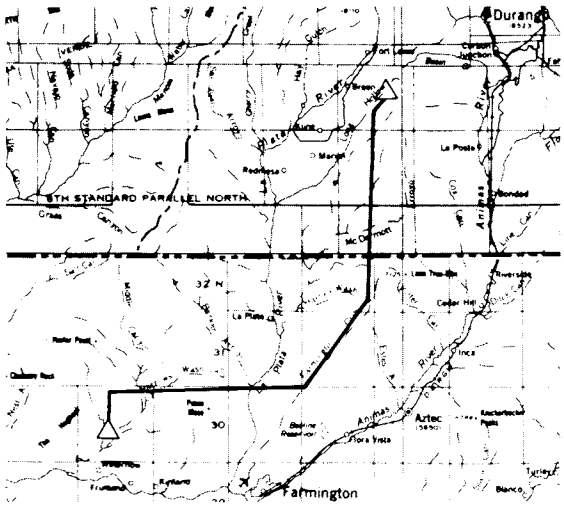
Burns & McDonnell

Figure 2-3
(Figure 3-15)

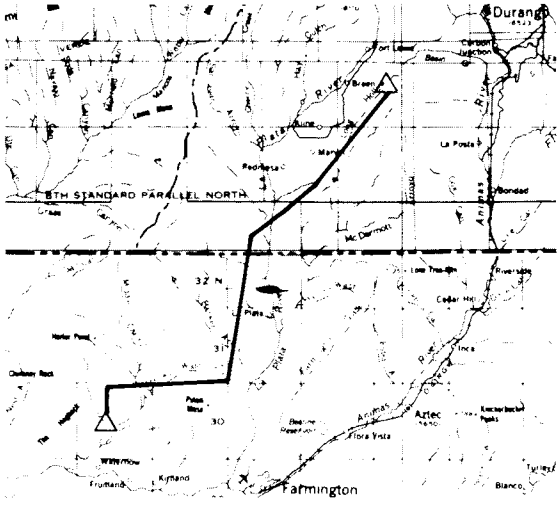
MONTEZUMA/LA PLATA COUNTY LINE TO LONG HOLLOW SUBSTATION ALTERNATIVE CORRIDORS



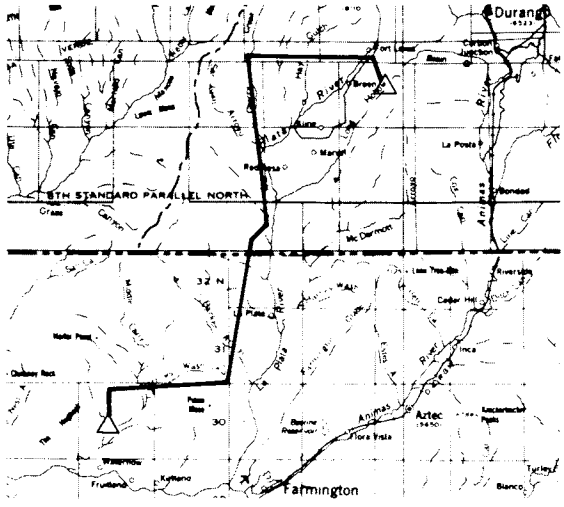
ALTERNATIVE A
SEGMENTS 33, 35a, 35b



ALTERNATIVE *B
SEGMENTS 33, 35a, 35c, 36b



ALTERNATIVE C
SEGMENTS 33, 34, 36a, 36b



ALTERNATIVE D
SEGMENTS 31f, 31e, 31c, 36a, 36b

5 0 5 10 15
Statute Miles
5 0 5 10 15
Kilometers

* Participants' proposed corridor

N

Burns & McDonnell
ENGINEERS - ARCHITECTS - CONSULTANTS

Figure 2-4
(**Figure 3-16**)
LONG HOLLOW SUBSTATION TO SAN JUAN GENERATING STATION ALTERNATIVE CORRIDORS

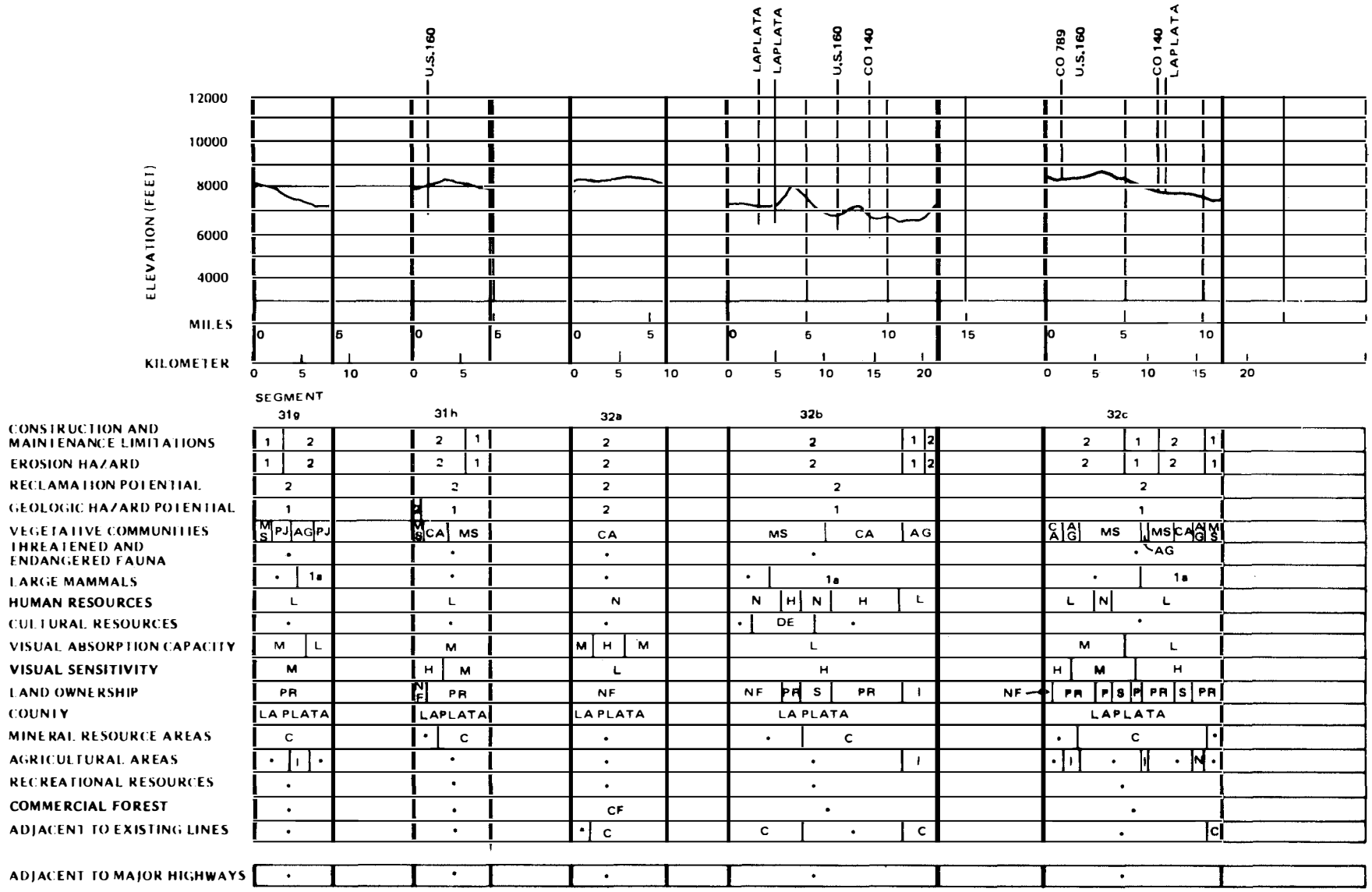


Figure 4-29

SEGMENTS 31g, 31h, 32a, 32b, 32c

IIT Research Institute. 1979. Evaluation of Health and Environmental Effects of Extra High Voltage (EHV) Transmission. Prepared for the Environmental Protection Agency (EPA), Office of Radiation Programs, Washington D.C. under Contract No. 68-01-4604. EPA requested data and information on the health and environmental effects of 60 hertz (Hz) transmission lines energized at 700 kV or higher. Fifty replies totaling over 6,000 pages were received. The conclusion reached by IIT from this literature review was: "It also appears to be reasonably well established that the normal environment produced by such transmission lines does not produce any significant health or environmental risks." Herrold, J. 1979. Health and Safety Effects of EHV Electrical Transmission Lines - A review of the literature, Michigan Public Service Commission, Dept. of Commerce, Lansing, Michigan. This study referenced 41 studies regarding electric field effects. The study concluded that "based on current knowledge and past operating experience, 345 kV line fields do not appear to cause any adverse effects upon human health." This study notes that the New York Public Service Commission ruled that a 765 kV line electric field strength at the edge of the ROW should not exceed the field of a 345 kV line at the edge of its ROW. The New York Commission noted that this field strength (4-6 (kilovolt per meter (kV/m)) would provide for a minimization of risks. The Michigan study indicated that any impacts from field effects are highly speculative.

Electric Power Research Institute (EPRI). 1979. Biological Effects of High-Voltage Electric Fields: An Update. EPRI EA-1123. Two thousand publications and research programs in progress were identified in this study. Approximately 50 of these entries were used in this update for in-depth consideration. The conclusion of this study states: "The general findings of this update confirm the conclusion of the 1975 review that it is highly improbable that electric fields from transmission lines have any significant biological effects on healthy individuals who encounter such fields in a normal way under ordinary conditions."

Mid-Continent Area Power Pool (MAPP). 1982. Source Book: Biological Effects of Transmission Lines, Minneapolis, Minnesota. This reference book contains reviews of literature related to the biological effects of transmission lines. Sixty-six technical studies are presented in this publication. This document does not give an overall conclusion regarding health effects related to transmission lines, rather it presents a summary and review and gives its observations on each study. REA's review of this document leads it to conclude that detrimental health effects are not to be expected from the proposed 345 kV transmission line.

In the United States most of the research into the effects of 60 Hz electric fields is sponsored by the Department of Energy (DOE) or EPRI. The combined annual budget for these two programs is around $5 million. Table 2-3 summarizing DOE research and Table 2-4 summarizing EPRI-sponsored studies are included in this section.

Table 2-3. Summary of Current DOE-Sponsored Research on Biological Effects of Alternating Current (AC) Electric and Magnetic Fields (Primary Source: Project Resumes Presented During a Contractor's Review, Nov. 18-19, 1980, Washington, D.C., DOE, Division of Electrical Energy Systems).

Study	Contractor/Principal Investigator	Results
Rats and mice are exposed to 100 kV/m fields for up to 120 days. Hundreds of parameters are being studied utilizing thousands of animals.	Battelle Pacific Northwest Laboratories	No effects in studies of metabolism and growth, susceptibility to infection and illness, cell genetics, pathology, bone growth, cardiovascular system, and reproduction and development. Subtle effects of small magnitude were detected in studies of endocrinology, neurophysiology, hematology, urine volume, bone fracture repair, and behavior. Studies are continuing.
Microorganisms are exposed to 60 Hz electric fields to assess possible mutagenic effects.	Battelle Pacific Northwest Laboratories (F. P. Hungate)	No effects found in cells exposed to electric field levels higher than could be produced through air by a transmission line.
Ecological studies are underway at the site of the BPA 1200 kV prototype transmission line. These include vegetation, wildlife, cattle, and honeybees.	Battelle Pacific Northwest Laboratories (L. E. Rogers)	Most studies show no electric field related effects. Leaf tip burn detected on some trees purposely left growing near the 1200 kV line. Effects noted on honeybees in 8 to 12 kV/m fields apparently related to induced currents in hives. Follow up studies are underway.
Plant and animal cells are studied to determine how 60 Hz electric fields may perturb cell systems.	University of Rochester (M. W. Miller)	Some effects observed in plant root growth. Electric field strengths were considerably higher than could be produced by transmission lines through air.

Table 2-3. Cont.

Studies are underway to determine mechanisms for biological effects from electric and magnetic fields. Tissues and whole animals are involved. Exposures include use of 450 MHz modulated with 16 Hz and 60 Hz.	Veterans Hospital Loma Linda, CA (W. R. Adey)	Some effects detected at levels as low as a few volts/m apparently frequency related. Significance of effects is being investigated.
Possible effects of 60 Hz electric fields on growth and metabolism of mammalian cells are being studied.	Mission Research Corp. and Los Alamos Scientific Lab (H. J. Price)	No changes in cell growth rate with an electric field of 2.5 kV/m in the cell nutrient. (This field strength could not be produced through air by a transmission line electric field).
Studies are concerned with effects of electric fields on metabolism, activity, biological rhythms, and body temperature.	Argonne National Laboratory (C. F. Ehret, R. S. Rosenberg)	Initial tests indicate mice are aroused by 25 kV/m fields. Gradual extinction of arousal occurs with successive "turn ons" of the electric field. Fields of 100 kV/m have not affected biological rhythms.
Studies involve the effects of 60 Hz electric fields on central nervous system on behavior in rodents.	Randomline, Inc. (A. H. Frey)	Some preliminary effects have been noted at field strengths of 3.5 kV/m. The identity of an "effect" depends partly on the type of statistical test used to analyze data.
A study of the detection of 60 Hz electric fields by rats.	University of Rochester (S. Stern)	Preliminary tests indicate threshold for detection of field was 5-8 kV/m. However, detection may be influenced by cage materials.

Table 2-3. Cont.

An investigation of the possible effects of high strength 60 Hz electric fields on health and behavior of nonhuman primates.	Southwest Research Institute (C. F. Feldstone)	In preliminary tests, baboons were able to detect 30 kV/m fields and generally adapted to the field. No obvious deleterious effects were observed.

Table 2-4. Summary of Current Research Sponsored by the Electric Power Research Institute Involving Biological Effects of AC Electric Fields (Primary Sources: Kavet 1979, Phillips et al. 1979a)

Study	Contractor/Principal Investigator	Results
Effects of 60 Hz electric fields on cardiac pacemakers.	IIT Research Institute, and University of Rochester	Studies with bench tests and with baboons indicated certain kinds of pacemakers may be affected by transmission line fields. Studies with human pacemaker patients are planned.
A study to assess effects of 60 Hz electric fields on honeybees.	Bioconcern	Adverse effects were observed in some bee colonies maintained beneath a 765 kV transmission line. Effects may be related to induced currents inside hives and resulting mini-shocks. Studies are continuing to determine mechanisms for observed effects.
A study of effects of 60 Hz electric fields on plants and animals.	Westinghouse Electric Corp. & Pennsylvania State University	For plants, limited damage to sharp pointed leaves at 20-25 kV/m but no effects on growth at up to 50 kV/m. Pigeons perceived electric fields of 10-20 kV/m (increased secretion of corticosterone). Studies are underway on chicken eggs and on tall growing plants.

Table 2-4. Cont.

Effects of 30 kV/m electric fields on adult swine and their offspring.	Battelle Pacific Northwest Laboratories	Preliminary results: for first generation studies no adverse effects detected in mating, fertility, gestation, number or size of offspring, growth of pregnant females and fetuses, or in blood and serum chemistry. Some effects seen in studies of neurophysiology, and behavior. Preliminary results of multigeneration studies include effects on reproduction which were not found in the DOE-sponsored rodent studies (Rob Kavet, personal communication). Effects included higher incidence of fetal malformation in exposed animals following a second breeding. Also, females conceived and raised in the electric field were less successful in mating compared to control animals. At this time it is not clear whether the effects are related to the electric field, an outbreak of illness that occurred earlier in the study animals, or to some other factor(s).
Electric field effects on nervous and endocrine system.	Tulane University	Multiple generations of mice will be exposed to electric fields of 80 kV/m. Studies are preliminary.
Epidemiological study of electrical linemen and switchyard workers.	Tabershaw Occupational Medicine Associates	First phase of the study is to determine project feasibility and design of a large scale study.

A comment was also received regarding the levels of short-circuit induced currents through large metallic objects located near or under the proposed line and safety considerations thereof. A recalculation was made of Figure D-3 of the SDEIS which showed the projected levels of expected short-circuit induced current through a large combine positioned at the point of maximum field strength. The maximum electric field strengths are 6.7 kV/m for the horizontal tower design and 6.6 kV/m for the delta tower design. The EPRI Transmission Line Reference Book - 345 kV & Above, Second Edition (Reference Book), lists the induced current factor of a John Deere Combine to be 0.38 milliamp/kilivolt/meter (mA/(kV/m) (Table 8.8.3). For the horizontal configuration where the maximum field strength is 6.7 kV per meter, the maximum theoretical induced short-circuit current is 6.7 x 0.38 = 2.6 milliamps (mA). For the delta configuration where the maximum electric field strength is 6.6 kV/m, the maximum theoretical induced short-circuit current is 6.6 x 0.38 = 2.5 mA. Also using the induced current factor from the reference book for a large school bus, the calculated short-circuit currents are 2.6 and 2.5 mA for the horizontal and delta configurations, respectively. It must be understood that all calculations of induced short-circuit currents are based upon combinations of extremely conservative, or "ideal", assumptions. For example, it is assumed that the object or vehicle is positioned at the point of highest field strength and oriented parallel to the line. It is assumed that the vehicle or object is perfectly insulated from the ground. It is assumed that the person making contact with the vehicle or object has perfect electrical contact with the ground and the object. In reality, however, the effects of these conservative assumptions are mitigated by the physics of the real world. The ground clearance on which the electric field is calculated is based upon the maximum allowable conductor sag. The conductors will sag this low only upon the occurrence of extreme thermal loading or extreme ice loading. At all other times the sag will be significantly less--the ground clearance will be greater and the electric field strength smaller. The maximum level of electric field strength actually occurs at two finite points in any given span. As one moves any direction from either of the two points, the electric field strength reduces rather quickly. The probability, therefore, of a vehicle or object being positioned at the point of maximum field is rather small. Because of the carbon content in rubber tires, vehicles are not well insulated from the ground. This factor slightly mitigates the levels of induced short-circuit currents, but more importantly it reduces the open circuit voltage to a small fraction of the ideally insulated case. The contact impedance between a person's foot and ground (especially when shoes are worn) and between a person's hand and the object significantly reduce the levels of short-circuit current passing through the body as compared to calculated levels. Here again, the actual levels of induced current are typically only a fraction of those calculated for the ideal case. Calculations show that short-circuit induced currents would not exceed 2.6 mA. REA's experience, as well as the experience of others in the industry, shows that the currents actually experienced by persons coming in contact with vehicles in the vicinity of power lines will be a fraction of the calculated maximums.

In fact, extensive work done by EPRI (Reference Book) shows, for example, that the induced current through persons contacting a school bus on asphalt statistically ranges from 1/100th to 1/5th of the "ideal" short-circuit current 100 percent of the time. Likewise, the actual levels of open circuit voltage ranges from 1/300th to 1/4th of the "ideal" levels. Work by Dalziel & Lee has shown that 99.5 percent of all men are able to withstand let-go currents of 9 mA or less and 99.5 percent of all women are able to withstand let-go currents of 6 mA. Testing, of course, has not been conducted with small children. However, 5 mA has been adopted by the industry as the safe let-go current for children based upon extrapolations of the data taken for men and women. The National Electrical Safety Code (NESC), ANSI C2, has adopted 5 mA as the maximum allowable induced current upon objects beneath transmission lines for the protection of men, women, and children. The SDEIS stated that the induced current will not exceed the 5 mA NESC limit, but does not say that it will reach that limit.

In summary, the 5 mA short-circuit limit required by the NESC as the maximum allowed through objects in the vicinity of transmission lines is well founded and based upon sound principles for the safety of all the public. REA's opinion is that the proposed design configuration and ground clearance provides adequate margins of safety for protection of the public at the proposed operating voltage. The predicted levels of short-circuit current induced by the proposed transmission line on large vehicles such as combines and school buses are within the limits established by the NESC. In fact, they are about one-half that limit. It can be furthermore anticipated that levels of current actually experienced by persons coming in contact with these vehicles will be a fraction of calculated levels.

2.3 Mitigation Plan

This section describes the measures to be implemented by the participants in order to mitigate any adverse environmental impacts resulting from the proposed 345 kV transmission line project. Comments were received on the mitigation plan that was presented in Section 5.15 of the SDEIS. As a result of these comments, the mitigation plan has been updated and is presented in this section. Site-specific stipulations for construction on all lands would be included in the plan of construction, operation, and rehabilitiation required in Section 504(d) of the Federal Land Policy and Management Act. This plan would include specific mitigation measures to ensure preservation of environmentally sensitive areas and would ultimately become a part of the Grant of ROW and Authorizing Document issued by BLM and FS, respectively. This plan would be prepared following the Record of Decision for the project and prior to the initiation of construction. This plan will be included in the construction contract documents and will be binding on the construction contractors.

In addition, the CEQ regulations (40 CFR 1505.3) require that the lead agency provide for monitoring to insure that essential commitments are

carried out and mitigation measures performed. REA will keep a record of the success of this mitigation plan.

General

- The design, construction, operation, and maintenance of the line would follow the applicable criteria set forth in the Environmental Criteria for Electric Transmission Systems published jointly by the United States Department of Agriculture (USDA)/United States Department of the Interior (USDI) and Management of Transmission Line Right-of-Way for Fish and Wildlife published by the USFWS and the National Forest Landscape Management Handbook published by USDA.

Geological Hazards

- Disturbed soil surfaces would be returned to the original grade or to a gradesatisfactory to the owner or land manager.

- Permanent maintenance roads and temporary roads would be aligned and graded to conform with the natural landscape.

- Damage to permanent access roads during construction and maintenance would be repaired.

- Where possible, towers would not be located on unstable or potentially unstable slopes.

- Active fault areas and epicenters would be avoided if possible. Towers and substation structures would be designed and constructed in conformity with applicable engineering and building standards. Should it prove unavoidable to place a tower near an active fault, the tower location would be selected on the basis of its expected seismic response.

- Access roads will not be constructed in unstable areas.

Soils

- Clearing and grading of construction storage and staging areas would be limited.

- Construction activities would be closely monitored to insure that soil disturbance and damage to vegetation is kept to a minimum.

- Construction activities during excessively muddy soil conditions would be restricted.

- Disturbance of steeply sloping areas and highly erodible soils identified by soil investigations during the design phase would be avoided as much as possible. Steeply sloping areas are defined as having slopes greater than 35 percent.

- Where soil is exposed during construction, erosion would be minimized by filling in ruts, terracing, riprapping, diking or spreading a straw much on the surface. Land management agencies and interested landowners would be consulted on revegetation and clean-up. Specific measures would be agreed to ofter the centerline was located but before ground disburbance begins.

- Construction of leveled earth equipment platforms, for the use of cranes in the assembly of structures, will be allowed at the end of temporary spur roads. Only one platform per structure site will be used, unless otherwise authorized. If all-terrain cranes are utilized, equipment pads may not be necessary at all structure locations.

Water Resources

- Construction of new access roads near stream banks would be limited.

- Revegetation would be done and sediment control structures would be used to control erosion in accordance with the FS publication Guides for Controlling Sediment From Secondary Logging Roads.

- Stream banks would not be disturbed unnecessarily and riparian vegetation would be left intact.

- Fill material would not be placed in streams or adjacent areas where excessive siltation may occur.

- Tower structures would be sited so that, to the extent practicable, they can be constructed and maintained without altering the stream or introducing sediments or contaminants into the water.

- Streams would be crossed by vehicles and construction equipment at existing crossings or with temporary facilities. Culverts would be used where necessary.

- Construction of access roads in and near river crossings would be in accordance with the requirements of the COE Nationwide General Permit for Utility Line Crossings and as specified by the applicable permits and grants of ROW issued by other agencies.

- Herbicides would not be used on the banks of streams or where runoff would wash the herbicides directly into a stream. The use of herbicides in substations would be in accordance with the label directions as required by the Federal Insecticide, Fungicide, and Rodenticide Act of 1972 and as recommended by the appropriate agency.

- Herbicides, oil, and other chemicals would not be stored or disposed of in such a way as to allow drainage into surface or underground waterways.

- Post-construction removal of debris would be performed in a manner to avoid adding contaminants to the water.

Vegetation

- Trees in the ROW would be topped and selectively removed to provide for conductor safety.

- Trees removed during ROW clearing will be disposed of by methods agreed to by individual landowners and by governmental agency requirements.

- Protection of vegetation would be given consideration throughout the planning and construction phases of the project. In wooded areas, tower structures would be sited to reduce the disturbance of trees, when possible.

- Appropriate precautions against fire would be taken during construction and maintenance.

- Existing corridors and access roads would be used whenever practical to reduce potential impacts to undisturbed areas. Prior to designating access routes and staging areas, the appropriate landowner or land manager would be consulted.

- Respective land management agencies and interested landowners would also be consulted during transmission line design, which includes transmission centerline alignment, tower location, pull sites, etc. The USDA/USDI publication Environmental Criteria for Electric Transmission Systems and the USDA Publication National Forest Landscape Management Handbook, would be followed to the extent practical during the design, construction, and maintenance of the proposed transmission line.

- Disturbed lands not committed for the life of the project would be allowed to return to its original state and revegetated according to Soil Conservation Service (SCS) recommendations or BLM, FS, state land manager and landowner requirements.

- Riparian areas would be avoided or spanned wherever practicable.

- Existing trees in the ROW would be properly "feathered" to create curved undulating boundaries, while allowing for safe operation of the line.

- Maintenance personnel are normally expected to require entry on the ROW one to two times per year. More frequent entries may be required if operational problems occur on the line. In the event that soils or vegetation are damaged during emergencies or storms, restoration procedures would be the same as those employed during and after construction. During maintenance inspections, any problems with conductor clearance or soil erosion would be noted and corrected.

- Public access to the ROW would be restricted according to landowner or land manager request.

- Pesticides and herbicides would not be applied to the ROW. In and near substations, only chemicals recommended by the appropriate authorities, such as the USDA and USDI, would be employed. Chemicals would be applied in accordance with the Federal Insecticide, Fungicide and Rodenticide Act of 1972.

- With the exception of the new substation at Long Hollow, construction would be within or immediately adjacent to existing substations. This would minimize disturbances to presently undisturbed areas.

Wildlife

- Timing of construction activities would be planned in cooperation with land management and fish and wildlife agencies to minimize disturbances during the reproductive seasons of species such as mule deer, elk and antelope. Special attention would be given to the months of May through July to avoid disturbance to calving and fawning activities.

- Mule deer and elk migration areas and critical winter range would be identified and avoided during critical months. Critical winter months may include November through May. The exact avoidance period of critical winter areas would be specified during the ROW approval process.

- Human disturbance to wildlife within the ROW could be restricted by blocking or locking gates to ROW access roads as needed.

- Riparian vegetation and wetland areas would be avoided or spanned where practicable in accordance with Executive Order criteria.

- Waterfowl concentration areas would be avoided where practicable. Additionally, the transmission line would be designed to be as high above water surfaces as practicable.

- If it becomes apparent that a significant number of waterfowl or other birds are being killed or injured by striking the lines, it may become necessary to mitigate the impact by measures such as marking or flagging selected portions of the line.

- Construction during hunting season would be evaluated on a site-specific basis. In those areas where hunting and construction activities would be incompatible, construction activities would be curtailed.

Wetlands and Riparian Areas

- Wetlands and riparian areas would be avoided where possible during the delineation of the ROW, centerline, tower locations and substation facilities. Wetlands and riparian areas that cannot be entirely avoided would be spanned without construction in the wetlands.

- Wetlands would be avoided during maintenance of the proposed project.

- Construction of access roads would not be permitted in wetlands.

- Sediment control measures would be used as needed to protect wetlands and reparian arears.

- Riparian vegetation would not be removed except tall trees would be topped that conflict with transmission line operation.

- Fill material would not be placed in wetlands.

- Any lubricating oils or fuel for equipment motors would be carefully handled and disposed.

Floodplains

- Floodplains would be avoided where possible. Those floodplains which cannot be completely avoided would be spanned without construction in the floodplain if possible.

- Any tower structures that must be built in floodplains would be designed to withstand the 100-year flood (that flood with a one percent chance of occurring in any given year).

- Structures would be placed where the likelihood and severity of flooding is expected to be lowest.

Threatened and Endangered Species

- Regions within the study area where the threatened and endangered plant species may occur were identified and avoided to the extent practicable during corridor selection.

- During centerline location and prior to construction of access roads and substation facilities, a qualified botanist would inspect the ROW, access roads, and substation sites in those areas where federally designated threatened and endangered plant species may occur to insure that these species would not be impacted. All such species that are identified would be avoided or, if recommended by the USFWS and land management agencies, transplanted prior to construction of the transmission and substation facilities.

- Timing of construction activities would be planned based on consultations with the appropriate agency to minimize disturbance to the reproductive seasons of sensitive species.

- Peregrine falcon and bald eagle nests and eagle roosting sites would be identified and avoided during critical months. Critical winter months may include November through May. The exact time frame may vary from year to year and in specific locations within the study area. Critical areas and periods during which they will be avoided by construction activities would be specified during the ROW approval process.

- Important bald eagle roost sites identified by the BLM, FS, CDOW, or USFWS would be avoided.

- All conductors for the proposed line would be separated by at least 7 m (24 feet). Since the eagle wing span ranges from 1.8-2.4 m (6-8 feet), the proposed conductor spacing would be adequate to prevent electrocution.

Cultural Resources

- Known historic and archaeological resources listed or eligible for listing on the NRHP would be avoided.

- A cultural resource survey would be completed for the transmission line ROW and new and expanded substations. If sites listed or eligible for listing on the NRHP are discovered, no construction would be initiated until the procedures prescribed in the ACHP Regulations, 36 CFR 800, have been carried out.

- If construction should be contemplated outside the boundaries of the area surveyed, the additional area would be surveyed at that time. If any sites are found during construction, work would be stopped until authorities are notified and an archaeologist can proceed to the site to make an appropriate assessment.

Land Use

- The proposed transmission facilities will be constructed in compliance with all applicable Federal regulations to minimize interference with any existing transportation systems or to reduce hazard to airports or navigable airspace.

- FAA officials would be provided with design and centerline information to assure minimal impact to navigation. Hazard markers would be placed on lines where required.

- An exact determination as to where energy or mineral resource lands occur would be made when the transmission line's ROW is identified. During the ROW approval process, a resolution of any energy lease-transmission line conflicts would be sought through consultations with all affected parties.

- Land management agencies and private landowners would be reimbursed for any commercial timber removed or damage to young growth because of ROW clearing activities. Timber below commercial size would be paid for at current appraised value.

- In agricultural areas, the centerline would be located along property, section, and fence lines to minimize disturbance to agricultural lands, where practicable.

- All fences cut or damaged during construction would be repaired, and gates would be installed in fences to prevent livestock from escaping.

- Gates, rigid and braced, (type to be determined with landowner input or land management agency requirements) will be installed in existing fences and locked per requirements established by the landowner or land management agency.

- Access roads that are no longer needed for operation and maintenance of the line will be reshaped and reseeded to discourage unauthorized use by the public. The appropriate land management agency will determine which access roads are to be closed on public lands.

- In areas where the line must cross prime, important or irrigated farmlands, the towers would be carefully located to minimize disturbances. Access roads and staging areas would, where possible, be located away from farmlands.

- The participants will work with interested landowners that are affected to minimize impacts of the transmission line location.

Human Resources

- Consultation with local planning agencies on a continuing basis in establishing the line route within the proposed corridor would minimize the impact to high density areas.

- Any easements required on private land would be based on negotiations with landowners. Colorado-Ute is coordinating its planning activities with the Southern Ute tribal officials to insure that the ROW is compatible with its land use plans.

- Appropriate approvals for line sections would be obtained prior to final centerline location and construction.

- To minimize the potential for impacts to recreational resources, the project participants would coordinate with the appropriate administering agency in the identification of ROW centerlines and tower locations.

- Efforts would be made to locate the facilities in the least obtrusive and most environmentally compatible manner.

Visual Resources

- Manmade objects in the natural landscape generally become focal points because of contrasting form, line, color, and texture. The project will be designed to complement its natural surroundings.

- The National Forest Landscape Management Handbook and general construction methods listed in Environmental Criteria for Electric Transmission Systems would be utilized to minimize adverse aesthetic impact.

- ROW through forest and timber areas would be established with curved undulating boundaries wherever possible.

- Trees would be topped and pruned and existing small trees and plants would be used to feather the ROW from grass and shrubbery to larger trees.

- Centerline selection would avoid skylining the tower structures if possible by staying away from hilltops and ridges.

- Location and design would take into consideration the topography and vegetation to reduce the visual impact.

- Nonspecular towers, hardware and conductor would be utilized.

- In areas with high visual sensitivity and low visual absorption capability, the participants would consider the use of alternative design structures to minimize visual intrusions.

Electrical Effects

- New and existing fences located in the transmission line ROW would be properly grounded, as required.

- Project design would include spacings of 17-40 m (55-130 feet) between the conductors and the spray nozzles of irrigation systems if the line passes through an area irrigated by irrigation systems.

- The proposed 345 kV transmission line would be designed in accordance with the NESC and REA Bulletin 62-1.

- The line would be designed so that it does not contribute to less than Federal Communication Commission (FCC) satisfactory service under fair weather conditions for all residences 90 m (300 feet) or greater from the 345 kV line.

- Any television or radio interference problems attributed to the proposed 345 kV transmission line and other associated facilities of this project would be corrected to the extent reasonably possible.

3.0 Consultation and Coordination

3.1 Introduction

This section presents the Federal, state and local agency and public review process for the SDEIS. Public comments on the document were solicited from Federal, state and local agencies, organizations and individuals and comments were received in the form of letters and remarks at public hearings. The input from the comment letters and public meetings were used in the preparation of the FEIS for this project.

3.2 Public Review Process and Procedures

The SDEIS was filed with the Environmental Protection Agency and released to the public on June 17, 1983. Notice of filing and dates and locations of the four public hearings was published in the Federal Register on June 24, 1983, and in local newspapers in the project area during the week of June 13-17, 1983. The public comment period ended August 8, 1983.

Approximately 400 copies of the SDEIS were sent to Federal, state and local government agencies, organizations and individuals for review and comment. Thirty-three letters commenting on the SDEIS were received by REA. These letters and transcripts of the four hearings may be inspected at the following locations:

Rural Electrification Administration
Western Area - Electric
14th & Independence Avenue
Washington, D.C. 20250

Western Area Power Administration
1627 Cole Boulevard, Room 304
Golden, Colorado 80401

Western Area Power Administration
Salt Lake City Area Office
438 E. 200 South, Suite 2
Salt Lake City, Utah 84147

Colorado-Ute Electric Association, Inc.
1845 South Townsend Avenue
Montrose, Colorado 81401

It is requested that prior arrangements be made to review documents.

All comments were carefully reviewed and considered by the REA and the cooperating agencies. Substantive comments that present new information, questioned findings or raised questions or issues relative to impacts or alternatives were addressed.

3.3 Responses To Comment Letters from Federal, State and Local Agencies and Interested Parties

3.3.1 Introduction

During the SDEIS comment period thirty-three letters from Federal, state and local agencies and the public were received. Comment letters that

were received are listed in Table 3-1 in the order that they are responded to in the FEIS. A response is presented after each comment. All the letters are reproduced in their entirety in Appendix A. All comments will receive full consideration in the final decision. Six comment letters required no response and are listed in Table 3-2.

3.3.2 Department of the Interior

Comment 1

GENERAL COMMENTS - Public Lands

The proposed project, as described in the draft EIS, would impact Federal lands administered by the Bureau of Land Management (BLM) in Colorado and New Mexico. Given this, incorporation or resolution of the following observations and comments in the final EIS should ensure that the right-of-way application will be approved without significant additional delays.

Response

No response required.

Comment 2

This draft EIS utilized some of the information contained in BLM's Glenwood Springs Resource Management Plan (DEIS published November 1982, FEIS published June 1, 1983). This fact should be appropriately documented in the final.

Response

Resource information contained in BLM's Glenwood Springs Resource Management Plan was used to evaluate the impacts of the proposed project between Rifle and Grand Junction, and is so noted here.

Comment 3

Indian Lands

No serious permanent environmental impacts resulting from the proposed construction are likely on Indian lands. However, if Alternative B is selected, the corridor will pass through approximately nine miles of Southern Ute land. It is important that the cultural resource surveys be conducted along the proposed corridor prior to implementation of the project. If the appropriate cultural resources surveys are completed and the necessary mitigative measures are incorporated, the final EIS analysis should be adequate for approval of the portions of the right-of-way which cross Southern Ute land.

Response

As stated in Section 2.3 of this FEIS, the participants will perform a cultural resource survey of the transmission line ROW, access roads and substation sites to be impacted by the proposed action. Construction will not be initiated until the participants have complied with ACHP Regulations 36 CFR 800.

Comment 4

Fish and Wildlife Resources

The primary impacts of construction of the proposed transmission line on the fish and wildlife resources of the project area are adequately

Table 3-1. Comment Letters Received.

Section Number	Name of Commentor	Date of Letter
3.3.2	U.S. Department of the Interior	August 15, 1983
3.3.3	Forest Service	August 15, 1983
3.3.4	Environmental Protection Agency	August 23, 1983
3.3.5	Federal Highway Administration	June 28, 1983
3.3.6	Federal Aviation Administration	July 11, 1983
3.3.7	Colorado Division of Wildlife	August 15, 1983
3.3.8	City-County Planning, Grand Junction-Mesa County	July 6, 1983
3.3.9	Montezuma County	August 5, 1983
3.3.10	San Miguel County	August 18, 1983
3.3.11	Jack Scott	July 29, 1983
3.3.12	R.C. Wingerson	August 1, 1983
3.3.13	Carl Weston	No Date
3.3.14	Susan Shields/Patrick Enright	July 26, 1983
3.3.15	Foy Cogburn	August 3, 1983
3.3.16	Anita Vogelaar	August 5, 1983
3.3.17	Tom Maxwell	August 7, 1983
3.3.18	Aileen Maxwell	August 7, 1983
3.3.19	Jim Hunter	August 7, 1983
3.3.20	Katy Moss	August 5, 1983
3.3.21	Robert Bement	August 3, 1983
3.3.22	Thelma Bement	August 3, 1983
3.3.23	Roger Howard	July 25, 1983
3.3.24	James Denton Brown	August 6, 1983
3.3.25	Robert Brown	August 6, 1983
3.3.26	Peter Ballode	July 28, 1983
3.3.27	Stella Montoya	July 22, 1983
3.3.28	Elizabeth Shaw	August 1, 1983

Table 3-2. Comment Letters Requiring No Response.

Name of Commentor	Date
Soil Conservation Service	July 12, 1983
Federal Aviation Administration - Southwest Region	July 29, 1983
U.S. Army Corps of Engineers	July 28, 1983
Colorado Division of Water Resources	August 2, 1983
New Mexico State Planning Division	August 26, 1983
New Mexico Department of Agriculture	July 25, 1983

described and would probably not be significant, providing mitigation measures outlined in the document are implemented. In addition, it will be necessary to provide assurance that the proposed mitigation is accomplishing the intended purpose through annual inspections. Any vegetation planted for mitigation that has died should be replanted. To help prevent excessive erosion, access roads constructed for the transmission line should be closed to vehicular use by the public. It appears that much of the fish and wildlife data used in the document is relatively old (prior to 1978). The accuracy of the document could be improved by using the most recent wildlife data available rather than merely incorporating data from the previous EIS. If more recent information is available, it should be used.

Response
Yearly inspection of the ROW will be performed by the participants to assure vegetative stands are adequate. Access roads not needed for the operation or maintenance of the transmission line will be reshaped and reseeded to discourage unauthorized use. Gates will be installed in existing fences and locked if requested by the landowner or government land manager.

The information on threatened and endangered species in the SDEIS has been updated and is current. The other wildlife resource information was incorporated from the previous EIS. REA believes the accuracy of this data is adequate to evaluate the potential impacts of the project.

Comment 5
Mineral Resources
Limited portions of the proposed transmission line alignments traverse known mineral resource areas. However, transmission lines generally do not preclude mineral recovery and can be rerouted in the future if necessary. Completion of this project should increase the availability of power, which would benefit the mineral industry.

Response
No response required.

Comment 6
SPECIFIC COMMENTS - Land Resources
The project's access roads, unless locked by gate, can provide access for many other types of users. Therefore, the impact of additional access roads in the area on other resources (i.e., recreational activities such as hunting and off road vehicles (ORV) use and the impacts of increases in these types of uses on yet other resources, i.e., animals, soils, visual quality) should be analyzed in the final statement.

Response
The project participants' preference is to control use of ROW access by using locked gates. Use of locked gates may not totally curb unauthorized use of ROW access, but it should reduce potential impacts to natural resources. Refer to Comment 8 of Section 3.3.7.

Comment 7
The final EIS should address the impacts of the project on livestock grazing in more detail. For example, in order to develop adequate mitigating measures, the impacts to ranchers' fences during the construction phase should be analyzed. In addition, a description of the impacts resulting from construction and surface disturbance on grazing pastures and loss of forage (in Animal Unit Months) should be provided.

Response
Mitigation measures for damaged fences are described in Section 2.3 of the FEIS: "All fences cut or damaged during construction would be repaired and gates would be installed in existing fences to prevent livestock from escaping." Since only 0.09 acres of vegetation per mile will be permanently disturbed by tower structures and less than 2 acres per mile for construction of access roads, the loss of forage and impact on grazing should be minimal.

Comment 8
The draft EIS makes no mention of paleontological resources or of surficial geology. A discussion and analysis of both of these resources should be included in the final.

Response
REA realizes paleontological resources could be impacted by the proposed project. The participants plan to survey the ROW, access roads and substation sites in Class I areas or other areas identified by the land management agencies as having potential to produce paleontological resources prior to construction. If significant paleontological sites are identified that would be impacted by the project, they will be mitigated. Impacts to surficial geology are discussed on page 5-1 of the SDEIS.

Comment 9
If the proposed 345 kV line is constructed and energized will this available capacity allow Colorado Ute enough latitude in their transmission system to carry out series compensation modifications and uprating of existing transmission lines? If so, these options should be included in the analysis.

Response
Construction of the Rifle-San Juan 345 kV line will provide sufficient capacity to allow Western's existing Rifle-Shiprock 230 kV line to be taken out of service and uprated to 345 kV as required. Series compensation of the existing line would be a future option, but would still have the potential problems discussed in Section 3.3.5 of the SDEIS. Future modifications of the transmission system would be evaluated in detail in Western's own NEPA documents.

Comment 10
Page 3-4: Given the possibility that resource values may restrict the construction of additional transmission lines in the future, REA is urged to include as a design alternative utilization of a single circuit tower that can be converted to a double circuit tower. If either of the towers

being considered (Figures 3-1 and 3-2, pp. 3-5 and 3-6) can be upgraded to carry a double circuit 345 kV, the final EIS should note this possibility.

Response
As stated on Page 3-10 of the SDEIS, "In certain areas where there is a physical, environmental, or land use restriction to a single tower ROW corridor, structures that can support another future circuit may be constructed." Neither of the 345 kV design towers shown in the SDEIS (Figures 3-1 and 3-2) could be upgraded to carry a second 345 kV circuit.

Comment 11
Page 3-10: BLM has a well-established firewood permitting system. In order to avoid confusion and potential increases in firewood trespass, the right-of-way clearing contractors should cut and remove the wood rather than leaving the cut wood stacked along the right-of-way. (The BLM can provide a list of commercial wood operators should the contractor wish to sell the wood to them and have them remove it.)

Response
Timber cut as a result of ROW clearing will be disposed of by methods agreed to by individual landowners and by government agency requirements.

Comment 12
Page 4-34: Discussion of Recreation Resources should be more specific to the recreation resources available in the area (such as a state park or lake adjacent to an alternate corridor).

Response
State recreational resources, fishing areas, wildlife areas, and recreation areas within close proximity to the alternative corridor network have been identified and described in Section 4.10.6 of the SDEIS. Potential impacts to recreation resources are discussed in Section 5.10.4 of the SDEIS.

Comment 13
Section 5.3.7
Adverse impacts to water quality would occur even if the proposed mitigation is performed. Even though the sedimentation impacts would be localized and short-term, the adverse impact should be acknowledged.

Response
The comment is correct. REA recognizes that there may be some sedimentation impacts to water quality; however, they would be temporary and localized in nature.

Comment 14
National Natural Landmarks
Page 4-34: The subject document identifies a potential National Natural Landmark known as Ophir Needles as an area within the project study area. The location of this site is southeast of the transmission line study area, not within the boundaries. The Natural Landmarks section on the above mentioned page should identify Cameo Slide, Mesa County,

Colorado in segment 3 and Rico Dome and Dolores River Valley, Dolores County, Colorado in segment 29, and be addressed under this section. In recognition of the natural features of these two areas, we urge that efforts be taken to minimize adverse impacts for these sites.

Response
The Ophir Needles and Cameo Slide areas are located within the project study area; however, they are not located within a corridor segment and will not be impacted by the proposed project.

The Rico Dome and Dolores River Valley are located in portions of T37N, R15W; portions of T38N, R12-14W; portions of T29-40N, R11W; and portions of T40-41N, R10W in Montezuma and Dolores Counties, Colorado. The proposed project will not impact the Rico Dome. The Dolores River Valley would be crossed by Corridor Segment 30a; mitigation measures outlined in Section 2.3 of the FEIS would be used to minimize impacts to the Dolores River Valley.

Comment 15
Page 4-18, Last sentence on page: In 1983 the 26 miles of the Gunnison River upstream of the confluence with the North Fork of the Gunnison River was designated as gold medal and wild trout water. These designations indicate that the Gunnison River above the North Fork provides outstanding angling opportunities for large trout and that it will not be stocked with hatchery fish. The last sentence on page 4-18 and the first sentence on page 4-19 should be revised to reflect this new management policy by the Colorado Division of Wildlife.

Response
The comment is noted.

Comment 16
Page 4-19, Dolores River: At the present time the quality of the Dolores River fishery varies considerably in the project area. This will be the case even more so after completion of the Bureau of Reclamation's McPhee Dam and Reservoir in 1984. This feature of the Dolores Project will provide regulated flows to enhance the stream fishery downstream of the dam. As a result of these flows, the first 11 miles of river downstream of the dam would be managed as a trout fishery. An additional 45 miles of the river would be managed for warm water species of fish. The statement on the Dolores River should be revised to reflect these improved stream conditions.

Response
The comment is noted.

Comment 17
Page 4-21: The Colorado River Squawfish has been found in the Gunnison River downstream of Delta.

Response
The comment is noted. REA has concluded that the proposed project will not impact the Colorado River Squawfish and the USFWS, in a letter dated July 29, 1983, has concurred with this conclusion.

Comment 18
Page 4-23: The razorback sucker has been found in the Gunnison River as far upstream as Delta, Colorado (Bio/West, Logan UT by Paul Holden).

Response
The comment is noted. The proposed project will not impact this species.

Comment 19
Page 4-35, National Monuments, second paragraph: Desert bighorn sheep have been recently transplanted into the Colorado National Monument.

Response
The comment is noted. The proposed project will not impact this species.

Comment 20
Page 5-31, Threatened and Endangered Species: There appears to be a slight contradiction throughout this section. For example, it is stated in the second paragraph: "a revised Biological Assessment is being prepared and REA will consult with USFWS on any effect this project may have on these species". However, in the case of most species, it apparently has already been determined that the project would have no adverse effect on the listed species. Either this determination is premature or the revised Biological Assessment is unnecessary.

Response
A Biological Assessment was prepared for the revised project because several new corridors have been identified and evaluated. REA reviewed the revised document and determined that the proposed project will not affect any federally listed threatened or endangered species. The USFWS reviewed the revised Biological Assessment and the SDEIS. By letter dated July 29, 1983, it concurred with REA's determination (see Appendix D).

Comment 21
Page 5-76, Wildlife, last paragraph: We suggest the following statement be added to this paragraph. "If it becomes apparent that a significant number of waterfowl or other birds are being killed by striking the lines, it may become necessary to mark or flag selected portions of the line with colored markers or other devices."

Response
The suggested statement is addressed in the mitigation plan which is found in Section 2.3 of this FEIS.

Comment 22
SUMMARY COMMENTS
It is obvious that a tremendous amount of work has been done since the original Preliminary Draft EIS was distributed in 1981. The Supplemental

Draft EIS is a comprehensive, well written document. We appreciate being given the opportunity to comment, and we hope our comments will aid in the preparation of the final EIS.

Response
No response required.

3.3.3 Forest Service
Comment 1
Errata Sheet shows Alternative B without the tap line as having only one mile more of commercial forest being impacted than Alternative C. It should be more like 6 miles more.

Response
The information used in Table 3-10 is derived from the segment profiles found in Section 4.12 of the SDEIS. The information displayed in the profile was obtained by using the centerline of the corridor segments as a reference. Based on the resource information provided by the San Juan National Forest and use of the centerline of the corridor segments, the information on the errata sheet is correct. If a more northerly reference point had been used in corridor segment 30d, the tap line would impact 9.6 km (6 miles) more than Alternative C.

Comment 2
Pages 1-3 and 3-59
Page 1-3, first paragraph states "Depending upon system conditions and other developments, the proposed 345 kV transmission line may include a 345 kV tap line to the Lost Canyon Substation..." and on page 3-59, first paragraph, fourth sentence states "...the proposed Rifle-San Juan 345 kV transmission line may include a tap line from the 345 kV line into the Lost Canyon Substation." There seems to be some confusion on the need for this tap line. In a letter dated May 11, 1983 from Colorado Ute to Paul C. Sweetland, Forest Supervisor, San Juan National Forest, it was stated that there was "no electrical requirement to connect Rifle-San Juan line into Lost Canyon Substation, either initially or in the future, and we do not anticipate tapping the line for this purpose." This position needs to be clarified by Colorado Ute and REA.

Response
Please refer to response to Comment 1 in Section 3.3.9.

Comment 3
Page 1-4, first paragraph is misleading when it states that the proposed line would parallel Western's 230 kV line to the Montezuma, La Plata County line. In fact, it does for a distance but it is proposed to leave it as shown in figure 1-1 of the SDEIS.

Response
Alternative B would parallel and be adjacent to the existing Western 230 kV line to a point about 48 km (30 miles) south of the San Miguel/Dolores County line. It would then depart the existing line and turn to the southeast.

Comment 4
Page 1-9, Major Concerns and Issues does not address what has been voiced so much by the public, i.e., multiple rights-of-way affecting their land use.

Response
This issue has been raised in public meetings, especially in the Mancos area. Several pipelines and electrical transmission and distribution power lines cross the same landowners in this area. The landowners have often stated that they do not want another ROW for a utility across their land. The Federal Land Policy and Management Act requires land managers to consider locating new facilities in a common corridor with existing facilities. Many private landowners prefer that the ROWs are dispersed, so that individual owners are not so heavily impacted. Multiple ROWs can have an adverse impact on existing land use. In the Mancos Area, the preferred corridor has been changed to Alternative C. The line would cross FS lands and, therefore, eliminate the need to cross private lands that would contain multiple ROWs.

Comment 5
Table 3-7, Item 6, Erosion Hazard. The 103.0 should be 123.0 and the total should be 129.7.

Response
The comment is noted; however, please note that it is not significant enough to affect the analysis of alternative corridors between Rifle and Grand Junction, Colorado.

Comment 6
Page 3-10, last paragraph talks of purchasing sufficient rights-of-way, where landowners are willing, to allow construction of a possible future second 345 kV line. There is no mention of this in the proposal.

Response
The construction of an additional 345 kV line is mentioned on Page 5-66 of the SDEIS. Western plans to uprate its existing Rifle-Shiprock 230 kV line to 345 kV; however, the exact timing of the uprate has not been determined. A third 345 kv transmission line may be needed if load growth and other system conditions warrant and it may parallel the proposed project.

Comment 7
Page 3-12, Access Road Construction implies that an access road will be needed along the transmission line for its entire length. We believe that total access along the transmission line is not necessary or required for construction or operation and maintenance.

Response
The project participants do not intend to have continuous access along the transmision line for its entire length. Existing access roads will be used wherever possible. Lack of adequate access could result in increased maintenance costs and longer outage times.

Comment 8
Page 3-44, Land Use does not address subdivisions or potential subdividable lands, which is a Land Use.

Response
Subdivisions or potentially subdividable lands were accounted for in the human resource category (see Appendix B of the SDEIS).

Comment 9
Page 3-53, fifth paragraph states "The Agencies preferred corridor between Grand Junction and Montrose is Alternative B." Alternative B does not affect or cross National Forest System lands. The Forest Service has not identified a preferred corridor in this area.

Response
No response required.

Comment 10
Page 3-61, third paragraph states that C would cross the most commercial timber, but B crosses more commercial timber. Alternative C would cross more only if the tap line is built.

Response
The comment is correct.

Comment 11
Page 3-62, third paragraph states "The Agencies will select a preferred corridor after the evaluation by the joint study team is completed." See the enclosed Decision Notice and Finding of No Significant Impact for the preferred corridor.

Response
Please refer to Section 2.2.1 of this FEIS for the response to this comment.

Comment 12
Page 5-19, sixth paragraph states "The edge effect would be most dramatic in densely forested areas where tall trees would gradate to smaller trees and shrubs and finally grasses and forbs." The method that has been suggested to clear rights-of-way for this project still creates a "slot" or "tunnel" effect. That method was used in past right-of-way clearing. The gradation method, if used in even age stand of trees really creates a slot because of limited small trees in the stand. The right-of-way type of clearing that will be used on National Forest System lands is to top trees and selectively remove trees under the conductor and along each side at a safe electrical distance. This is about 12 to 15 feet from conductor to vegetation. This type of right-of-way clearing reduces or eliminates the "slot" or "tunnel" effect that is created by the other method of right-of-way clearing.

Response
REA concurs with this comment.

Comment 13
Page 5-50, Impacts on Human Resources. The FEIS should address multiple rights-of-way impact on the land and other human resource impacts. For example, what is the impact of multiple rights-of-way on a ten acre tract of land?

Response
Multiple ROWs do have an impact on small parcels of land. Multiple ROWs would have a negative impact on the owner that wished to subdivide the land or add additional structures to his property. Small parcels of land would be avoided to the extent practicable, especially if homes are located on the property.

Comment 14
Page 5-54, Socio-economic Impacts, states that easement acquisition would benefit landowners but fails to mention that in some cases could be an overall net loss to the landowner.

Response
The participants will negotiate an easement with each landowner. In some cases, easement acquisition could be viewed by the landowner as a loss, in spite of just compensation. Refer to Comment 109 in Section 3.3.11 of this FEIS for further discussion.

Comment 15
Page 5-72, Item 2 under Geologic Hazards. Need to add the following mitigations: "Temporary access roads will be aligned and graded to conform to the natural landscape." "On National Forest System lands, access roads will not be constructed in unstable areas."

Response
These mitigation measures are incorporated in the mitigation plan found in Section 2.3 of this FEIS.

Comment 16
Page 5-73, add the following mitigation measures under Soils (also could be used under Visual Resources): "Tower structures and sites will be designed to conform with the terrain. Leveling and benching of tower and assembly sites will not be allowed."

Response
The Forest Service's mitigation request may be too restrictive. Leveling and benching of tower and assembly sites is normally not required; however, it may be necessary in certain areas. The participants will construct the transmission line according to the stipulations included in the FS authorizing document.

Comment 17
"Construction of leveled earth equipment platforms, for the use of cranes in the assembly of structures, will be allowed at the end of temporary spur roads. Only one platform per structure site will be allowed, unless otherwise authorized."

Response
This mitigation measure is acceptable and is incorporated in the mitigation plan found in Section 2.3.

Comment 18
Item 4 under Soils states "Disturbance of steeply sloping . . ." A clarification should be made on "steeply sloping areas", we suggest anything over 35% be classified as steeply sloping.

Response
A clarification of "steeply sloping" is included in Section 2.3.

Comment 19
Item 2 under Water Resources, "form" should be "from".

Response
The change has been made.

Comment 20
Page 5-76, Item 1, last sentence is not clear. It states "Wetlands and riparian areas that cannot be entirely avoided would be spanned without construction in the wetlands." If you cannot avoid the wetlands, how can you avoid construction?

Response
The transmission line could span a wetland and not involve construction activity in the wetland. No wetlands were identified within the corridor network that could not be spanned.

Comment 21
Page 5-79, Item 4. This is not a mitigation measure, it is only a requirement for payment of destroyed or cut trees.

Response
The comment is noted.

Comment 22
Last item under Human Resources, what is being mitigated?

Response
Potential conflicts with private landowners and the Southern Ute Indians are being mitigated.

Comment 23
Page 5-80, first item states "Appropriate permits would be obtained prior to final centerline location and construction." What is being mitigated?

Response
Potential conflicts with Federal, state and local government agencies would be mitigated.

Comment 24
Page 5-81, Items 2 and 3 under Electrical Effects. These two items are not mitigation measures, they are informational statements.

Response
These two items have been removed from the Mitigation Plan and will be incorporated into the easement forms.

3.3.4 Environmental Protection Agency
Comment 1
REA indicates the need for the facility as a foregone conclusion. However, the circumstances have not changed which led to the Colorado Public Utility Commission's (PUC) denial of the Certificate of Public Convenience and Necessity. The PUC concluded that existing power lines could carry twice the current load, which would meet the needs of Southwest Colorado through 1986. PUC also indicated that WAPA (Western Area Power Administration) could increase its 230 kV capacity by 1/3 (with low cost expenditures) so as to meet needs through 1989. The 1982 forecasted demand was 13% while actual load growth was only 7% that year. The 1983 year to date (June) annual demand has only increased 2.2%. The evidence that projected electrical load has not increased as expected indicates significant overprojection by Colorado-Ute. The review of conservation alternatives and alternative power supply technologies is very limited. The EIS does not reflect an in-depth study of engineering costs and environmental considerations of such alternatives. Recently, Colorado-Ute announced it had created a subsidiary to invest in small hydro, solar, and co-generating alternatives. If such small scale facilities are practical, as indicated by Ute, then decentralized facility location could affect the location and need for this transmission line. With the validation of lower demand projections, one or more of these alternatives may be more viable. Their environmental impacts deserve closer scrutiny. EPA, therefore, recommends a detailed study of these and other alternatives, such as hydro, wind, and coal-fired activities.

Response
The PUC approved a Certificate for this project as proposed by Colorado-Ute and PSC on September 20, 1983. REA has reviewed the purpose and need of the project and has concluded that the 345 kV line is needed. Western, PSC and Colorado-Ute performed studies which demonstrate that pooling resources and constructing one major transmission system is more cost-effective than constructing three minor lines suitable only to their singular needs. A joint project would, in the long term, best meet the collective needs of the participants. Western's 230 kV line is loaded to full capacity the majority of the time with present Colorado-Ute loads and Western's transfers. Any increase in Colorado-Ute loads served by this line reduce necessary Western transfers to Arizona. Western cannot remove its 230 kV line from service for uprating until a parallel line is constructed.

Colorado-Ute determined that any alternative, to be operationally and financially feasible, must use Colorado-Ute's major generation resources that exist in the Craig and Hayden, Colorado area. This is where the

most ample sources of power available to Colorado-Ute are located, and to ignore these existing generation facilities and to construct new ones such as hydro, wind and new coal-fired facilities in order to solve a transmission capacity problem would be duplicative and an unnecessary financial burden on consumers.

Alternatives such as those suggested by EPA were considered and eliminated from futher analysis in the SDEIS. They were eliminated because they did not satisfy the participants' needs, they were not economical, or they were only a temporary solution to meet some of the needs for the project (see Section 3.3 of the SDEIS for further discussion). A large number of alternatives were evaluated in the SDEIS before REA came to the conclusion that the 345 kV proposal was the preferred alternative. REA has concluded that further evaluation of alternatives such as those suggested by EPA would not reveal another more favorable alternative.

Comment 2
Page 1-10: The fourth paragraph states, "No published scientific studies to date have shown adverse effects on humans from electrostatic and electromagnetic fields produced by 345 kV lines". It should be noted however, that current research is raising significant questions concerning the bioeffects of electric and magnetic fields. An example is Dr. Nancy Wertheimer's epidemiological studies which have found correlations between 60 Hz magnetic fields and the incidence of cancer. We recommend a more extensive review of the current literature in this area.

Response
REA and the project participants have conducted an extensive review of the literature on this subject and consulted with DOE and other organizations regarding bioeffects of electric and magnetic fields. Appendix B includes a bibliography of some of the publications available in the libraries of REA and the participants. The conclusion reached after reviewing the scientific literature on the subject is that the statement in the SDEIS is valid "that no published scientific studies to date have shown adverse effects on humans from electrostatic and electromagnetic fields produced by 345 kV lines." Conclusions from EPA's own sponsored research, was stated as follows: "It also appears to be reasonably well established that the normal environment produced by such transmission lines (60 Hz, 700 kV or higher) does not produce any significant health or environmental risks." (IIT Research Institute, 1979) Dr. Wertheimer's epidemiology research was conducted on distribution lines in an urban setting where these lines were in close proximity to residences. Fulton (1980) conducted a similar study in Rhode Island and found no relationship between childhood leukemia and electric power distribution facilities. After publication of Fulton's results, Wertheimer and Leeper (1980) offered in part the following comments, suggesting that their own findings may have been presumptuous: "We feel the Rhode Island results have clarified an important research point: because of the many exposure sources and the relationship of such

sources to various population characteristics, it is probably not fruitful to pursue the magnetic field/cancer relationship through epidemiologic studies, except where a reasonably unexposed population and carefully matched control group can be assured.

Comment 3
Page 3-10, third paragraph: Here it is stated that the minimum right-of-way will be 150 feet in width. From Figure D-3, this width corresponds to an electric field at the edge of the ROW of 1.8 kV/m for the horizontal configuration and 0.9 kV/m for the delta configuration. We believe that the greatest field at the edge of the ROW should be 1 kV/m. Hence, it is our opinion that the horizontal configuration design should be modified to lower the edge-of-ROW electric field strength. Additionally, if construction of an adjacent transmission line is a serious possibility, as Section 3.2.3 suggests, the future availability of additional land to expand the ROW should be considered.

Response
REA and the participants have concluded that the electric fields at the edge of the ROW for the horizontal design would not pose a health risk. This conclusion is based upon the review of the literature discussed in Section 2.2.5.1 of this FEIS. Acquisition of additional ROW is discussed in Section 2.1 of this FEIS.

Comment 4
Page 5-63, third paragraph: This section states that the line will not induce currents greater than 3.5 mA through large metallic objects according to REA calculations. It is uncertain from the DEIS what this number represents because two sentences later, the DEIS states, "...the maximum induced electrostatic current of the largest anticipated vehicle would not exceed the 5 mA level..." Assuming that 5 mA is the theoretical maximum induced current and not the probably actual current, and realizing that values as high as 90% of the theoretical maximum induced current have been measured, a 4.5 mA induced current is within the range of possibility. This is more than twice the current that many adults would consider painful and which could cause an adult to withdraw involuntarily. Such startle reactions are potentially dangerous to workers who might recoil into moving agricultural or construction machinery, for example.

An additional concern is that it is likely that at 4.5 mA, a child would be unable to release the source of an induced current. This level approximates currents which could result in tetany in the chest muscles and possibly respiratory arrest. While this is an extremely unlikely event that has never, to our knowledge, occurred as a result of a power-line induced current, a recent Department of Energy Report (DOE/EV-0056) references two situations in which children were killed by currents of 7-8 mA. Accordingly, we feel REA would exercise good judgment in considering a lower induced-current design.

In this situation, REA is suggesting that the potential exposure be allowed to be within an appreciable fraction of the lethal level for a child. We question the wisdom of this even though 4.5 mA is below the 5 mA National Electrical Safety Code standard and the American National Standards Institute standard.

Response
Please refer to Section 2.2.5.1 of this FEIS.

3.3.5 Federal Highway Administration
Comment 1
We note that the document has been sent to the Colorado and New Mexico State Clearing Houses: however, since the Highway Departments of both states require a permit before crossing State or Federal highways, we would suggest that they receive copies of this document for review. This action would assure their involvement in this important project.

Response
Copies of the SDEIS were previously sent to the Colorado and New Mexico State Highway Departments.

3.3.6 Federal Aviation Administration
Comment 1
During your planning process for determining final transmission line routing, keep in mind that notice to the Federal Aviation Administration (FAA), is required when any structure would exceed 200 feet above ground or when any structure within 20,000 feet of a public use airport with a runway more than 3200 feet in length exceeds a 100:1 slope from the airport (within 10,000 feet of a public use airport with a runway not more than 3200 feet in length exceeds a 50:1 slope from the airport).

Response
As stated in Section 2.3 of the FEIS, "The proposed transmission line will be constructed in compliance with all applicable Federal regulations to minimize interference with any existing transportation systems or to reduce hazard to airports or navigable airspace." FAA will be notified if any structures exceed 60 m (200 feet) or are located in the vicinity (as defined in the comment) of an airport.

3.3.7 Colorado Division of Wildlife
Comment 1
Several areas were located along the proposed corridor that will be hazardous to aircraft in our line of work if not marked for high visibility. Those areas are identified as: Dry Creek T47N, R11W, S2; Horsefly Creek T46N, R11W, S19; North Creek T45N, R11W, S30; McKenzie Creek T45N, R11W, S31; San Miguel River T44N, R12W, S14; Beaver Creek T43N, R12W, S4; North Side Dolores River Canyon T37N, R14W, S5; Lost Canyon T37N, R13W, S30; West, Middle, East Mancos River Canyons are candidate and may require identification upon closer inspection; and it is recommended that the towers and span be marked with highly visible orange spheres.

Response
After the final alignment of the transmission line has been determined, those areas listed above that are crossed by the line will be evaluated as to aircraft hazard. If a hazard exists, aircraft hazard markers would be installed.

Comment 2
Road closures should be implemented on all roads which were constructed or opened for the purpose of line construction. Those areas where roads or vehicular access did not previously exist should be contained with controlled access points (locked gates) and be used only as necessary for maintenance of the line. If the preferred alternative is selected, the Division specifically requests that vehicular access into Horsefly and McKenzie canyons be closed permanently following construction.

Response
Please see response to Comment 98 in Section 3.3.11 of this FEIS.

Comment 3
Any state wildlife area land needed for the ROW should be replaced (rather than ROW purchased) with equal value land, preferably adjacent to the affected property. A power line ROW would negate most development practices the DOW might implement in the future, therefore, this land should be replaced.

Response
The participants will contact the CDOW and negotiate with respect to crossing CDOW managed lands. It is anticipated that the participants and CDOW can reach an agreement in a timely manner for such easements.

Comment 4
Calving and fawning areas are to be avoided during the period May 15 through June 15. This is recommended for elevations 7500-10,000 feet.

Response
Timing of construction activities would be planned in cooperation with land management and fish and wildlife agencies to minimize disturbances during the reproductive seasons of species such as mule deer, elk and antelope.

Comment 5
Land use agencies will recommend a mixture of vegetative species to be used in revegetating the ROW following construction. The DOW recommends that browse (low shrub) species be included in this mix on big game winter range areas. Land use agencies should require that erosion problems be addressed annually as part of the ROW agreement. The Division prefers that a straight line effect be avoided along any corridor. The DOW recommends that corridors undulate along the edge to prevent the straight line effect. Undulating lines will benefit wildlife more and could be considered as a mitigation effect. Also, shrubs less than 15 feet in height should remain as much as possible.

Response
The comment on including browse species in the revegetation mixture is noted and will be evaluated by the land management agencies during the selection of a revegetation mixture.

Pages 5-16 and 5-75 of the SDEIS state that any problem with conductor clearance or soil erosion would be noted and corrected during maintenance inspections.

Page 5-15 and 5-75 of the SDEIS state that the joint USDA/USDI publication Environmental Criteria for Electrical Transmission Systems would be followed to the extent practicable during the design, construction and maintenance of the proposed transmission line. This publication advocates undulating edges and feathering of vegetation in the transmission line ROW. Refer to the response to Comment 12 in Section 3.3.3.

Comment 6
The Statement reports that the line will be raptor proofed upon construction according to the standard guidelines established for this protection. The Division concurs with this action.

Response
No response required.

Comment 7
The DOW prefers Alternative E alignment in the Government Springs area south of Montrose. Alternative E is adjacent to a present line and would not go through new areas as the preferred alternative does.

Response
The agencies's preferred corridor is Alternative A between Montrose and the Norwood Substation site because it would have less impact on small private land parcels and subdivisions.

Comment 8
Construction during hunting seasons (October 15 through November 15) will be incompatible with activities on state wildlife areas that have big game. The general public will attempt to use line construction access roads on public lands during hunting seasons. This can cause interference with work crews, affect their safety, and allow considerable unnecessary off road vehicle use.

Response
Construction during the hunting season will be evaluated on a site specific basis. In those areas where hunting and construction activities would be incompatible, construction activities would be curtailed.

Comment 9
The Bodo Wildlife Area contains a land use covenant which may require approval by Nature Conservancy and the Bureau of Outdoor Recreation for implementation of line construction on the area (Note: The covenants apply to the Mapco pipeline). Mitigation in the form of land exchange will most likely be recommended as was the Mapco case.

Response
Please refer to the response to your Comment 3.

Comment 10
The DOW has no recommendations other than the preferred alternative on the southern route.

Response
No response required.

3.3.8 City/County Planning Grand Junction, Mesa County
Comment 1
(P. 1-10) In the area of human health and welfare, all data on the biological and health hazards of transmission lines should be researched. A review of only the published studies is not acceptable. In addition, the Bibliography lists only two publications related to the biological effects of transmission lines. This Department recommends that a complete assessment of the biological and health effects of transmission lines on humans be included in the EIS and a complete bibliography of researched material also be included.

Response
Please refer to Section 2.2.5.1 and Appendix B of this FEIS.

Comment 2
(Table 2-1, 1-2) These tables show a projected increase in power and energy requirements for Grand Valley Rural Power. Annexations by Grand Junction, Fruita and Palisade will transfer areas served by GVRP to Public Service Company as per their franchise. Have annexations been considered for these projections? If so, what is the rationale for increased power and energy demand? If not, an analysis of possible losses to Public Service should be included.

Response
Colorado-Ute's Power Requirements Study is based largely upon the projections made by each of its 14 member systems. Grand Valley Rural Power, before completing its most recent Power Requirements Study, participated in a joint review of area growth with PSC and the City of Grand Junction for the purpose of identifying possible annexations. This information was subsequently included in Grand Valley's Power Requirements Study. This study shows that although Grand Valley has lost loads in the past due to annexation, its rural areas have nevertheless sustained a steady growth. It further shows that a substantial amount of Grand Valley's load is in rural areas and is not likely to be subject to city annexations. Growth in these rural areas is expected to continue to overshadow load losses due to city annexation.

Comment 3
(P. 2-8) What are "severe economic and social penalties?" A generalization of this magnitude is not an acceptable rationalization for the need for this project.

Response
If adequate transmission capacity is not constructed, Colorado-Ute members in southwest Colorado would have to place a moratorium on new electric service connections and to curtail service to some consumers during problem periods. Such developments would have an impact upon local economies and cause inconveniences to consumers. An unreliable power supply could also discourage future economic growth in an area.

Comment 4
(P. 2-22) What is the source of the population for Grand Junction and suburban areas? What geographic area does this cover. The Department estimates the 1983 population for Mesa County to be approximately 87,500 persons, with approximately 75,000 persons living between Fruita and Palisade.

Response
The information used in the SDEIS was provided by PSC. The updated information is noted.

Comment 5
(P.3-4) What are "acceptable levels of radio/television interference?" Any interference of radio and/or television reception to residents living in proximity of this proposed line would not be acceptable.

Response
The Rifle-San Juan line would be designed so that it does not contribute to less than FCC satisfactory service under fair weather conditions for all residences 90 m (300 feet) or greater from the 345 kV line (SDEIS, P. 5-62). The participants have made the following commitment in the Mitigation Plan in Section 2.3: "Any television or radio interference problems attributed to the proposed 345 kV transmission line would be corrected to the extent reasonably possible." (FEIS, Section 2-3).

Comment 6
(p. 5-19) Increasing the diversity of wildlife is not necessarily a benefit. Disturbing the ecosystem may increase competition between species thereby adversely affecting some populations. Before the assumption that "wildlife would likely benefit," can be made, more detailed study and analysis is required.

Response
REA believes that the studies cited in conjuction with this statement, "wildlife would likely benefit" (Mayer 1976, Flecher and Busnel 1978), support this statement.

Comment 7
(P. 5-64) A summary of the literature available on biological hazards should be included in the EIS. This Department is concerned about the possible biological hazards associated with transmission lines. Information on biological hazards of transmission lines should be made available to interested parties, as well as REA. Since this a very controversial issue, a more definitive analysis should be included. The statement that "REA . . . has concluded that the proposed 345 kV transmission line would not constitute a biological hazard" is totally insufficient. Please also see comment #1.

Response
Please see the response to your Comment 1 and the response to Comment 1 in Section 3.3.4.

Comment 8
(P. 5-66). If WAPA intends to uprate its 230 kV transmission line, why is this proposal necessary. Is it not duplication? If a parallel line to the proposed project is anticipated, adequate ROW should be obtained at the present time, to avoid conflicting land uses if the system is expanded.

Response
Western's existing Rifle-Curecanti-Shiprock 230 kV transmission line is an integral component of the Colorado River Storage Project (CRSP). This line is heavily loaded and cannot be taken out of service for its needed uprating because now there is no other way to serve existing loads without the line. After the proposed Rifle-San Juan 345 kV transmission line project is completed, sufficient transmission capacity would be available to meet existing loads, allowing Western to take its 230 kV line out of service for uprating. Acquisition of additional ROW is discussed in Section 2.1 of this FEIS.

There is no duplication because the need for incremental transmission capacity growth in southwestern Colorado is great enough that both the proposed project and the planned uprate are vital to meet both local and regional reliability needs. The uprate of Western's 230 kV line will be fully evaluated in a later review process.

Comment 9
(P. 5-76) "Human disturbance to wildlife ... could be restricted...." "could be" is not a satisfactory mitigation measure.

Response
Locked gates would be used to restrict unauthorized access to the transmission line ROW. Access roads that are no longer needed would be reshaped and reseeded which would discourage unauthorized use by the public.

Comment 10
(P. 5-82) What is the basis of the assumption of "short-term" wildlife disturbance? Alteration of the ecosystem may not be short-term. Why is the promotion of more diverse species considered to be a positive effect? Increased competition due to increased diversity may adversely affect certain populations. See Comment #6.

Response
The disturbance being referred to on Page 5-82 is the disturbance to wildlife during the construction phase. This disturbance would be short term. Alteration of the ecosystem may not be short term, but the area affected, 45 m (150 feet), would be minimal. Communities with greater species diversity display more stability and are less likely to be affected by external disturbances.

Comment 11
(P. 5-82) If the facility is abandoned, the ROW should be reclaimed. It is recommended that a reclamation plan be required at the time of abandonment.

Response
If the facility is abandoned, the ROW would be reclaimed. A reclamation plan would be developed in accordance with local statutes.

Comment 12
(General) Throughout chapter 5, the terms "may," "likely" and "apt" appear much too frequently. The purpose of this document is to assess the environmental consequences of this project. The above referenced terms connote a lack of data and understanding. If insufficient data is available, more research is indicated.

Response
Based upon the experience of REA and the cooperating agencies on other projects, it is REA's position that the SDEIS adequately addresses the potential environmental impacts of the proposed project. REA utilizes a corridor concept rather than a centerline evaluation. This approach allows for more flexibility in routing the line; however, it makes it difficult to determine specific impacts. Therefore, the terms "may," "likely," and "apt" are appropriate.

Comment 13
(Purpose and Need) According to the SDEIS, Colorado Ute will own 37 1/2% of the capacity of the proposed line from Rifle to Grand Junction and 50% from Grand Junction to San Juan. With minor exceptions (as noted above) Colorado-Ute has specified and projected their needs for this project. But the SDEIS has no projections for Public Service Company's nor WAPA's share of the capacity. The total capacity and projected loads of all the utilities on this proposed line should be included in order to assess the total need of the project.

Response
PSC developed four scenarios for load growth in the Grand Valley through the year 2002. The medium growth scenario (which assumes that Union's Demonstration Plant would be the only shale oil venture to go into production at 10,000 barrels per day) was selected as the guide to develop the forecast for power requirements and need to participate in the proposed project.

Public Service Company of Colorado
Power Requirements (in MW) for the Grand Valley

1982 Actual	83	84	85	86	87	88	89	90	95	2000	2002
97	101	107	112	116	120	124	129	133	158	188	201

Interpolation of these projections indicates that the 1995-1997 load would be approximately 165 MW west of Cameo in the Grand Valley. If the largest generation unit at Cameo and the Rifle-Cameo 230 kV transmission line are out of service at the same time, the system would have only 40 MW of power available. This power would come from the remaining generation unit at Cameo and the combustion turbines at Fruita. PSC's 25 percent share of the proposed project, 125 MW, plus the 40 MW available from Cameo and Fruita would provide the required power until the local generation source was available to be put back into service, or until additional generation capability is developed in the Grand Junction area.

Western will own 37 1/2 percent of the Rifle-Grand Junction portion of the line and 50 percent of the Grand Junction-San Juan line. Western does not intend to use its portion of the proposed Rifle-San Juan line to directly serve load but rather to relieve inadequacies in the present western Colorado transmission system. The additional capacity owned by Western will allow Western to meet its contractual obligations for power deliveries and help Western maximize the Oil Conservation Program as well as greatly increase Western's ability to take advantage of the economic benefits and flexibility of hydrogeneration (see Sections 2.3 and 2.4 of the SDEIS).

3.3.9 Montezuma County
Comment 1
In reviewing the EIS and how it relates to Montezuma County I find one major inadequacy and have several other comments on improving the information in the document.

Our major goal here is to select a route for this line across Montezuma County. Much information is presented on the effects of each of the alternatives. Yet the information presented does not help arrive at a conclusive decision. Does this line need to tie into the Lost Canyon Substation or not? Until this question is answered a route containing the least impacts cannot be chosen.

Response
The 345 kV transmission system has been planned such that it would not be necessary to tap the Rifle-San Juan 345 kV line into the Lost Canyon Substation as long as Western uprates its Curecanti-Shiprock 230 kV line to 345 kV operation in a timely fashion.The tap in and out of Lost Canyon Substation is an alternative proposal which would strengthen the transmission grid if Western is unable to or substantially delayed in converting its Rifle-Curecanti-Shiprock 230 kV line to 345 kV operation.

Comment 2
If demands increase as expected, when will the proposed system become inadequate for the needs at Lost Canyon? -Installation of the proposed line will relieve loads on the two existing lines (C/U 115 kV and Western 230 kV) in the area. Also, the proposed Long Hollow Substation will provide additional "transmission support for the Lost Canyon, Cortez, and Cahone areas" (1). Western's capacity will be doubled through the area. With the wheeling of power, it appears that Empires' expected demands could easily be met through 1991.

Response
The proposed 345 kV system which would include a 345/115 kV substation at Lost Canyon after Western's 230 kV line is uprated to 345 kV, will be adequate to provide Empire with a bulk power supply for the foreseeable future (beyond the 1991 date noted in the comment).

Comment 3
Will construction of the proposed line in any way negate the need for uprating Western's 230 kV line?

Response
Construction of the proposed project will not negate the need to uprate Western's line. Refer to response to Comment 8 in Section 3.3.8. Both lines will be required to meet local and regional reliability needs.

Comment 4
Although Westerns' line is a separate proposal from this one, additional information on it is needed to evaluate and minimize the impacts of the proposed line on Montezuma County.

Response
Refer to Comment 8 of Section 3.3.8. Western cannot remove its line from service for uprate until an additional line is built. The construction of the Rifle-San Juan 345 kV line will provide much of the additional transfer capability which Western requires. Western will initiate a separate NEPA process on the uprate so that its impacts can be thoroughly evaluated.

Comment 5
Section 2.0 Purpose and Need
Table 2-3 (2) described the annual peak requirements of five Colorado Ute members, and table 2-3(3) describes shortfall in transmission capacity. Reviewing this data does not give a clear understanding of the situation. Is it necessary for a utility provider such as ColoUte to be

able to meet the greatest peak demand that can be expected when other lines are available in the area? It seems the public interest would best be served by being able to meet normal projected high loads, and allowing the Regional interconnected Transmission system, described in Section 2.5, to provide additional power if necessary.

Response
Colorado-Ute is required by law to provide adequate service to its member systems, which includes meeting their peak load demands. Colorado-Ute, therefore, must have both the generation resources and adequate transmission capacity to meet the peak load. In some areas of its service territory, Colorado-Ute has been able to contract for usage of other utilities' transmission lines in order to serve member loads where capacity in their transmission facilities was available. In southwestern Colorado, however, the only other bulk transmission facility that is connected directly to Colorado-Ute generating resources is Western's 230 kV line which is presently loaded to capacity. Please refer to Section 2.3.2 of the SDEIS for additional discussion.

Comment 6
Summing the columns in table 2-3 is incorrect. These are peak loads that occured at one time during a year. To add them is to say that they all occured at the same time. A summary of the power Colorado Ute provided to their members at peak times during the year would be more realistic, and should be included for comparison.

Response
The five southwest Colorado member systems listed in Table 2-3 are all winter peaking systems which generally peak at approximately the same time each year, usually coinciding with a period of extended cold weather. There is some diversity between the member system peaks that would reduce their arithmetic total. However, transmission system losses, normally not included in the member peak, presently offset the diversity factor. REA believes that in the case presented here, the sum of the columns in Table 2-3 does give an accurate estimate of the total power requirements of the five southwest Colorado members.

Comment 7
Table 2-3 shows that in 1991 the Shell CO2 load is expected to be 62 MW. It is expected to increase further in the following years. If this is the case, why did they build a 115 kV System, capable of carrying only 50 MW? (p.2-5). Table 2-5 show that Colo Ute expects to need 210 MW of additional capacity in 1991; yet by owning 1/2 of this 345 line, they will only have an additional 125 MW of capacity. Thus the system will be inadequate upon completion.

Response
The Shell CO2 115 kV transmission system is being constructed with a large capacity conductor. This design, coupled with the short distance to the bulk power supply located at Lost Canyon, will provide adequate service for the projected Shell project loads for the foreseeable future. The proposed Rifle-San Juan 345 kV line will have a nominal capacity of 500 MW. Colorado-Ute's 50 percent share will, therefore, be approximately 250 MW between Grand Junction and the San Juan Generating Station.

Comment 8
3.2.3 Right of Way Considerations. More information is needed for affected entities to evaluate clearing needs, visual impacts, and use of alternate support structures. Describing clearing requirements more fully would be beneficial. Colo Ute should work closely with affected parties concerning these items.

Response
Only certain portions of the proposed corridor will require significant tree clearing. Generally, the pinon/juniper vegetation-type will require clearing only around tower sites and the removal of a few isolated tall danger trees between spans. The pinon/juniper vegetation-type is short and has a slow growth rate; therefore, the transmission line will span over the trees. The conifer-aspen vegetation-type will require the most tree clearing activities. Mitigation measures will include providing tree screens and undulating boundaries to prevent the straight line of sight visual effect. Trees removed during ROW clearing will be disposed of by methods agreed to by individual landowner and by governmental agency requirements.

Comment 9
3.4.2 Rifle-Grand Junction 345 kV, Grand Junction to Shiprock 230 kV Transmission Line. This section and table 3.1 states that this proposal meets the needs of Colo Ute & PSC, while Western would have to construct an additional line from Rifle to Shiprock. Western is already planning on new construction as stated in Sec. 3.7.2.4 and table 5.4.

Response
Western is not planning on constructing a new 345 kV transmission line in western Colorado. Western anticipates a need to uprate its Rifle-Shiprock 230 kV line to 345 kV, as indicated in Section 3.7.2.4 and Table 5.4 of the SDEIS, even with the proposed Rifle-San Juan 345 kV transmission line. See response to Comment 4.

Western cannot take its Rifle-Shiprock 230 kV line out of service for uprate to 345 kV without having an alternate transmission path, which at present does not exist. If a 230 kV line were constructed from Grand Junction to Shiprock (as in Alternative 3.4.2) satisfying only Colorado-Ute's requirements, Western would in any event need to construct a separate transmission line to meet its needs.

Comment 10
Uprating the Curecanti-Shiprock 230 kV line to 345 kV is very desirable, as it (1) allows the use of existing towers and right-of-ways, (2) allows the Colo Ute line to avoid almost all private lands in Montezuma County, and (3) avoids the undesirable and unnecessary impacts of a tie from the Colo Ute line to the Lost Canyon Substation.

Response
REA agrees with your comment.

Comment 11
3.4.8 Rifle- San Juan 345 Line This section states that by building the proposed project, Western will not have to construct new facilities. Montezuma County has been told that Western will uprate its 230 line, and thus we will not need to build a tie from the Colo Ute to Lost Canyon Substation. Again, please clarify this discrepancy.

Response
The intent of Section 3.4.8 of the SDEIS is to state that the proposed Rifle-San Juan line is a joint project and that if all three parties were not in the project they would need to build three separate lines. The proposed project is not expected to serve all of Western's future needs but it does postpone construction of additional facilities by Western. No tap line between Lost Canyon Substation and the new 345 kV line would be needed if the 230 kV line is uprated as planned.

Comment 12
3.6.3 Alternative Tower Designs
There was considerable concern voiced from residents of this area with the visual impacts caused by this line. Of great concern was where the line will cross the view of the LaPlata Mountains (line section 30e). It seems that this section of the line, and possibly many forested and woodland areas could be enhanced by the use of H-Frame wood structures. Table 3-4a (p.3-39) shows no detriments for this type of application. What criteria would make these structures impractical? Their use appears as if it would be preferential, and should be used whenever possible.

Response
Steel lattice structures are favored over wood structures in this type of terrain because the steel lattice structures allow longer spans and require less maintenance than wood structures. However, the participants will consider the use of alternate structure designs in visually sensitive areas.

Comment 13
3.7.1.2 Resource Categories and Data Item Values Human resources - I am not in agreement with the values assigned to low density areas. Private lands where the average tract size is greater then 80 acres has been given a low impact rating. The impact of a line crossing a persons property whom has worked to purchase and/or maintain a large tract of property, should not be equated with the impact on public lands. This category should be given a moderate impact rating.

Response
Please see response to Comment 54 in Section 3.3.11 of this FEIS.

Comment 14
Visual Resources - This is a very difficult impact to assess, especially on the scale needed for this study. I recommend that visual impacts be studied on the ground before final line location. This effort should be required of Colorado-Ute, and be done while in close contact with land managers, local governments, and landowners (I should note that the study on visual impacts done in the Montezuma County "corridor study" also needs to be strengthened through field work).

Response
Visual impacts will be taken into consideration in the centerline determination. Mitigation measures found in Section 2.3 of this FEIS will be used to minimize visual impacts of the transmission line.

Comment 15
Section 4.6.1 Vegetative Communities - Agricultural lands (including pasture and grazing lands) have been overlooked on figure 4-5 and figure 4-27. On private lands especially it is more important to note that the land is used for grazing than the fact that it is a mountain shrub community type.

Response
The information displayed in Figure 4-5 was compiled from resource maps of the study area developed by SCS, BLM and Public Service Company of New Mexico. At the scale used in Figure 4-5, it is difficult to include small dispersed tracts of agricultural lands. Also refer to response to Comment 65 in Section 3.3.11 of this FEIS. More exact information will be used in the county planning processes to locate the final centerline.

Comment 16
4.9 Visual Resources - poorly mapped. - see comments above.

Response
The visual absorption capacity of the study area (as well as the other resources mapped in Section 4.0 of the SDEIS) was mapped at a small scale so the entire study area could be mapped. Figure 4.9 is a generalized representation. Larger scale working maps were used to develop the corridor profiles found in Section 4.12 and for the analysis of potential impacts found in the tables and text of Section 3.7 of the SDEIS. REA and the project participants developed the methodology for analysis of visual impacts in consultation with the cooperating agencies. REA believes the methodology is adequate.

Comment 17
4.10 Land Use - Figure 4-11 does not show the four categories of land use described in Appendix B. Commercial forest is not mapped.

Response
Commercial forest is not mapped on Figure 4-11. It is mapped on the corridor profiles found in Section 4.12 of the SDEIS.

Comment 18
Prime Farmlands (Prime soils as designated by the SCS) are not shown in Montezuma County, but many acres of these soils have been mapped by the SCS.

Response
The source of prime farmland information, Important Farmlands of Colorado, SCS, 1980, used to develop Figure 4-11 did not show any prime farmland in Montezuma County.

Comment 19
What is potential commercial forest?

Response
Those areas mapped as commercial forest in corridor profiles found in Section 4.12 of the SDEIS currently have trees of sufficient size to have commercial value. All of these areas may not currently be accessible, hence, they are considered as potential resources.

Comment 20
Commercial forests on private lands have been overlooked (Figure 4-27).

Response
Information on commercial forest resources located on private and state lands has been obtained from the Colorado State Forest Service and has been incorporated into the analysis. Please refer to Section 2.2.2 and the response to Comment 55 in Section 3.3.11 of this FEIS.

Comment 21
If potential commercial forestlands are included potential prime farmlands should also be included (as described by the SCS).

Response
As discussed in the response to Comment 18, Important Farmlands of Colorado does not show any potential prime farmlands for Montezuma County.

Comment 22
The following recreation areas in Montezuma County were not noted, although they were within the corridors studied. Forks Campground, Bauer Lake, and Jackson Gulch Reservoir.

Response
Forks Campground is located in Section 36, T39N, R14W, N.M.P.M., corridor segment 30a; Bauer Lake is located in Section 17, T36N, R13W, N.M.P.M., corridor segment 30d; and Jackson Gulch Reservoir is located Section 3, T36N, R13W, N.M.P.M., corridor segment 30d. If the final alignment or the proposed transmission line is in close proximity to any of these recreational resources as stated on Page 5-81 of the SDEIS, the project participants would coordinate with the appropriate administering agency to minimize potential impacts.

Comment 23
Those agencies preparing an Impact Statement must remember to put special effort into the lands that are not managed by them- namely the private lands. The private sector is repeatedly left incorrectly inventoried, and unprotected. Federal agencies have the responsibility of assisting the public in their laws of incorporation. This document is very weak throughout in its analysis of the private sector lands.

Response
The utilization of the ROW over private lands for the operation and maintenance of the transmission line by the operator will be the same as across Federal land; however, since only easements are being acquired, the principal responsibility for managing the land under the transmission line will remain with the landowners. They retain the right to use the land for any purpose consistent with the transmission line easement. The mitigation measures found in Section 2.3 of this FEIS apply equally to private and Federal land.

Comment 24
A great deal of effort has gone into the preparation of this EIS. Based on the information contained in it, along with further research and local concerns, I would like to recommend that no tie to the Lost Canyon Substation is necessary, and that alternative C be chosen through Montezuma County. The line constructed should be a single circuit 345 kV line . Montezuma County needs additional system support, and would like to have this line built as soon as possible. This response to the EIS is made with the intent of improving the document, not delaying the line.

Response
Alternative C is now the preferred corridor through Montezuma County. No tie from the proposed line to Lost Canyon would be constructed if Western uprates its 230 kV line as planned.

3.3.10 San Miguel County
Comment 1
During extensive public hearings held by the Board of Commissioners as a result of Colorado-Ute's request for a special use permit (required to construct a power line in our County), the Board requested that an alternative route through the far western portion of our county be considered. Colorado-Ute refused to make such an analysis. The Board based their decision on the belief that the residents and visitors to our County deserved such analysis. The Board determined that the proposed route would be allowed only if no additional towers were constructed in that corridor; if additional towers or structures were to be built a far western county route must be considered. The far western area of the county is least populated and utilities located there would have the least impact on our residents and our county.

Colorado-Ute has appealed, to our District Court, the Commissioners' decision referred to above. No decision by the court has yet been rendered.

Response
Two alternative corridors in the far western portion of San Miguel County were evaluated in the SDEIS. One of these corridors was referred to as the Broad Canyon route (Alternative D p. 3-54, SDEIS) which connected to a future substation site in San Miguel County. The other far western San Miguel County corridor evaluated in the SDEIS followed the existing 115 kV transmission line south of Nucla to Lost Canyon Substation and this corridor did not connect to the future substation site in San Miguel County. This corridor was shown in Figures 3-11 and 3-13, and its evaluation was displayed in Table 3-9 of the SDEIS. Both alternatives have larger overall environmental impacts and higher costs (Broad Canyon Alternative-7 million dollars more, far western alternative-22 million dollars more) than the preferred corridor in eastern San Miguel County. Any variation of the two corridors evaluated in western San Miguel County would have similar overall impacts and costs. A comparison of environmental impacts of the three alternatives from Montrose to the Montezuma County-La Plata line can be made from information presented in Tables 3-8, 3-9, and 3-10 of the SDEIS.

Comment 2
Colorado-Ute has stated their intention to build with REA funds all portions of the proposed 345 kv line except that segment passing through our County. It is my belief that such a plan is for the purpose of applying both political and judicial pressure on the County so that Colorado-Ute may obtain "through the back door" what it could not obtain "through the front door".

Response
Ordinarily REA does not permit construction before all the necessary permits and ROW easements have been obtained. On occasion, when the need has arisen, REA has approved the construction of a continuous line section if that section can serve a useful purpose and can be independently justified. However, REA would not permit the participants to construct the line to the boundaries of San Miguel County without first obtaining a San Miguel County permit.

Comment 3
Colorado-Ute, we believe, is attempting to acquire rights-of-way wide enough for more than one set of towers or structures. Such acquisition are made by Colorado-Ute with full knowledge that the required permits for such a power line location are not in hand. It is my belief that Colorado-Ute is now planning for the day that multiple towers and lines will pass through our County. It is the Board's position that any multiple line permanent utility corridor should be located in the far western portion of our county.

Response
Colorado-Ute, at one time, stated that it would obtain ROWs for an additional future line adjacent to the proposed line where private landowners were willing to sell such additional ROWs. However, in view of the Colorado PUC decision authorizing the line, which limits allowed expenditures for future lines, Colorado-Ute does not now intend to purchase such additional ROW unless exceptional circumstances, such as

governmental requirements or special physical characteristics of the land, indicate or require it. Colorado-Ute will be required to obtain approvals from local, state, and Federal Governments, as appropriate, at

the time it proposes to construct any future line adjacent to the line it is now proposing. Approval by San Miguel County or any other county for the proposed line does not commit the County to the approval of future lines in this corridor.

3.3.11 Jack Scott

Comment 1

1.1 Introduction Page 1-2, 5th Paragraph (Para).

Since a final EIS on the original proposal was never issued and since the Environmental Analysis was a large part of the DEIS, the reviewing public of the SDEIS has no knowledge of nor way of knowing the extent of corrections and answers to public comments on the DEIS or if these were incorporated into and corrections made in these documents. From the mistakes in the SDEIS, it appears few corrections were made in the DEIS or EA.

It would be appropriate to print the public comments on the DEIS in the final EIS here so that the public would have the benefit of questions and answers given.

Response

REA and the cooperating agencies determined the project as currently proposed was substantially different from the original double-circuit proposal; therefore, a SDEIS was prepared. As stated on Page 1-2, "It was REA's intention that the SDEIS be reviewed essentially on its own as a single integrated document", and further "the SDEIS contains all maps and basic descriptions of the project necessary to review all reasonable alternatives under consideration." REA decided that since the proposed project was restructured and substantially different than the original proposal, the comments received on the original proposal (DEIS) would not be responded to because the original project was no longer being proposed. Applicable information and concerns expressed in these comments were taken into account in the planning of the revised project and the preparation of the SDEIS.

Comment 2

1.1 Introduction 6th Paragraph.

The revised project is not being reviewed by La Plata County because no new application or formal contact has been made by Colorado-Ute (C-U) to the County. Because of this, the revised plan has never gone before the La Plata County Planning Commission. There have been no county planning meetings for public comments on the present proposal.

Response

There were numerous county planning meetings in response to the original proposal. As a result of comments on the original route, Colorado-Ute has been negotiating with the Southern Ute Indian Tribe for an alternative route location. Colorado-Ute will submit an application for a Special Use Permit for the revised project to La Plata County when the line route is more clearly defined.

Comment 3
1.5.1 Fed Action Alternatives, Page 1-7.
Various stipulations for construction and operation-what are these--include here a sample copy of the BLM Grant of Right-of-way and a FS Authorizing Document.

Response
General stipulations are found in the updated mitigation plan in Section 2.3. The BLM Grant of Right-of-Way and FS Authorizing Document are not available yet, but will be developed after the centerline is determined. Examples of the forementioned documents that have been developed for other projects are available at the local FS and BLM offices.

Comment 4
1.6 Major concerns, and Issues, p 1-9, Para. #2.
Access Roads many times will not be in the 345-kv line ROW. What is the total estimated acreage for roads in addition to the 2025 ha (5000 acres) 345 kV and 50 ha (1250 acres) 115 kV?

Response
It is estimated that approximately 440 km (275 miles) of access roads, either overland or bladed, will be required, of which 320 km (200 miles) may be located off the transmission line ROW. The actual mileage will be determined by site specific requirements dictated by terrain, landowner and governmental permit requirements. As an estimate, 320 km (200 miles) of 4.2 m (14 foot) wide access would result in approximately 142 ha (340 acres) of land required in addition to the transmission line ROW. Not all of these roads would occupy the land for the life of the project, and in segments where the line would parallel existing transmission lines, existing access roads will be used.

Comment 5
Para. #3.
The line changes land use from agriculture to heavy industrial for the ROW. This paragraph assumes that agriculture will remain a viable and economical use of the private land for the life of the project.

This even now is not the case with land use changing to recreation and subdivision. The potential use of this land for these other purposes should be addressed. What is the lines affect on the sale value 1983 costs of the ROW land and the affect on sale value 1983 costs of adjacent lands before and after the line? Sample properties in the Hesperus area can be used. This is an environmental and socioeconomic concern shared by all private owners. It is their environment.

Response
Construction of an electric power transmission line does not change land use from agricultural to heavy industrial use. Most agricultural uses are compatible with transmission lines and will be allowed to continue within the ROW. The fair market value of land will be established by an appraisal. The right-of-way appraiser is primarily concerned with the

changes in value that take place when some portion of a property is acquired for a right-of-way. The appraiser will analyze any changes in value and measure them in terms of the appropriate compensation for the property rights taken.

Comment 6
Agricultural lands also have a potential to produce commercial timber, these lands have an equal value and status with Federal Commercial Forest Lands.

Response
Prime farmland, irrigated cropland and commercial forest were assigned a high sensitivity to impact. Nonirrigated cropland was assigned a medium sensitivity to impact. Private and public land were treated equally in the SDEIS.

Comment 7
Para. #4.
Since Western has admitted in the so called scoping process that they will pay no property tax revenues to the counties, etc., is Western still going to own from Norwood vicinity South to San Juan? What counties will not be receiving this revenue?

Response
Western, as an agency of the Federal Government, is exempt from property tax. Colorado-Ute and PSC will pay taxes based on their beneficial interest in the line. Colorado-Ute will pay taxes on the line in each of the counties listed on Page 5-55 of the SDEIS and PSC will pay taxes in Garfield and Mesa Counties only. Estimated tax revenues for each county are listed on Page 5-55. Western will own and operate the southern half of the transmission line.

Comment 8
1.7 Agency Preferred Alternative.
REA has concluded the project is desirable and necessary so that REA can loan or guarantee the loan for the many millions -- a feather in its cap. Based on REA's evaluation and on public agency input, the decision was made. The Colorado Public Utilities Commission has not yet determined the question of need. The private sector or "Public" has had little if any input into this document and has not been represented fairly or at all by REA. REA appears to have cut and stacked its own deck to choose the preferred corridor.

Response
REA is required to identify a preferred alternative if one or more exists (40 CFR 1502.14(e)) in the Draft Environmental Impact Statement. The selection of the preferred alternative is tentative and is based upon REA's independent review of the project and information it has received thus far. REA recognized that at the time the SDEIS was prepared that the PUC must issue a Certificate for the project (see SDEIS, Page 1-7). REA is required to conduct its environmental review in a timely manner. REA believed that sufficient need for the proposed project existed and, therefore, initiated its environmental review. Since the publication of

the SDEIS, PUC approval was given on September 20, 1983. The public has had input into the development of the SDEIS via public information and scoping meetings, open houses, and comments submitted on the original project DEIS that was issued in July 1981. Public comments received on the SDEIS are being addressed in this FEIS. REA's decision concerning either approval or denial of financing assistance to Colorado-Ute for this project will not be final until its Record of Decision is issued.

Comment 9
2.1 Intro.
If enough participants and thus reasons for the line can be introduced any type of line can be needed. In short the true purpose is to have a large capacity line to rid C-U of its excess power production from its Craig III Power Plant. Where and how will C-U get rid of this Craig III power if the line is not built or is built, to what entities will power be sold? What is the true price to the C-U customer?

Response
Colorado-Ute needs the Rifle-San Juan 345 kV line to provide electric service to the southwest area of the state of Colorado. Table 2-5 in the SDEIS shows the additional capacity needed to serve these southwest area power requirements. Craig Station Unit 3 is being constructed to serve the southwest area power requirements and the power requirements of the other Colorado-Ute member associations. Colorado-Ute has stated it does not expect any rate increases from the addition of Craig Station Unit 3 or the Rifle-San Juan 345 kV line. It has presently committed itself to a goal of no rate increases for 18 months (from early 1983 to mid 1984). REA hopes Colorado-Ute succeeds in maintaining a level cost of power.

Comment 10
2.2.1 Description of Member Loads.
C-U can expect requirements in 1983 to be approx. 7 percent above 1982", include here the true story and figures for the first six months of 1983. These are no where near the expected percentages.

Response
Colorado-Ute's member sales for the first eight months of 1983 (January through August) are 1.3 percent below sales experienced the first eight months of 1982. This reduction is due to the effects of the current recession, particularly in the slowdowns and closings of the mining and milling loads served by Colorado-Ute members, and the decreased energy useage in the agriculture loads served by Colorado-Ute members caused by a wet irrigation season and participation in the Federal Payment-In-Kind program. Colorado-Ute is now seeing indications that its energy sales are rebounding.

Comment 11
2.2.3.
What is meant by "A large capacity conductor will be installed to provide the capability of providing emergency support to Lost Canyon area loads in addition to serving the Durango Area."? What is a large capacity conductor? Where will this (What line segments) conductor be installed? Does this at some future date include upgrading or building a new 115 line from Lost Canyon to Durango?

Response
The large capacity conductor to be installed on the Long Hollow-Durango 115 kV line refers to a conductor capable of carrying a large amount of power over the short seven-mile distance to Durango Substation. This conductor would be designed to handle not only the Durango area load but also have emergency capability of handling a portion of the Lost Canyon area load during outage of the 230/115 kV transformer at the Lost Canyon Substation or the Empire-Lost Canyon 115 kV line. No plans exist to upgrade the existing Durango-Lost Canyon 115 kV line or to construct a new line, although such system improvements are possible if warranted by load growth.

Comment 12
If it can provide emergency support to Lost Canyon why could not Lost Canyon then supply emergency support to La Plata Electric? If it could, the expensive 345 kV line into La Plata County is not required and a more direct route for 345 is preferred like along the existing 230 Western line.

Response
Lost Canyon presently is a primary source of support for the Durango area. It will continue to be an important emergency source to Durango after completion of the Long Hollow Substation. However, Lost Canyon would not be capable of providing primary support for the growing La Plata system indefinitely and provides no support during outages of the Durango-Lost Canyon 115 kV line.

Comment 13
2.3.2.2. Transmission of Firming Energy Required.
Why doesn't CRSP purchase Craig III power plant from C-U and build line segments into Utah to tie into the grid? This relieves C-U from a financial burden and gives Western its sources of power.

Response
Craig Unit 3 is needed to provide power and energy for existing and future Colorado-Ute member loads. If Unit 3 power was not available for member needs, Colorado-Ute would have to purchase higher cost firm energy from other utilities which could result in significant rate increases for consumers.

If lower cost purchases for firming or fuel replacement energy cannot be found elsewhere, Western may purchase energy for use in and outside of Utah from Colorado-Ute at rates, locations, and times that are agreeable to both parties. These purchases may or may not come from Craig III. Transmission to the interconnecting points in Utah is adequate to meet Western's commitments in Utah at the present time.

Comment 14
What does Western pay to CU per kw/hour for firming energy? What does C-U charge each of its member coops for like energy from the same sources.

Response
Colorado-Ute sells energy to Western from time-to-time on an hourly basis. The price of this energy depends on market and system conditions at the time of the sale. Colorado-Ute does not sell firming energy to its members. However, Colorado-Ute's average price of firm power and energy to its members is approximately 4.2 cents per kilowatt-hour (kwh) and 2.6 cents per kwh for interruptible energy sales to its members.

Comment 15
2.3.2.3. It appears that there has been extreme overbuilding of generation capacity near Craig and Hayden and that when Craig III comes on line C-U's misguided planning will come apparent and power will be sold at bargain basement prices if the 345 line is built. Is the line intended to get C-U out of the bind it has gotten itself and REA into?

Response
Colorado-Ute's need for the line is clearly stated in Section 2.2.2 of the SDEIS. The Rifle-San Juan transmission line project is needed to provide adequate transmission capacity to serve Colorado-Ute's existing member loads in southwest Colorado with a reasonable reserve capacity for expected future load growth.

Comment 16
2.3.2.5 Trans of energy.
How can this supplementary power be lower cost than the hydro power? Hydro is the cheapest unless someone like the C-U member is subsidizing the coal generation to bring the price lower. If the huge coal plants had been sized within reason to their load service areas, there would not be excess cheap power available to Western and CRSP.

Response
The off-peak supplementary power purchased by Western is not lower in cost than the hydroelectric generation, but it is lower in cost than oil or gas generation. By purchasing off-peak supplementary power, Western is able to reserve its water releases for use during peak demand periods. This reduces the need to use expensive fuels to meet peak loads and provides overall savings in power costs to consumers. The coal-fired generating stations are typically base loaded. During certain periods of time when member loads are, for a variety of reasons, below baseload level the excess energy produced by these stations is available to sell to other power suppliers and is sold at current market prices.

Comment 17
To what extent are the 14 COOPS and their members of C-U subsidizing the cost of this cheap power and the facilities needed to produce and deliver it?

Response
As detailed in Section 2.3.2.5 of the SDEIS, Western is committed to a fuel conservation program dedicated to reducing the use of oil and gas generation. Area utilities including Colorado-Ute do not subsidize this program but actually benefit by selling surplus energy to Western.

Comment 18
Poor Planning on Western's part, over zealous growth in power sales by Western, and ignorance of the true water supply and demands of the Colorado River Basin appear to be the real culprits rather than a wish to maximize the Fuel Conservation Program. If they were truly maximizing fuel, the Hydro plants would be going and the coal wouldn't be burning.

Response
Western's power sales growth is not the result of active solicitation on Western's part for new customers or promotion of greater usage by existing customers. On the contrary, Western's sales are based on the allocation of finite Federal power from resources within Western's area. The number of Western's customers may increase only if new Federal resources are made available or the allocation of resources is changed. Colorado River water supply and demand varies from year-to-year and the excess available for power production is a finite resource. From time-to-time, the U.S. Bureau of Reclamation (BOR) and Western review the water supply and demand of the Colorado River for improved management opportunities. Nevertheless, the hydro resource available for the production of firm power remains essentially the same. The purpose and intent of the Fuel Replacement Program is to replace expensive oil and gas generation with less expensive coal generation that otherwise might be curtailed. Surplus hydro-power may be used in the fuel replacement program to the extent it is not taken by the firm power customers. The program is pursued on an "if and when available" basis as opposed to a firm power contractual arrangement.

Comment 19
2.4.1
What is the present (July 1983) Status of the Union Oil Shale Project?

Response
Construction has been completed on Phase I of Union Oil Company's Oil Shale Project. Phase I includes facilities necessary to produce 10,000 barrels of oil per day. Production of oil from shale is being initiated and production of 10,000 barrels per day on a consistent basis is expected by the spring of 1984.

Comment 20
2.5 last Para.
What portion of the line will be paid for by these other entities? Why should there be excess capacity available since C-U is not chartered in Colorado to supply power outside of Colorado?

Response
Colorado-Ute, Western, and Public Service Company are the only participants in the project and will share all project related costs. The line will, at times, have some excess capacity, particularly in the early years. Transmission lines are planned to provide sufficient capacity not only for present system loads but also for loads in the foreseeable future. It is to the benefit of the participants and other power suppliers in the region to maximize the use of the facility. Therefore, the participants will allow use of the line by other power suppliers and derive revenues from them through power wheeling arrangements when capacity is available for such purposes.

Comment 21
3.2.1 Project Description Para. 3.
Besides cost which is an environmental factor, why not use a single-pole 345 tower? This would require only a 100 foot ROW and greatly reduce total environmental impact.

Response
Lattice steel towers have been selected as the standard structure for the transmission line for both economic and environmental reasons. Single steel poles will cost anywhere from 10 percent to 50 percent more than lattice towers depending upon terrain. Other disadvantages of single-pole structures vs. lattice towers besides cost include:

1) They would be more visible because they are solid and taller;
2) They require single massive moment foundations which would require larger construction equipment and more materials vs. smaller four legged uplift/compression foundations used for lattice designs;
3) They are heavier and have longer single components than lattice towers or require more extensive access road construction. This could affect construction where helicopters may otherwise be used; and,
4) An economic pole design would require shorter spans than lattice towers thus requiring more structures per km (mile).

Steel lattice towers will be the standard support structure used for the line; however, alternative structure designs such as the single-pole or H-frame would be considered during the design phase and may be used to mitigate environmental impacts in sensitive areas.

Comment 22
The tower would have a nonglare coating to reduce reflection. Will towers when requested by Federal agencies also be color anodized or painted to blend more environmentally into the landscape? If counties request such colored towers, is C-U/Western and REA agreeable to this.

Response
Dull, nonreflective steel has been proposed for the line since it has been shown to blend into the dark vegetative cover prevalent on most of the proposed line route. Painted structures are not proposed because of increased maintenance costs, and REA does not believe the incremental

reduction in visual impact warrants such mitigation; however, the participants will evaluate the acceptability of such conditions on a case by case basis.

Comment 23
Para. 4, and Figures 3-1 and 3-2.
What is the highest and lowest tower height to be used if the towers under consideration average 115' and 105' respectively?

Response
Specific tower heights will not be known until the line has been surveyed and specific structure locations have been determined. Generally, the tower height will be determined by the length of the span between towers and the terrain being spanned. The highest towers will likely be found where there are long spans with high ground between them. The shortest towers would probably be found on hills or rises with low ground between them. The tower heights may range from 21 m to 60 m (70 to 200 feet).

Comment 24
Para. 13, page 3, 8.
Is C-U going to extend to Lost Canyon or is it not? They know if Western is going to upgrade and when.

Response
The 345 kV transmission system has been planned such that it will not be necessary to tap the Rifle-San Juan 345 kV line into the Lost Canyon Substation so long as Western uprates its Curecanti-Shiprock 230 kV line to 345 kV operation. Please see the response to Comment 1 in Section 3.3.9.

Comment 25
Figure 3-3.
This tower may be mislabeled--should it be 115 kV? 3.2.2 Page 3-10 Construction Methods, Last para of section. What is the cost per mile using nonconventional methods as compared to road building and conventional methods.

Response
Figure 3-3 was mislabeled in the SDEIS. The figure should read "Long Hollow-Durango 115 kV Line, Double-Circuit Structure." Based on transmission line construction experience in Colorado, 100 percent helicopter construction can cost two to three times more than conventional construction.

Comment 26
What agencies, bodies, or entities can "not permit" conventional methods? For what reasons are they "Not Permitted"? What type of terrain dictates helicopter construction? Will the guidelines in these two documents also apply to private lands if the landowner so desires? Will they apply if the counties request them for private lands?

Response
The BLM and Forest Service could require the use of nonconventional construction methods for sections of the line. Nonconventional construction may be required due to lack of existing access, steep terrain, soil conditions and sensitive environmental elements. Steep inaccessible terrain may necessitate nonconventional construction methods. The guidelines found in Environmental Criteria for Electric Transmission Systems (USDA and USDI, 1971) and National Forest Landscape Management - Utilities (USDA 1975) will apply to all lands crossed by the transmission line.

Comment 27
3.2.3 page 3-10 -11 Para. 1.
"All easements acquired would provide for payment of damages to crops and certain other items damaged" List in full these certain other items.

Response
The list is as long as the number of specific uses each individual has for his or her property. Some of the most common are: crops, roadways, bridges, trees, fences, and improvements.

Comment 28
Para. 2.
Agriculture is possibly not the highest and best use for the land. I see no mention of purchase of development rights? What are the participant's intentions concerning payment here and for loss of scenic easements on private properties. Payment should be required by REA for private owners for inflicting an industrial zone strip into areas of agricultural or subdivision or recreation use.

Response
A power line does not create an industrial zone strip of land automatically. Zoning is established by the governmental agencies. Appraisal by a qualified real estate appraiser will properly take all questions of property value into account. Compensation will be paid to owners of recognizable property interests based on the current fair market value of such property interests, considering their highest and best use, but not purely speculative uses.

Comment 29
Para. 3.
I assume this applies to private properties also, does it, REA.

Response
The methods for vegetative clearing described in the referenced paragraph apply to all lands that would be crossed by the transmission line.

Comment 30
3.2.4. 3-11 Para. 1.
Inspection by contractors to C-U/W is entirely inadequate and unacceptable. Continuous inspection of both Government and private lands should be performed solely by C-U/W as compliance with environmental

regulations, guidelines, and stipulations cannot be insured or corrected in a final inspection. Only preventing environmental degradation insures environmental protection. Once a compliance is broken it can never be mitigated or corrected fully so non-compliance of environmental concerns should rest with C-U/W and REA.

Response
During the construction of the transmission line, Colorado-Ute, the project manager, would closely monitor the activities of the construction contractor with field inspection on a daily basis. Individual landowners as well as governmental agency compliance officers will be able to contact these field inspectors on an "as required" basis to insure contractor compliance with the permit and construction requirements. In addition, the individual agency special use permit and landowner requirements will be incorporated directly into the construction contract and will be binding on the construction contractor.

Comment 31
If non-compliance should occur, REA by granting financing assistance to C-U for construction has to stipulate that provisions of the SDEIS and FEIS will be met. What provisions and bonding are required by REA to guarantee environmental and other concerns of the Final EIS are met on private land? What recourses do counties and private individuals have with non-compliance of environmental regulations, guidelines and stipulations? What is REA's role in this recourse? Can REA be sued directly by individuals if non-compliance occurs.

Response
If noncompliance should occur, REA and Colorado-Ute should be notified immediately of the problem. Every effort will be made to correct a problem of noncompliance. REA does not require a bond from a borrower to guarantee that mitigation measures are carried out. Counties and private individuals have as recourse for noncompliance with environmental regulations, guidelines and stipulations whatever remedies are provided in the respective regulations, guidelines and stipulations. As a condition of receiving the REA loan guarantee, REA would require that Colorado-Ute covenant that they will construct and operate the Project in accordance with the FEIS. Should Colorado-Ute not construct and operate the Project in accordance with its commitments, REA could, among other remedies, withhold the advance of loan funds or sue for specific performance, which could result in Colorado-Ute being ordered by a court to comply with the commitments.

Comment 32
Para. 2 of section page 3-11.
The construction contractor is hired by C-U/W and has little if any binding contact with Federal, state or private owners. It is incorrect and misleading to say in SDEIS that damage would be repaired by construction contractor when the duty and obligation falls solely on C-U/W and REA. This should be corrected in the final EIS. C-U/W and REA should be required to monitor all construction, pre construction, and post construction and other aspects at all times.

Response
As mentioned in a previous response, the special use permit and landowner requirements will be incorporated into the construction contract; therefore, the construction contractor will be bound to comply with these obligations and Colorado-Ute, the project manager, will make sure they are complied with. Colorado-Ute will monitor preconstruction, construction, and post construction activities.

Comment 33
3.2.5 Page 3-12 Access road Const. Para. 2.
Would the specific standards for access roads for federal lands also be granted and used on private lands if requested by the land owner. If not, why not?

Response
Access roads across privately held lands will be constructed to the same standards as across Federal or state lands. There is no intent by Colorado-Ute, Western, PSC or REA to provide less protection to private lands than public lands.

Comment 34
How would permission for their use be obtained. If by negotiation with the land owner, outline the specific steps used by C-U/W in negotiation and include the legal documents required by the FS and BLM and those allowed to Private owners.

Response
Permission to use access is negotiated with the landowner. FS and BLM include access permission in the permits or grants they issue. The following steps outline the procedure used to obtain permission for access:

1. Determine access requirements;
2. Identify access route;
3. Describe access road with legal survey description, if needed;
4. Appraise access road to establish its value;
5. Negotiate to buy access road easement rights from affected landowner.

Sample copies of Western and Colorado-Ute acquisition documents are found in Appendix C for information as to general policy; site specific acquisition documents may differ in terms from these samples. The Forest Service and BLM permits for this project have not been developed yet, therefore, they are not available.

Comment 35
Para. 3.
Gates would be installed and locked if required--required by whom?
The landowner
The fed or state body
Colorado-Ute/Western
What type of gate? What type of braces to protect fence? REA needs to require in the Final EIS that Colo. State Highway department standards be met in any fence repair or installation.

Response
Gates, rigid and braced, (type and specifications to be determined with landowner input or land management agency requirements), will be installed in existing fences and locked per requirements established by the landowner or land management agency.

Comment 36
3.3.1 Energy Conservation, para. 2.
If the participants and member coops have studied and encourage energy conservation...such as off-peak use of home appliances, why are C-U and its members so violently opposed to demand meters and why did they create an all out war with the Colorado PUC for requiring demand meters?

Response
All the participants in the project encourage and promote energy conservation. The rate structure currently used by Colorado-Ute rewards consumers for using less electricity. The consumer is charged strictly for the quantity of electricity used. If less is used the consumers bill is lower. The demand-rate opposed by Colorado-Ute encourages consumers to levelize their usage of electricity, but not necessarily to reduce their usage by conserving.

Under the demand rate structure a consumer is charged based upon both the quantity used and the highest peak usage (or demand) for a 15 minute period during the month. The charge for the quantity (or energy) used is relatively low and the demand charge fairly high. All electric consumers who carefully levelized their usage could actually use more energy than under Colorado-Ute's flat rate, but be charged less. While a customer owning a solar home who uses only a small amount of energy but has a relatively high demand on a couple of cloudy days in the month would be charged considerably more under a demand rate than the flat rate. For these reasons Colorado-Ute does not believe the demand rate will encourage conservation, but might actually discourage it.

The PUC staff, on the other hand, believes demand meters would lead to increased consumer conservation. The use of demand meters at the retail level would require additional investment by the utility. The disagreement to which your comment refers is an effort to determine whether demand meters would be economically justified and whether a demand energy rate would really result in conservation.

Comment 37
3.3.4 Page 3-16.
New 115 kV transmission lines will be required even with the 345 kV line to transmit the increased power available to member substations and to new member substations and to service areas created by and after construction of the new 345 line. La Plata Electric board members have publically stated a new line will be needed to Pagosa Springs within 10 years and are in the process of acquiring ROW for a new 115 kV line to tie in and loop with a new line proposed by San Miguel Power to Silverton and then next phase to Cascade substation. The Forest Service and BLM are well aware of these applications to them. What goes here? Include these proposals already on the books in the Final EIS! Where and what

are some of these new 115 lines? Instead of C-U owning these lines they may be C-U member Co-op owned and built, but they are still 115 distribution lines.

Response
The 115 kV facilities that La Plata Electric Association has proposed are not dependent on the construction of this project and would have been proposed to be built anyway. The purpose of these and future 115 kV facilities are to replace or support old, overloaded 46 kV distribution lines in the member system's service areas. Each project, as it is proposed, will be subjected to an environmental review independent of this project.

Other additional subtransmission and distribution facilities may result from the construction of the Rifle-San Juan line; however, they are not presently identifiable and the locations are indefinite, making an analysis of environmental impacts meaningless at this time.

Comment 38
3.3.7.
Does the existing transmission system have sufficient capacity to support the outage of the proposed 345 kV line?

Response
The existing system will support an outage of the proposed new 345 kV line, but will be limited on total transfer capability until the Rifle-Curecanti-Shiprock 230 kV line is uprated to 345 kV. The proposed 345 kV line will be sectionalized by the Rifle, Grand Junction, Montrose and Long Hollow Substations and the San Juan Generating Station. An outage occurring on any section of the proposed 345 kV line would be isolated and the southwest Colorado loads could still be served adequately by the remaining 345 kV line segments.

Comment 39
It is a shame that the Colo. Highway Dept and the utilities do not get together and lay the lines down the highways and utilize the heat for melting snow and ice from highways in the winter. Surely a federal grant is available to cover the cost.

Response
The added costs and potential maintenance problems associated with underground transmission lines make them less desirable than overhead lines from the utilities perspective. Another disadvantage would be trying to route the electric lines to the same points as highways. The coordination required during construction would be extensive. Maintenance activities on the electric lines would disrupt the vehicle traffic. REA is not aware of any source of Federal grant funds to analyze the concept or finance such a construction project.

Comment 40
3.4.2 1st para.
If Western would "most likely use one of the alternative corridors" why does not Colo-Ute do the same in Montezuma and La Plata counties like the present 230 kV route.

Response
Colorado-Ute needs to deliver power and energy to La Plata Electric Association so it can serve the Durango area load center; therefore, paralleling the existing Lost Canyon-Shiprock 230 kV transmission line corridor is not a viable alternative.

Comment 41
3.4.4 3.4.5 3-25.
Would most likely use alternative corridors/ This is speculation and if they would most likely use alternative corridors what are they doing with C-U in this location (preferred). C-U can meet La Plata Electrics needs with at most a double circuit 115 line.

Response
If a coordinated approach is not used, Western and Colorado-Ute would have to build separate transmission facilities resulting in two transmission lines instead of one and causing greater environmental impacts. Colorado-Ute needs transmission capacity to serve La Plata Electric Association and four of its other member systems in southwest Colorado. A double-circuit 115 kV line with a capacity of approximately 125 MW would only serve Colorado-Ute's needs until 1985 (see SDEIS, 2.2.2 and Table 2-5).

Comment 42
3.4.7.
If new growth in southwestern Colo. has decreased since Feb. 5, 1982, Utes growth projections in Final EIS have to be corrected to reflect current data and information in 2.2.1 and Table 2-1 and 2-2 and other places in the study.

Response
Section 3.4.7 of the SDEIS refers to a reduced rate of load growth and not a reduction of load. This is correctly reflected in Tables 2-1 and 2-2 of the SDEIS.

Comment 43
3.4.9 Page 3-26 1st Paragraph.
Independent action creating greater overall environmental impact? Is this based on speculation statements in 3.4.2, 2.4.4, and 3.4.5 that lines would most likely be built in alternate corridors. Does 3.4.9 take into account the proposed actions of upgrading of the 230 line and the additional proposed 345 line to parallel the 345 line covered here? This should be added to final EIS.

Response
If Colorado-Ute, Western, and PSC had to construct separate transmission lines to meet each of their needs, the environmental impacts of the three new lines would be greater than the impacts of the proposed plan. The proposed action being addressed is construction of a single-circuit 345 kV transmission line and associated facilities from Rifle, Colorado, to the San Juan Generating Station near Farmington, New Mexico. Section 3.4.9 of the SDEIS does not include upgrading Western's 230 kV line nor an additional 345 kV line parallelling the proposed project. These future proposals are included in Section 5.14 of the SDEIS.

Comment 44
3.4.9 Page 3-26 2nd Paragraph.
The 345 kV transmission line is in the public interest? This is entirely a subjective statement. What public and how is it in its interest? Expand on this statement and also include who like the private land owners and customers of C-U who will be sacrificed to pay for the "public interest".

Response
The proposed project is in the interest of those who consume electric energy and receive service from the three project participants. This project will allow the participants to continue to provide an adequate and reliable supply of power and energy to their customers. The PUC has determined that the project is in the public interest and has issued a Certificate for the single-circuit 345 kV transmission line project.

Comment 45
3.6.1 3-29 2nd Paragraph.
The public had no input into interagency meetings or notification of these meetings and the public scoping meetings did not meet REA's own requirements for public notification and were probably illegal because of this.

Response
The interagency meeting was held to receive input on the project from Federal, state and local government agencies. Public input was received at public information meetings held in September 1979. Advertising for these public meetings met REA's notification requirements. REA further requested that Colorado-Ute announce in local newspapers that additional public information meetings would be held in March 1983 before the SDEIS was prepared.

Comment 46
3.6.2.6 para. 2.
and Table 3-4 and figure 3-6. How much bearing does the fact that C-U bought this substation site in 1979 have on the attempt to justify this particular substation location and the study of alternative locations.

Response
REA made an independent evaluation of the alternative substation sites and has concluded that Colorado-Ute's preferred location is an acceptable site.

Comment 47
Para. 6.
So what if expansion would require expansion onto BLM land and relocation of a county road. These public lands should be used for the public good and these are no reason for not expanding this site.

Response
If the Durango Substation were expanded, two single 345 kV circuits or a 345 kV double-circuit transmission line would have to be constructed to this substation. The environmental impacts and costs of these two single-circuit lines or this double-circuit 345 kV line and the Durango Substation expansion would be greater than the proposed plan.

Comment 48
Table 3-4.
The fact that no attempts were made to purchase other substation locations shows that this location was decided long before the DEIS process and the SDEIS just attempts to justify a foregone conclusion and does not really meet NEPA and CEQ regulations.

Response
Several substation sites were considered before the preferred site was purchased. An independent REA review of the other sites resulted in a finding that no other site was superior to the preferred site. The fact that Colorado-Ute purchased the site did not bias REA's review of alternative substation sites.

Comment 49
3.6.3 Alternative tower Designs.
If a county requires double circuit structures and/or certain structures for environmental reasons in their permitting, C-U/W will comply?

Response
Such a requirement would be evaluated by Colorado-Ute, Western and PSC and they would work with the county to arrive at a reasonable and cost effective solution.

Comment 50
3.6.3 Alternative tower Designs.
REA will require C-U/W to live up to and meet County permitting requirements?

Response
As a condition of receiving the REA loan guarantee, REA will require that Colorado-Ute covenant with the U.S. Government that it will comply with all local laws, ordinances and regulations, as well as all Federal and state laws and regulations, all Executive Orders, and all Memoranda of the Secretary of Agriculture.

Comment 51
A column for 345 kV Double Circuit Single Steel Pole is needed in this table for comparison.

Response
See response to Comment 21.

Comment 52
3.7.1.2 3-43.
Since "importance is reserved for the individual decision-maker" and since the private land owner had no participation in the decision process or assigning numeric values, the whole process is discrimination in the true civil rights violation definitions.

Response
Throughout the procedural history of the EIS process, individuals, including private landowners, have had the opportunity to make comments, contact key decision makers, and have their concerns considered and addressed. The purpose of the SDEIS is to allow the public and others an opportunity to comment on the project and thus provide input to the decision-making process. The comments are then responded to, and appropriate changes made, in the FEIS. This procedure is consistent with the Regulations developed by the CEQ. Private landowners and Federal landowners are treated identically with respect to the quantification of environmental impacts. Prime farmland and irrigated cropland were given a high value, the same as commercial forest. Areas of high population density (areas under private ownership) were given a high rating.

Comment 53
Land use on nonirrigated cropland should be uprated to H because nonirrigated is solely the present use of the land. Highest and best use potential need consideration.

Response
The use of private lands today and in the future depends on the individual preferences of the current and future landowners. A transmission line tower would have a greater impact potential on irrigated land than nonirrigated land due to the possible interference with irrigation practices. No attempt was made to speculate on or evaluate the potential use of private land or the current or future landowner preferences along the corridors. The analysis was performed using resource information available on the current use of the land.

Comment 54
Human Resources -- Low density and nonsettled areas should be uprated to H also since potential human resources in these areas have been ignored.

Response
Low density and nonsettled areas were not ignored in the analysis. They were considered to have less potential for impact than the high density areas and were, therefore, rated accordingly. If these areas had been rated "high", there could be a situation where one alternative corridor crosses a highly populated area while another crosses land that is not settled. Both would be given the same score if their mileages were the same, but the impacts would not be the same. The high density area would have a greater potential for impact. See response to previous comment.

Comment 55
Commercial forest exists on private lands and has not been identified anywhere in the SDEIS for the La Plata County area.

Response
Additional information on commercial forest has been incorporated into Section 2.3 of this FEIS. This information was obtained from the Colorado State Forest Service at Colorado State University in Fort Collins in the form of a Timber Resource Inventory. Based on this information, commercial forest on private/state land has been identified within corridors passing through Garfield, Montrose, Ouray, Dolores, San Miguel, Montezuma and La Plata Counties. The report indicates that approximately 11 percent of private and state lands in La Plata County are considered commercial forest while another 6 percent are considered noncommercial forest. These commercial forestlands consist of stands of ponderosa pine (71.3 percent), aspen (13.5 percent), spruce-fir (10.2 percent), and mixed conifer (5.0 percent). Pinyon-juniper is considered noncommercial forest, as are some stands of ponderosa pine, aspen, and mixed conifer. The mileages of state and private commercial forest crossed by the affected alternative corridors have been totaled. Table 2-1 in Section 2.2.2 is a summary of the commercial forest data item and the land use environmental resource category scores for those alternatives affected by incorporating the commercial forest information obtained from the Colorado State Forest Service.

Comment 56
Recreation needs adding here -- Why were no recreation areas identified on private lands. The Hesperus Ski Area cross country ski trails extend into the preferred Corridor C in the La Plata County Line to the Long Hollow Substation Segment. The private land in Sections 4, 9, 10, 12, 13, 11, 14, and 15,T35N R11W, N.M.P.M. is of high recreational utilization in both summer and winter. This has been ignored thus far in the EIS process and should be incorporated in the Final EIS.

Response
The preferred Corridor C passes west of the ski area, but may overlap part of Sections 9 and 15, T35N, R11W. As is stated in the Mitigation Plan (Section 2.3 of this FEIS), the project participants will coordinate with the appropriate administering agency or individuals in the identification of ROW centerlines and tower locations to avoid or minimize the potential for impacts to recreational areas including the Hesperus Ski Area.

Comment 57
Table 3-10, Figure 4-5.
Vegetation (Resource Data item) is missing. The "agricultural lands" is defined under 4.6.1.10, page 4-11 and 4-12 under main topic Vegetation, 4.6, page 4-9. It needs to be included here in Table 3-10 and in Figure 4-5. The information shown on Figure 4-5 is entirely wrong for La Plata County for private lands for a radius of 7 miles around the town of Hesperus.

Response
Agricultural lands are included in Table 3-10 and Figure 4-5. In Table 3-10, agricultural lands are included under the "Land Use" resource category, and subtotaled as prime farmland, irrigated cropland, and nonirrigated cropland. It was determined that the land use category was the appropriate place for this vegetation category to avoid confusion. The vegetation included in the table is, therefore, natural plant communities crossed by the corridors. It should be noted that the scale of Figure 4-5 is 1/16 inch equals one mile. At that scale, the area around the town of Hesperus (i.e. 7 mile radius) covers less than one inch on the map. Significant detail cannot be shown at such small scale. Much larger scale SCS Land Use and Natural Communities maps were used during the corridor selection and evaluation process.

Comment 58
Table 3-10 Montezuma -- La Plata County Line to Long Hollow (MLPCL to LH) private land seems to have been ignored as to geologic hazard. This needs correcting in the Final EIS. Section 9, T35N, R11W and Section 10 and 15 also have greatly unstable grounds.

Response
The reference maps used to assess the geologic hazard potential along the corridors (Colton et al, 1975) do not indicate a hazard in these sections. If "unstable ground" occurs in any area to be crossed by the line, it will be investigated during the geotechnical study stage of the project and measures will be taken to avoid any serious foundation and soil stability problems at tower locations.

Comment 59
Table 3-10 Land Use -- add the word "potential" to commercial forest and add mileage of actual forest lands on BLM and private lands in Alternative C M-LPC. to LH.

Response
See response to Comment 55.

Comment 60
Recreation (Human Resources) is also missing for private lands, or is the line to miss all of the NW 1/4 of Section 15 and all but the SW 1/4 of Section 9 T35N, R11W, N.M.P.M. for Alternative C, Figure 3-15, M-LPCL to LH.

Response
The information presented in Table 3-10 of the SDEIS is based on the resources crossed by the centerline of the corridor. It is, therefore, a representative section of the total corridor width. The final ROW could be located anywhere within the corridor. Although the edge of the corridor does cross part of Sections 9 and 15, the centerline of the corridor passes through the SW 1/4 of both sections and therefore, avoids crossing the area noted in the comment. When the location of the ROW is determined, the owners of private lands and recreation resources will be contacted and potential conflicts resolved, if possible.

Comment 61
Was Figure 3-15 used to obtain miles and score for Table 3-10? If so, Table 3-10 needs redoing in the Final EIS. Figure 3-15 -- All alternatives have to be remapped and redone. Substation location on all is 3 to 6 miles too far North.

Response
Figure 3-15 was not used to obtain the miles and scores used in Table 3-10. The intent of Figure 3-15 was only to illustrate the basic differences between the alternatives under consideration between the Montezuma/LaPlata County Line and the proposed Long Hollow Substation. The substation was incorrectly located on the maps. Corrected Figures 3-15 and 3-16 are included in Section 2.2.3 of this FEIS.

Comment 62
Figure 3-15 shows graphically apparent manipulation as far as alternative creation to obtain the preferred. Distance means expense and more impact so why is alternative c the only one that diagonals? All others have straight lines with basically 90 degree corners. To be truly alternatives, A, B and E should cut out 90 degree turns and diagonal also to make them competitive and comparable to obtain the best route.

Response
The identification of corridor alternatives between the Montezuma/ La Plata County line and the Long Hollow Substation occurred over the last four years. La Plata County officials helped Colorado-Ute identify several of the current alternative corridors presented in the SDEIS.

Comment 63
3.7.2.5, Alternative C, Page 3-64.
Commercial Forest should have "potential" added before it and Commercial Forest on BLM land and private land should be added to mileage.

Response
See response to Comment 55.

Comment 64
4.5.4 Upper Colo. 3rd para. & 4.5.3 2nd Para.
Because yields are small and quality may be poor these wells and groundwater are many times used for domestic and stock watering purposes. The effect of blasting in pier excavation and mitigation measures for disruption of well and spring water supply needs addressing somewhere in the Final EIS.

Response
Transmission line engineering and construction will be accomplished such that there should be no damage to existing wells, ditches, and springs. ROW negotiations will identify sensitive locations and construction activities will avoid these locations to the extent practicable.

Comment 65
Figure 4-5.
Using the SDEIS' own definition of Agricultural Lands 4.6.1.10,

Page 4-11, Figure 4-5 for Montezuma and La Plata counties is in error. The criteria established in 4.6.1.10 should show much more private agricultural lands in the Mancos, Mancos Hill to Hesperus areas. Map needs redoing and mileages on tables and corridor segments all require redoing with correct data. I invite and suggest that REA does an onsite survey of the Hesperus vicinity as their information is wrong for Figure 4-5. SDEIS Figure 4-11 also points out how wrong 4-5 is. 4-11 needs correcting by adding more agricultural lands in Hesperus vicinity. Does the map show manipulation of fact to graphically and fictionally fit criteria to REA's and participants desired results.

Response
The definition of agricultural land on Page 4-11 was too broad to match the areas shown as agricultural in Figure 4-5. Cropland and pasture are displayed in Figure 4-5. Information displayed in Figure 4-5 was not developed from on-site surveys. It was compiled from resource maps of the study area developed by SCS, BLM and Public Service Company of New Mexico (PSNM). At the scale used in Figure 4-5, it is difficult to include small dispersed tracts of agricultural lands. The map was prepared early in the project, prior to the delineation of the corridor network. The map does not reflect in any way an attempt to fit criteria to the needs of the project.

Comment 66
Conifer-aspen should have the word potential added as map does not reflect existing conditions in La Plata County. Mountain shrub in Hesperus Vicinity should be agriculture by definition 4.6.1.10 or should be Conifer-aspen if the definition "potential to produce commercial timber" 1.6 Major Concerns and Issues, Page 1-9 is used as it was on National Forest Land.

Response
As noted in a previous response, the vegetation described along the corridor is taken from available resource maps and was not developed from on-site surveys. There may be some discrepancies between the actual vegetation and the resource maps. The "potential to produce commercial timber" was misinterpreted in the comment. "Potential" indicates that timberlands actually occur but may not be readily accessible. It does not imply that other vegetation-types, such as mountain shrub, have a potential to produce commercial timber.

Comment 67
Figure 4-10 -- Land Ownership. State lands should be added to give an accurate picture of ownership. Indian reservation lines do not reflect current Southern Ute Indian Reservation. BLM ownership maps for Montezuma and LaPlata County should be utilized to correct this Figure 4-10.

Response
Figure 4-10 is a reproduction of small scale BLM land ownership maps for Colorado and New Mexico. These maps do not have state lands on them. However, larger scale BLM land ownership maps (1/2 inch to a mile) were used to determine the location of state lands and Indian lands during the

development of the corridor profiles found in Section 4.12 of the SDEIS. There is no benefit to adding this information to Figure 4-10. Figure 4-29 has been corrected and is included in Section 2.2.4 of the FEIS (Figure 2-5). There were several small errors in the extent of state and public lands shown.

Comment 68
Figure 4-11.
More agricultural land exists in the Hesperus-Thompson Park vicinity--add to map.

Response
The agricultural land shown in Figure 4-11 is generally consistent with the reference maps indicated as sources in the figure. Due to the constraints posed by the scale used in the figure (i.e. one mile = 1/16 inch), not every parcel of agricultural land can be delineated. The intent of Figure 4-11 was to give the reader an indication of the general amounts and diversification of land use types occurring in the area.

Comment 69
The Hesperus ski area on private lands is also in this area and needs to be added to the map.

Response
No ski areas were included on the map. A list of such areas is provided in the response to Comment 72.

Comment 70
Flood plain areas are expanded completely out of proportion in La Plata County area with floodplains marked being over 800 feet high.

Response
It is assumed the comment refers to floodplains over 800 feet above the low point in the area. Again, the area shown as "floodplain areas" in Figure 4-11 are very generalized and do include some lands that are above the historic flood elevations. At the scale used for the map, however, delineating specific floodplain elevations is not practical. Figure 4-11 is only intended to identify those areas where the proposed project may cross floodplain areas of major rivers or streams (flood-prone and wetland areas).

Comment 71
4.10.4.
Potential to produce commercial timber 1.6 Major Concerns and Issues page 1-9 and here "Potential commercial forest value are identified in the corridor profiles in Section 4.12."

In these profiles potential commercial forest should be identified also on BLM and private lands in the Hesperus-La Plata County area. Alternative C M-LPCL to LH crosses already forested land in Section 9 and 15 T35N, R11W. Figure 4-19 should be corrected for all segments.

Response
See response to Comment 55.

Comment 72
4.10.6.
Recreation Resources needs to have Private Recreation Resource Areas such as Hesperus Ski Area added to this topic, added to Table 4-9, and to 4.12 profile segments.

Response
The location of private recreational resources along the alternative corridors is noted below. The Hesperus Ski Area's location is, therefore, acknowledged in this FEIS. A table of major private recreational resources in the study area is included below:

Major Private Recreation Areas

Name	Location
Hesperus Ski Area	La Plata County
Chapman Hill Ski Area	La Plata County
Forest Lakes Ski Area	La Plata County
Purgatory Ski Area	La Plata County
Stoner Ski Area	Montezuma County
Powderhorn Ski Area	Mesa County
Ouray Ski Area	Ouray County
Kendall Mountain Ski Area	San Juan County
Telluride Ski Area	San Miguel County

The location of the ski areas will be considered during the siting of the centerline. If the alignment of the proposed transmission line is in close proximity to any of these ski areas the project participants would coordinate with appropriate owners to minimize potential impacts.

Comment 73
Figure 4-29.
At no point does Segment 32a in reality go below 8,000 feet elevation as it does in Figure 4-29. The elevation scale for Segment 32C is off many places by several hundred feet -- correct these.

Response
A revised Figure 4-29 is included in Section 2.2.4 of this FEIS (Figure 2-5). Elevations have been corrected on the figure.

Comment 74
Vegetative communities for 32c need correcting. There are segments labled MS that are CA. Much labled SG should be AG.

Response
The revised Figure 4-29 indicates the correct distribution of vegetative communities along Segment 32c based on the most recent SCS Land Use and Potential Plant Communities Map for La Plata County. Corrections have been made on the profile.

Comment 75
Human Resources, 32c needs to have Recreation entered for Section 15 and Section 9 T35N R11W, N.M.P.M.

Response
As noted earlier, the corridor profiles are based on the resources crossed by the centerline of the corridor. Since the centerline does not cross the Hesperus Ski Area, the area was not added to the profiles.

Comment 76
Human resources should have a medium density added. 80 acre limit determination had no private input into criteria meaning no public input.

Response
The impact ratings for "Human Resources" were developed as a response to public and agency comments. The DEIS did not contain an evaluation of human density along the alternative corridors. Although the 32 ha (80 acre) criteria is somewhat arbitrary, it was an attempt to incorporate human density data into the corridor evaluation process. The commentor is correct in stating that the 32 ha (80 acre) criteria determination did not involve public input. It is the responsibility of the lead and cooperating agencies to develop the technical information or criteria used in the environmental analysis. The DEIS and SDEIS offered the opportunity for the public to comment on technique but the purpose of these documents was to provide information and environmental review.

Comment 77
Land ownership listed for 32c Figure 4-29 are incorrect. 32c shows only 1/2 mile of contiguous P. This is impossible. Correct this using BLM ownership maps covering this segment. There is a mile of state land in this segment with several disconnected Public Tracts as well as private.

Response
The land ownership information in Figure 4-29 (Figure 2-5 of this FEIS) has been modified to include the state and public land noted in the comment.

Comment 78
Agricultural areas, Figure 4-29. There are more nonirrigated than are shown in 32c.

Response
The source used to compile the agricultural land information for Figure 4-29 does not substantiate the comment. According to the source, nonirrigated cropland occurs along Corridor Segment 32c in Sections 14 and 15, T34N, R11W.

Comment 79
Recreational resources 32c needs to show Hesperus Ski Area for alpine and cross country courses and winter and summer recreation in Sections 4, 9, 10, 11, 12, 14, 15, T35N, R11W.

Response
See response to Comment 60.

Comment 80
Commercial forest with standing trees exists in Segment 32c. This is not shown in figure 4-29 and needs to be added. If potential commercial forest is used on private lands based on the U.S. Forest Service criteria for 32a, Figure 4-29, then most of Seg. 32c has commercial forest. Not to include it here would constitute discrimination against private owners and could constitute a civil rights violation.

Response
See response to Comment 55.

Comment 81
Segments 32a, 32c, and 32b would cross or run in full view of US 160 or Colorado 140 so need to be covered here. They are adjacent to the highway.

Response
Where Segments 32a, 32b, and 32c cross either US 160 or Colorado 140, it is so indicated on the profile. In those areas, the visual sensitivity rating is correspondingly high. "Adjacent to major highways" implies that the corridor runs parallel and next to the highway in that stretch. Highway crossings are not, therefore, indicated under "adjacent to major highways." The transmission line would be sited in accordance with the mitigation practices described in Section 2.3.

Comment 82
If Segment 32c crosses highway Colorado 140 before crossing the La Plata River it will be crossing Fort Lewis Agricultural Experiment Station property. This needs to be added to Ownership.

Response
See response to Comment 77.

Comment 83
5.2.3 Page 5-5.
Discuss what constitutes close supervision of construction activities. Promoting return of the affected areas to a non-erodible condition is not acceptable on private lands. A guarantee to stop erosion is required in the FEIS for these lands.

Response
Construction activities will be supervised and monitored by Colorado-Ute or by its agents. Promoting return of affected areas to a nonerodible condition is reasonable. Colorado-Ute has in the past gone back and reseeded areas that did not become established during the first growing season, and this ROW maintenance practice will continue for this project.

Comment 84
5.3.1 page 5-10.
Spillage and discarding of oils should be prohibited by REA on or off of corridor segments.

Response
A mitigation measure that pertains to the disposal and storage of oil can be found in Section 2.3 of this FEIS.

Comment 85
5.4.4 Page 5.17.
M-LPCL to LH -- There is more conifer-aspen vegetation than listed here. The 9.6 km is only Forest Service ground in 32a. Vegetative communities etc. map Figure 4-5 needs correcting. 32c has several miles of standing timber. Figure 4-28 needs substantial changes made to reflect on site verification.

Response
An additional 3.8 km (2.4 miles) of conifer-aspen and 4.0 km (2.5 miles) of mountain shrub have been added to Alternative C from the Montezuma/La Plata County Line to the proposed Long Hollow Substation. The sagebrush and grassland data item has been reduced by 3.7 km (2.3 miles). The vegetation category for Alternative C should read as follows:

Alternative C

Vegetation	Miles	Score
Conifer-Aspen	8.4	33.6
Pinyon-Juniper	0.0	0.0
Saltbush and Greasewood	0.0	0.0
Mountain Shrub	6.7	13.4
Sagebrush and Grassland	0.0	0.0
Barren	0.0	0.0

Comment 86
5.4.5 Page 5-19 2nd para.
It is good to see mention of increased erosion potential. This is a major impact to private lands. REA will require C-U/W to mitigate and control this erosion on private lands by using a straw mulch, sheep-footed in until a reseeded ground cover is obtained to control erosion naturally.

Response
Measures to minimize erosion are found in Section 2.3 of this FEIS. Interested landowners would be consulted on vegetation restoration and clean-up measures prior to their implementation. In fact, some landowners may not want sheep-footing.

Comment 87
Para 3.
REA recognizes that Domestic livestock populations will also be affected by removal of cover and food resources and will require the participants to compensate private land owners because the ROW size and affected area would be greater on private lands than on Federal or Indian lands--in proportion. State so in the final EIS.

Response
Compensation would be based upon the amount of damage to forage on a given parcel of land. The proposed ROW width would be the same on private property as on Federal or Indian lands.

The pasture or cropland would be affected where access roads and tower structures are constructed. Landowners would be compensated for loss of crops where damage occurs. Compensation, in addition to the amount of the appraised fair market value of the land interest to be acquired, must be determined on a case-by-case basis.

Comment 88
Para 5.
The vunerability to invading weed species affects private lands even more than public. Discuss what is meant by "proper reclamation techniques" and list these in the final EIS.

Response
Reclamation measures for the line will be designed prior to construction and will be contained in the construction plan. Upon completion of transmission line construction, Colorado-Ute and Western will work directly with the agencies and interested landowners to insure the reclamation effort is complete. Yearly inspections of the ROW will be performed to insure that vegetative stands are adequate. It is expected that some weed species will invade an area undergoing reclamation. However, reclamation techniques will be used to minimize the amount of weed species that will invade. The reclamation work will be performed under a contract separate from the construction contract. Assistance will also be provided by Colorado-Ute and Western maintenance crews.

Comment 89
5.4.6 Cumulative Para. 2.
A comprehensive study of segments covered in Figure 4-29 needs to be handled. This need was requested in the scoping process by letters to REA dated January 27, 1983 and sent in again after the so called Durango Scoping meeting. The majority of the concerns were not covered.

Response
A study of the corridor segments covered in Figure 4-29 has been performed in the SDEIS. A comparison of the potential impacts to vegetation of the five alternatives between the Montezuma/La Plata County line and the Long Hollow Substation is found in Section 5.4.4 of the SDEIS. The level of detail found in this section is the same as for other segments of the line.

Comment 90
5.4.6 Cumulative Para 3.
This paragraph should be deleted. Permanent disturbance occurs for private land on and adjacent to all of the ROW easements and access roads. Use is restricted completely to only those allowed by C-U/W and adjacent property value is forever diminished in the mountain areas.

Response
Permanent disturbance to vegetation from tower structures will occur on approximately 22 ha (54 acres). The amount of permanent disturbance from new access road construction will not be known until the need for new access roads is determined and the alignment is negotiated with the land management agency or landowner. The SDEIS estimated that approximately 0.8 ha (2 acres) of vegetation could be permanently disturbed per km (mile) of transmission line for access road construction. Temporary impacts to vegetation may occur within the ROW or adjacent to access roads. Use will be restricted to those allowed by the land management agency or landowner.

Comment 91
5.4.7.
Feathering is to be guaranteed by REA on Private lands on which actual on the ground Conifer-aspen communities exist? This should be a requirement by REA in the Final EIS.

Response
ROW vegetation will be feathered on all lands with vegetation-types that require feathering, unless otherwise requested by the private landowner. Refer to mitigation measures on Page 2-22 of FEIS.

Comment 92
5.5.3.
Locking the gates will not prevent trespassers and illegal hunting because the powerline ROW will provide easy illegal access on both public and private lands. This ROW opens the flood gate to numerous illegal activities. REA will require C-U/W to mitigate this inconvenience to private owners by paying legal fees required to prosecute trespassers and vandals on and off the ROW both during construction and after.

Response
The landowner should ordinarily have no need to incur legal fees in a criminal action (prosecution) against trespassers and vandals. As for legal fees incurred by a landowner in a civil action, the landowner has no authority to represent Colorado-Ute or Western in a legal action even if both the landowner and Colorado-Ute or Western have standing to sue and legitimate claims for damages. Colorado-Ute or Western may not have the legitimate claim against the encroacher that the landowner would, because Colorado-Ute or Western will not acquire unlimited rights against trespassers and vandals. When the nonexclusive ROW is acquired, the majority of such rights would be retained by the landowner. Therefore, Colorado-Ute and Western cannot be required to pay private owners for either their inconvenience or their legal fees in prosecuting trespassers and vandals on and off the ROW during and after construction.

The problem stated is one of law enforcement. The participants are not law enforcement agencies, but they will install gates on access roads where entry to properties is to be discouraged, and cooperate with the landowner in efforts to prevent or eliminate trespass and vandalism on the ROW.

Comment 93
5.5.5 points out this improved access and mentions activities other than hunting. The words "and unlawful" should be added before hunting and after Lawful in this section to appropriately describe the true circumstances as does 5.8.1 which points out adverse effects on cultural resources. The line is an invasion of privacy and property rights on private lands.

Response
Paragraph 4 under Section 5.5.5 in the SDEIS recognizes that there is a potential for adverse impacts to wildlife due to unlawful hunting. All limited private property rights acquired by the participants would be properly valued and paid for in the ROW acquisition process.

Comment 94
Add here a statement like that found in 5.8.7 2nd para.
I suggest "The primary unavoidable adverse impact would result from increased vandalism and trespass to property made more accessable by access roads. Improved access may attract individuals seeking to disturb or harm private property. Limiting the use of access roads would lessen the impact but not completely eliminate it."

Response
Note the previous two responses to comments.

Comment 95
5.5.7 Adverse effects Para. 1.
Define completely in this paragraph the term "Temporary Disturbance".

Response
Wildlife may be disturbed during the construction of the transmission line by construction crews and equipment. This disturbance would be temporary since it would only occur during the construction period. Some disturbance may also occur when the line is being maintained. This would also be temporary and probably occur one or two times per year.

Comment 96
5.8.1 Para. 1.
This paragraph points out the invasion of public and private lands and diminishing of owners rights through trespass. It should be easily expanded to most things besides cultural resources.

Response
See responses to Comments 92 and 93.

Comment 97
5.8.5 Secondary Impacts.
Vandalism and theft because of the ROW is a major concern of the private owner. Discuss procedures C-U/W intends to use to prevent vandalism to private property during and after construction and maintenance.

Response
REA, Colorado-Ute and Western know of no documentation or study to support the fact that transmission lines increase the risk of vandalism. Colorado-Ute and Western have operation and maintenance policies and procedures for monitoring the ROWs and neighboring lands to identify and control trespassers, encroachers, and vandals. The participants will install gates on existing fences crossing access roads to the ROW if requested by the land management agency or landowners. The gates will be locked if the property owner prefers a lock. The construction contractor also has concerns with security of his equipment. The contractor is as interested in preventing theft and vandalism as the landowner. Within the authority granted by the landowner in the easement deed to the ROW, Colorado-Ute and Western will cooperate with the landowner in identification and prosecution of vandals on the ROW and neighboring lands. Both Colorado-Ute and Western have a strong interest in protecting the operational integrity of transmission facilities and preservation of public health and safety by preventing vandalism.

Comment 98
5.8.7 Adverse Impacts Para. 2.
Good paragraph. What methods (list them) are to be used in limiting the use of access roads.

Response
Access roads that are no longer needed for operation and maintenance of the line will be reshaped and reseeded to discourage unauthorized use by the public. Gates will be installed in existing fences and locked as per agreement between Colorado-Ute and the landowner or land management agencies.

Comment 99
8.9.1.
Surface mining and surface use on private lands will be affected by the line. Will C-U/W be required by REA to move the line at their own expense if it is required by the mineral owner in order to extract minerals on private land. This is a requirement on Federal lands and the private owner should be guaranteed the same by REA.

Response
Federal permits have not generally required a guarantee that lines be removed for mineral development. Conflicts between transmission lines and mineral development have not been found to be a serious problem in the past and are not expected to be a problem in the future. If conflicts arise with respect to private mineral interests they will be resolved by individual negotiations.

Comment 100
Agriculture Para. 3.
Land can continue to be cultivated under the towers but some landowners may not find it practical. List here the reasons this would not be practical and why owners would be inconvenienced.

Response
Landowners can determine for themselves based on the size of their equipment whether farming the land under and close to the towers is practical or not. Most of the ROW between towers will continue to be available for farming.

Comment 101
5.9.3 Mitigation , 2nd para.
list here possible examples of resolutions to an energy lease-transmission line conflict. Does "affected parties" also mean private land and mineral owners.

Response
Colorado-Ute will work with landowners and coal, oil, or other mineral leasees to determine the proper location of the line to avoid such tracts to the extent practicable.

Comment 102
Para. 4.
define thoroughly what conditions are meant by "where practical" and practical to whom? The private land owner?

Response
The participants will attempt to follow property and section lines where they can; however, other factors must be considered. Existing transmission line routes, terrain, farmhouses, subdivisions, land types, property owners, and local officials help to determine where the specific line route will be.

Comment 103
Add after repaired, the words "to as good as or better condition than existed before construction".

Response
Fences will be repaired to at least equal the condition they were in prior to construction.

Comment 104
Para. 5.
After "disturbances" add "to the future use of the farm land by the land owner."

Response
To provide clarity, the intent of the statement was that the towers would be carefully located to minimize disturbances to uses of the farmland as presently used, and as can practicably be determined for uses in the future.

Comment 105
5.9.4 M-LPCL to LH P. 5-48.
When the recreation, commercial forest, agriculture and cropland mileages and figures are corrected for the preferred alternative "C," this section may change substantially. It should be corrected.

Response
After rechecking the resource information in this area, it was found that Alternative C would cross 2.7 km (1.7 miles) of irrigated cropland, 0.8 km (0.5 miles) less of nonirrigated cropland, and 13.4 km (8.4 miles) of commercial forest. Alternatives D and E would cross 17.6 and 12 km (11 and 7.5 miles) of commercial forest, respectively.

Comment 106
5.9.5 Adverse Impacts.
The impact could be minimized, will it be? Expand by listing specifics on how C-U/W will minimize impacts on private lands.

Response
Colorado-Ute and Western would work to minimize the impacts by:

(1) locating the line along existing transmission lines, property lines, section lines, half section lines and fence lines to the extent practicable;
(2) locating access roads and staging areas away from farmlands where possible;
(3) restricting public access to ROW and access roads;
(4) minimizing erosion of construction exposed soil by filling in ruts, terracing, riprapping, diking, or spreading straw mulch;
(5) consulting landowners on vegetation restoration and clean-up measures prior to their implementation;
(6) avoiding archaeological and historical sites and comply with ACHP Regulations 36 CFR 800; and
(7) avoiding or minimizing impact to commercial timber areas with selective clearing.

Comment 107
More than 793 acres of commercial forest will be removed - as this study identified little to no commercial forest on private and missed much for BLM.

Response
The revised figure for number of ha (acres) of commercial forest removed is approximately 364 ha (900 acres). This includes the information found in Section 2.2.2 of the FEIS on commercial forest on state and private lands.

Comment 108
5.10.1 General Impacts, Last para.
Access Roads ... create new access ... increasing recreational opportunities. Add here "and opportunities for trespass and vandalism."

Response
The comment is noted. See response to Comments 92 and 93.

Comment 109
5.10.3 Mitigation.
Discuss here the concept of negotiations with private landowners. List the step by step procedure. Include sample copies of easement and ROW forms for FS and BLM and Private Lands. Discuss condemnation procedures for both Colo. and N. Mex.

Response
The concept for negotiations is "just compensation" for the taking of a ROW. Negotiations with private landowners are for the purpose of establishing the amount of just compensation to the landowners for the purchase of a perpetual, nonexclusive ROW easement for transmission lines and access thereto; or for the purchase of the fee simple title to lands selected for siting of future substations. The procedure followed is very general and can vary. Prior to the commencement of purchase price negotiations the acquiring organization will request a right-of-entry permit from the landowners to allow for site inspection, soil testing, survey, and appraisal. This is followed by centerline survey, survey plat development, land appraisal, value determination, and landowner negotiations before the easement is obtained. If landowner negotiations are unsuccessful, Colorado-Ute is authorized by Colorado Statute to acquire land or easements by condemnation action brought in state district court. Western follows United States Department of Justice issued appraisal and acquisition standards and the relocation and acquisition policies set forth in the Uniform Relocation Assistance and Real Property Acquisition Act of 1970. In the event of unsuccessful negotiations, Western is authorized by statute to acquire by condemnation action brought in the appropriate U.S. District Court. Sample copies of Western and Colorado-Ute acquisition documents are located in Appendix C for information as to general policy. Site specific acquisition documents may differ in terms from the attached samples. Changes requested by individual landowners are given full consideration. Samples of FS and BLM authorizing documents are available in local offices of these agencies.

Comment 110
2nd para.
Who and what are the appropriate administering agencies that would be involved on private land? Is the landowner included here?

Response
If the project would impact developed recreational resources located on private land, the project participants would coordinate with appropriate private landowners.

Comment 111
5.10.4 Slt. Cor Impact com. page 5-53.
M-LPCL to LH Alternative C crosses the Hesperus Ski area location. If this is not a Recreation area perhaps REA needs to restructure its criteria and add private recreation areas where their actions here will have much larger socioeconomic impacts. This recreation area was pointed out in the scoping process. Alternative C is high Density when several hundred people utilize the location daily.

Response
Please refer to responses to Comments 56, 60 and 72.

Comment 112
5.11.1 Direct Impacts.
Short term impacts from payments to landowners. REA is required also to mention the socioeconomic impacts more long term to private owners of inability to use as collateral for loans the easement and ROW property, the resulting loss of total monetary value of the adjoining property especially at time of sale, the locking of the ROW into an industrial type of land use for the life of the project, the loss of converting the ROW to other uses by the private owner. Inconvenience and danger as pointed out in 5.13.2, 5.13.3, 5.13.4 also are a direct and secondary impact.

Response
There is no evidence to indicate that easements and ROW property are excluded for the use of collateral for loans. The loans may merely be subject to them. The loss of monetary value, if any, is a consideration in just compensation. There is no evidence to indicate that a ROW locks the property into an industrial type of land use. Inconvenience and NESC are considerations of the compensation paid for the ROW. REA recognized that the potential inconvenience to farming practices may be considered a secondary impact.

Comment 113
Anticipatory Impacts: The loss monitarily, time wise, and mentally and physically to the private landowner in dealing with C-U/W and REA and the multitude of meetings, hearing, PUC processes, monitoring of construction, and general invasion of privacy and property rights are examples. Reading the EA, DEIS, and SDEIS for which federal agencies are compensated as they were for writing and comment on, is also a substantial loss to the private owner.

Response
The private landowner may voluntarily participate in the processes you have mentioned but the landowner is certainly not forced to do so. The "costs" in time and money to the private landowner are the price of being able to be involved and provide input into the various processes.

Comment 114
Compensation for the private time required in Anticipatory procedures and impacts is required of C-U/W and REA for the Private Owner.

Response
No such compensation is required.

Comment 115
Since September 1979 any private landowner possibly to be impacted has to be covered in the final EIS. These people and their rights were ignored thus far by REA even when civil rights and equal rights possible violations by REA were called to question.

Response
At present REA is unaware of any civil rights laws or property rights laws which have been violated. We suggest that if you have specific information regarding such violations that you immediately advise REA.

Comment 116
Correct this problem. If it is not done it will constitute deliberate violation of civil rights and property rights by REA and C-U/W.

Response
In our society where private landownership is a right, certain rights must be conceded. A private landowner cannot assert his ownership right to the detriment of the general public. That is why utilities and governments have been given the power to condemn land, if necessary, for certain facilities which provide service to the general public. These facilities include transmission lines, when it is necessary to cross private land.

Comment 117
Para. 2.
"payment would benefit" but is it a fair and just payment since it is a one time payment when Federal lands receive a yearly payment and many, many protections? Can a fair and just payment be obtained without spending the majority of it on attorney fees to get payment? What amount of the payment will be required to force C-U/W to live up to the obligations for protection to land outlined in the Final EIS.

Response
Please refer to response to Comment 109. No expenditures would be required to force Colorado-Ute and Western to meet their obligations. REA could withhold approval of advancement of loan funds if Colorado-Ute failed to follow the mitigation plan outlined in Section 2.3.

Comment 118
Western's absence is obvious. C-U/PSC pay taxes: Western does not.

Response
Refer to response to Comment 7.

Comment 119
The counties like La Plata and Montezuma where Western will own and operate the line will not receive taxes. REA should point out the areas of line to be owned and operated by Western as was pointed out in the last so called Scoping meeting in Durango and level with the public.

Response
La Plata and Montezuma Counties will receive taxes. Refer to response to Comment 7.

Comment 120
5.11.2.
Shared ownership and operation of the line is not the final result. C-U and Western will take over specific portions of the line for ownership and maintenance. This section and table 5-1 is invalid.

Response
The section referred to and Table 5-1 are valid. It states that Colorado-Ute and PSC will pay taxes on their beneficial interests.

Comment 121
Para. 2.
Civil rights of private property owners have probably already been violated by REA; Further violation will constitute deliberate violation.

Response
REA is unaware of any violation of civil rights of private property owners. See responses to Comments 115 and 116.

Comment 122
5.12.3.
Will the standards set out in the National Forest Landscape Management Utility Handbook USDA 1975 and in the Environmental Criteria for Electric Transmission Systems USDA, USDI be utilized on private land at the landowners request? REA needs to stipulate this compliance.

Response
See response to Comment 26. Standards used on public lands will also be used on private lands.

Comment 123
Non specular towers etc. would be utilized. Does this include color anodized metal to camouflage even further. If not it should be stipulated by REA in the Final EIS.

Response
See response to Comment 22.

Comment 124
Do the areas of high visual sensitivity where use of alternative design structures will be required also include private lands and landowner requests. REA should stipulate to this for C-U/W.

Response
The statement found on Page 5-59 of the SDEIS applies to all lands crossed by the project.

Comment 125
5.12.4 M-LPCL to LH.
Alternative C. Crosses near or through the Hesperus Ski Area. This section is wrong.

Response
Please see response to Comments 56 and 60.

Comment 126
5.13.1 and 5.13.1.1.
REA should require prevention of wet weather interference.

Response
This line will be designed so that it does not contribute to less than FCC satisfactory service 90 m (300 feet) or greater from the transmission line.

Comment 127
5.13.1 5.13.3.
Colorado-Ute has not complied with REA Bulletin 62-4 in the past on its present line so why should C-U be expected to now.

Response
As stated in the SDEIS, Colorado-Ute will comply with requirements found in REA Bulletin 62-4.

Comment 128
5.14 Cumulative Impacts 2nd para.
Mapco Construction is not completed as clean up and restoration is not finished three years after line was laid.

Response
REA should be contacted immediately if the mitigation plan is not followed or if cleanup and restoration does not take place within a reasonable amount of time.

Comment 129
5.15 after project the last word of first sentence add words "on private lands."

Response
The mitigation described in Section 5.15 will apply to both private and public lands.

Comment 130
Is plan of construction, operation, and rehabilitation to be prepared for private lands to cover site specific stipulations to be placed in the ROW and easement documents for private lands? If not, why? REA could find itself in a civil or equal rights violation. 2nd para. Is the lead agency REA to insure "that essential commitments are carried out and mitigation measures performed on private lands" also.

Response
Site-specific stipulations for construction on all lands will be included in the plan of construction, operation, and rehabilitation required in Section 504(d) of the Federal Land Policy and Management Act. This plan will be included in the construction contract documents and will be binding on the construction contractors.

REA will require Colorado-Ute to carry out the commitments made in the mitigation plan presented in the FEIS for this project on private and public lands.

Comment 131
The mitigation plan requested by REA should include and cover thoroughly all private lands crossed by the line so that private lands and owners can be on an equal basis with government lands and agencies.

Response
Refer to response to Comment 129.

Comment 132
The measures on 5-72 through 5.84 should be revised and corrected to reflect changes in text and content of the SDEIS when made Final.

Response
This section has been updated and included in Section 2.3 of the FEIS and represents the general mitigation plan for the project.

Comment 133
The Final EIS Document is the way the project should be, what happens if C-U/W do not meet commitments outlined in the document. REA has a commitment to private owners to Guarantee that their (REA'S) actions of financing or guaranteeing financing will prevent destruction environmentally and economically of private property crossed. REA is ultimately responsible.

Response
REA should be notified if commitments made in the EIS are not met. REA will take the matter under advisement and independently determine whether or not a commitment is being met. If it is not being met, REA will require Colorado-Ute to correct the matter.

3.3.12 R. C. Wingerson
Comment 1
My personal and primary concern is that the need for this proposed project has not been justified, and as a consumer my electric rates will be unnecessarily increased. There are three entities involved in this proposal (Colorado-Ute, WAPA, and PSC) with three quite different sets of needs. While it may be true that the 345 kV line can satisfy these needs, it is also true that, as proposed, consumers in the Colorado-Ute system will end up subsidizing consumers elsewhere. There seems to have been no attempt to find either a least cost solution to everyones needs or to devise an equitable allocation of costs based on expected benefits to each party. Let me be more specific.

In chapter 3, "Alternatives Including The Proposed Action" a number of alternatives are dismissed because they do not individually satisfy all the needs of all the parties. This is a sham. No attempt seems to have been made to combine a few of these and other possibilities so as to create viable alternatives that would satisfy all needs. For example, the twice daily peaking of the Colorado-Ute load is a primary cause of its capacity problems, yet load leveling by demand or time of day pricing or other means is dismissed. NEPA requires the analysis of a full range of reasonable alternatives. This does not seem to have been done. The stand-alone alternative approach is simply not reasonable, and reasonable combinations of the simple alternatives have been ignored.

Response
The PUC issued a Certificate on September 20, 1983 for the Rifle-San Juan 345 kV transmission line project. The need for the proposed project was thoroughly analyzed by the PUC prior to issuing the Certificate. REA has also reviewed the need and concurs with the PUC in that there exists a strong need for additional transmission capacity in southwestern Colorado and that the proposed project is appropriate to meet this need.

REA has concluded that construction of the proposed project will not result in Colorado-Ute consumers subsidizing others. The proposed plan was determined to be the least cost solution of the alternatives studied to meet the needs of Colorado-Ute and the other participants and the allocation of cost is proper and appropriate.

REA finds that joint participation projects which meet the needs of each participant involved, such as the proposed facility, are generally superior from an economic and environmental perspective when compared to each participant constructing a separate facility to meet its need. The alternatives discussed in Section 3.0 of the SDEIS were evaluated using this philosophy. Section 3.0 certainly does not consider all possible alternatives to the proposed action, but considers what REA and the participants have determined to reasonable alternatives.

Comment 2
The strongest justification for the 345 kV line seems to come from WAPA needs. For several years WAPA has been studying its problems. Its decision to go with the present proposal may have been strongly influenced by the economic advantages of the subsidy by Colorado-Ute members. No analysis is included in the SDEIS of alternative links in the western states grid such as a line from Craig/Hayden to Salt Lake City. Such a link might well be more beneficial to the region than the Rifle/San Juan link. WAPA surely has this kind of analysis available as well as analyses of other alternatives to meet its needs. Why is this vast body of information ignored?

Response
All participants in the joint project and their ultimate consumers will benefit economically when compared to the cost of constructing three separate projects.

A study was conducted by Colorado and Utah power suppliers to investigate the potential construction of a 345 kV line to Utah as well as several other lines in Utah and Colorado. REA has reviewed these studies and concluded that the Craig/Hayden to Salt Lake City line would not satisfy the present and future needs of Colorado-Ute and PSC for serving loads in southwestern Colorado, and thus determined that this was not an alternative to meet transmission needs in southwest Colorado. A Utah line would not meet Western's need for additional transmission capability between its Colorado and Arizona systems.

Comment 3
Justification for Colorado-Ute is based on a capacity shortfall in south western Colorado as shown in Table 2-5. This analysis overlooks the obligation of WAPA to deliver power to this area. A number of rural electric cooperatives now in the Colorado-Ute system were preference customers in the Colorado River Storage Power System. When Colorado-Ute was formed, it assumed these preference rights for delivery of power. The SDEIS does not discuss the current status of agreements concerning amount and point of delivery of power by WAPA to Colorado-Ute, and hence the simplistic analysis of Table 2-5 is invalid.

Response
From the historical standpoint the commentor is partially correct. At one time Colorado-Ute had a 10 MW allocation from the CRSP in the early 1960's. This allocation was relinquished by Colorado-Ute as a part of the settlement of litigation with respect to Hayden Station Unit 1 in 1967. Apparently the commentor was not aware such purchases had been discontinued.

The entire output of the Collbran Project generation is delivered to Colorado-Ute at the Collbran Substation near the Lower Molina powerplant. Total capacity of Collbran Project is about 14 MW. The Collbran contract will expire on September 30, 1989. Western proposes to renew the existing contract for the post 1989 period. In addition, Colorado-Ute obtained the CRSP allocation from Intermountain Rural Electric Association (IREA) when IREA became a member of Colorado-Ute. The contract rate of delivery is 17.4 MW in the summer and 20.9 MW in the winter. This allocation does nothing to alleviate transmission problems in southwest Colorado.

Comment 4
Furthermore, no consideration is given to buying New Mexico power for the extreme south and especially for the Empire Electric CO2 load which may be interruptable.

Response
The possibility of purchasing power from New Mexico is discussed in Section 3.3.2 of the SDEIS. Surplus generating capacity may be available in Arizona and New Mexico, however adequate transmission capability is not available to deliver the power to load centers in southwestern Colorado without the construction of this project or somthing similar.

The Shell CO2 project located in the Empire Electric Association service territory requires a very reliable source of power for its operation. Shell has, accordingly, designed and financed the construction of a looped 115 kV transmission system with redundant substation facilities to insure a significant reliability of service to the project.

Comment 5
The division of cost, maintenance, and capacity as described on page 1-3 is strange. Both Colorado-Ute and WAPA are moving power from north to south, yet their capacity on the first leg from Rifle to Grand Junction is smaller than for the remainder of the link. In other words, they

cannot fully use the southern part of the link without further enlarging the northern portion. Environmental impacts would be reduced if double circuit towers were installed initially (but perhaps only a single circuit wired) between Rifle and Grand Junction.

Response
Colorado-Ute and Western are not, as suggested, limited in their use of the Grand Junction-Rifle section. Power is often scheduled south to north through western Colorado. For this situation, the difference in capacity ownership at Grand Junction would not preclude full utilization of the Grand Junction-San Juan portion of the proposed project by Colorado-Ute and Western.

PSC's 25 percent participation in the Rifle-Grand Junction section of the project is needed to provide increased reliability of service to its Grand Junction area loads (refer to Section 2.4 of the SDEIS). This use of capacity primarily for reliability and the relatively short distance between Rifle and Grand Junction will normally allow Western and Colorado-Ute to fully utilize their capacity south of Grand Junction even when power is being scheduled from north to south.

Colorado-Ute was ordered by the PUC in its Certificate to not construct additional facilities beyond those required for a single circuit 345 kV line thus eliminating the possibility of constructing double-circuit towers between Rifle and Grand Junction.

Comment 6
Any capacity problems for Colorado-Ute in SW Colorado have been caused primarily by changes in WAPA operations including acquisition of firming energy, intra-project generating exchanges, and fuel conservation programs. Before these changes, power flows were from south to north. WAPA delivered power to Colorado-Ute in the SW, and Colorado-Ute generated and distributed from the north. The Colorado-Ute system thus had good redundancy and simple distribution. Today, however, after WAPA changes, the power flows are from north to south leading to all the problems in SW Colorado while benefits go to consumers in Arizona (Salt River Project) and New Mexico. This is a key part of the need question. WAPA should deliver power to Colorado-Ute in the SW as originally agreed, and utilities in New Mexico and Arizona should pay for the required new line since it is their power from the Craig/Hayden area that is creating the problem.

Response
Insufficient capacity for serving Colorado-Ute loads in southwestern Colorado has resulted from area load growth and not changes in system operation by Western. Western's 230 kV transmission system is the backbone of the CRSP system which enables reliable deliveries of power to Western's customers by utilizing exchange programs and purchases of firming energy.

Western has had an exchange agreement with Colorado-Ute since 1962. In 1974, Western and Colorado-Ute modified this agreement to establish firm exchange amounts. This exchange provides the same type of benefits as

the Salt River Project agreement (see Section 2.3.2.3 of the SDEIS). The exchange agreement is still in effect and benefits both Western and Colorado-Ute. Without it, additional transmission capacity would be needed by each. Western's fuel conservation program provides for the purchase of lower cost off-peak coal-fired generation, and delivery of hydroelectric power at peak periods to replace the use of more expensive oil and gas generated power. This program contributes to lower cost power for consumers.

Comment 7

Colorado-Ute was formed to generate, purchase, and distribute power to its member coops, only. (To this can be added activities such as wheeling, exchanges, and power pooling customary in the utility industry.) Thus Colorado-Ute has no growth impertive beyond what is necessary to satisfy its members' needs. It is not at all clear from the SDEIS how much capacity of the proposed 345 kV line (if any) will be needed by Colorado-Ute over the next few years. Table 2-2 seems to be the basis for load projections, but this is nothing more than a survey of the various cooperatives that, by and large, are not staffed to develop this kind of information. This is pie in the sky. Where is the independent analysis by REA using state-of-the-art methodology as required by law? In particular, price/ demand elasticity should be included in the analysis.

Response

Table 2-5 in the SDEIS shows specifically the projected additional capacity needed to meet the five Colorado-Ute Members' power requirements for the period 1983 to 1991. Deficit capacity and deterioration of electric service will occur without the construction of the Rifle-San Juan project. REA specifies the methodologies and procedures to be utilized in conducting power requirements studies in its REA Bulletin 120-1. Colorado-Ute and its members developed their power requirements studies in accordance with the specifications of REA Bulletin 120-1. REA has approved the power requirement studies conducted by Colorado-Ute and its members.

Comment 8

The fact is that only minor improvements in the Colorado-Ute distribution system are needed to satisfy SW area needs for the foreseeable future. Today power in the area comes largely from WAPA, Nucla, Bullock, and the Collbran hydro units. Additional low head hydropower can soon become available from the Montrose Canal Project, and power can be purchased from New Mexico. Colorado-Ute intends to disconnect all these sources and use the 345 kV line to bring power from Craig 3. Putting all the eggs in one basket in this way can only reduce system reliability and increase the vulnerability of the system to natural and human disruption.

Response

Please refer to Table 2-5 of the SDEIS for a comparision of Colorado-Ute's southwest Colorado member power requirements and available resources. The proposed project, as covered in the response to Comment 1, is appropriate to serve the long-term needs of southwestern Colorado loads. Minor distribution system improvements would not satisfy area needs for the forseeable future.

The Montrose Canal Project has been delayed due to problems with the FERC license application. The project will probably be constructed, but timing is now uncertain.

Colorado-Ute purchases relatively little power and energy from Western to serve these loads. Furthermore, Colorado-Ute is required by law to interconnect with qualifying small hydro projects and will continue to do so after the proposed 345 kV line is completed. None of the power sources discussed will be "disconnected." Please refer to Secton 3.3.2 of the SDEIS for a discussion of purchase of required power.

Comment 9

A thorough analysis of loads and regional system interconnections is likely to show that the main reason for the 345 kV line is to dispose of power from Craig 3 -power that is not needed by members of the Colorado-Ute system. Using absurd power sales projections, Colorado-Ute has forecast no rate increases when Craig 3 comes on line. It is more likely that we will see a 40% rate increase due to Craig 3 and another 10% increase due to the 345 kV power line. Faced with this probability, consumers are likely to oppose entering Craig 3 into the rate base -- especially since the plant was built without proper review and authorization. It is thus entirely possible that ownership of Craig 3 may revert to the REA. If this comes to pass, then Colorado-Ute will not need the 345 kV line, and it will be important that any new line financed by the REA be in the best possible location for integrating the Craig 3 output into the regional power grid under whatever management arrangement the REA may devise.

Response

The Rifle-San Juan Project is needed to meet the five Colorado-Ute member's power requirements even if Craig Station Unit 3 were not built. The two projects are not mutually dependent. REA considers the Rifle-San Juan project essential and the best means for delivering the current and future power requirements of the five members. Craig Unit 3 would not by itself revert to REA; rather, in the event of default by Colorado-Ute with respect to the requirements of the mortgage with the United States of America, REA would become the successor of interest in the entire Colorado-Ute system and obligations, thereof. In such an event, the Rifle-San Juan project would still be essential to deliver power and energy to the southwest Colorado-Ute member systems and such need for the Rifle-San Juan project would be identical with Colorado-Ute's present need for the Rifle-San Juan Project. REA considers it unlikely that Colorado-Ute will default on its mortgage requirements.

Comment 10

My conclusions are thus that the REA has failed to consider an adequate range of reasonable alternatives, it has failed to conduct an independent assessment of Colorado-Ute's need for the line, it has failed to show that the 345 kV line is actually needed by Colorado-Ute (separate from the needs of other entities), and it has failed to show that the 345 kV line is the best solution to whatever needs Colorado-Ute may have.

Response
REA considers the range of alternatives to the Rifle-San Juan project examined in the SDEIS to be adequate and reasonable. The analysis of need for the Rifle-San Juan project was directed to examining the total needs of the three participants as well as the individual needs of Colorado-Ute. REA considers the Rifle-San Juan project to be the best solution of the range of alternatives examined to meet all the participants' needs.

Comment 11
Beyond this issue of need there are additional items in the SDEIS indicating a rather careless attitude toward the facts of the situation. I refer, for example to the last paragraph of section 1.6 wherein is the statement "no published scientific studies to date have shown adverse effects on humans from electrostatic and electromagnatic fields produced by 345 kV lines". I refer you the Bulletin of the Atomic Scientists for April 1980, Page 28, wherein is discussed the 1978 decision by the New York Public Service Commission that the 60 Hz electric and magnetic fields from 765 kV power lines constitute a health risk. The decision was based on scientific testimony and was upheld in court. 765 kV vs 345 kV is not the issue here since tower heights are established to give essentially equal field strengths and hence equal hazard on the ground. Nearly 60 reports are in the scientific literature on the effects of low frequency electric and magnetic fields including many showing effects on animals at field strengths equal to or less than those expected from the 345 kV line. A number of foreign papers address the effects on humans. Studies now in progress may indicate the need to decentralize power generation in order to minimize the need for long distance high voltage power lines. A conclusion of the Bulletin article is that "the hearing and other related events revealed the outline of an industry attempt to conceal evidence about health risk". It appears that the REA may be joining this conspiracy. This is contrary to the statutory duty of the REA as lead agency for the preparation of the EIS "to protect the welfare of the public" as stated on page 1-5. Consideration of this health risk is expected to favor decentralized alternatives over the current Colorado-Ute proposal.

Response
Several commentors requested a review of the literature on electric fields and any associated health effects. REA has provided additional information on electric fields and health effects in Section 2.2.5.1 of this FEIS. REA has conducted a careful and extensive review of the literature on this subject. REA's position is that the statement made in the SDEIS that "no published scientific studies to date have shown adverse effects on humans from electrostatic and electromagnetic fields produced by 345 kV lines" is still valid. Appendix B of this FEIS includes a bibliography of some of the publications reviewed.

Comment 12
In summary, the proposed 345 kv line is likely to adversely affect the health and economic welfare of consumers in the coops of the Colorado-Ute

system without providing anyademonstratedebenefits.prWeldon'tineedhit.ERC We don't want it. It is a)wastetofiourpmoney.y If othersuwant,abpower line, let them build it, and let them pay for it.

Response ıtively little power and energy from Western to REA concluded after extensiverreviewoondthetsubject,uthat thelproposed project would not adverselygaffect therhealtheofsconsumers.coSeenprevious response to Comment 11. REA further concludes.thatnthefRifle-SanrJuan 345 kV line is essential forithenlong-term economicedevelopmentoin3.3.2 southwestern Colorado, and theolinerwilleinffactucontribute.to the well-being of the ultimate consumer. The proposed project will allow Colorado-Ute to provide the benefit of adequate and reliable electric service to its members in southwestgColordo.stTheiPUCrhasndeterminesthat the project is in the public interestoandhhas4issuediaeCertificate.se of

3.3.13 Carl Weston ;hat is not needed by members of the

Comment 1 ; absurd power sales projections, Colorado-Ute ıses when Craig 3 comes on line. It is more

An active nest of southern ıspotted owlseweredrecentlyafoundain thetMesa Verde Park area near Cortez by aopostlgraduatecbiology studentounderity, Prof. Crug of the UniversitysofeColoradoCatiBoulder. tThisaspecies has been proposed for protectedwstatuslbywtheoU.S.rFish andiWildlife Service. Much of the proposediroutepisssuitablethabitathforothisaig 3 species. Survey and mitigation measures shouldtbenpartoofdthetE.I.S. not

t will be important that any new line financed

Response)ossible location for integrating the Craig 3

The southern spotted owl iswnotglisteddas ahthreatenedaormendangeredement species or proposed for being listed as threatened or endangered. While the owl may be proposed for protective status, REA does not have any evidence that the southern spotted owl would be adversely affected by the proposed project. is needed to meet the five Colorado-Ute

; even if Craig Station Unit 3 were not built.

Comment 2 ıtually dependent. REA considers the

The Purpose and Need sectiontofıthedEISedoestnotaindicateetheeeffecthon Colorado River Basin Pact norialiocationstrepresentedbinstheCwaterUnit 3 consumed in coal fired generation;ofa"pooledandeshared"opower.ult by Significant amounts of water allocatedrtoeone stateecouldgbeesecondarily transferred to use in another state viaoelectricalcpower withoutrest in concomitant water allocationeadjustment.ations, thereof. In such an

)roject would still be essential to deliver

It appears possible that prioritiesoofrwatertuseeandrconservation inch water competing states couldpbejdirecteddawayifromipowerigeneration and the "pooled and shared" poweroexploitedlasSanmeans ofoinvoluntary secondary transfer of waterCrightsoreplacing juniortwatertrightsgineone state with power consumption in another.

Response

Planned water depletions are reviewedhperiodically (usually annually)tby the states involved for complianceiwithstheivariousccompacts. iWaterndent rights for consumptive use within statehboundaries are grantedtonlyoby that state, irrespective ofutheytypedof use.olTherefore,(whetherepower is used within or outside the ;statedintwhichftheewatersiswusedtinhconnection with the generation of thatopowerehas noebearingronoanyeofatheaColorado River Compacts.

Comment 3
I see no provision to ensure that "pooled and shared" power concepts facilitated by this project are not used by Colorado Ute to justify construction of transmission and generation capacity in excess of the needs of its own service area. What assurances are there that this is not a Trojan Horse strategy for other power systems to exploit resources, environment, financing and water in Western Colorado to avoid the problems these factors would cause in their own service areas? How are the pricing, timing, manner of repayment, and criteria for implementation of "pooling and sharing" to be controlled to assure that REA co-ops in Colorado will not be subsidizing growth costs in other member systems especially those that are investor owned? What percentage of the need for this projects is attributable to the "pooling and Sharing concept.

Response
As members of the Inland Power Pool, Colorado-Ute, Western and PSC participate in the sharing of generating reserves with other Pool members. This lowers costs to all the participants' consumers by reducing the amount of reserve capacity necessary on each individual system. Please refer to Section 2.5 of the SDEIS for further discussion. It should be reemphasized that Colorado-Ute's share in the project is based solely on the needs of Colorado-Ute and its members.

Comment 4
How are the legal costs of fighting all the way to the Supreme Court (as was done by Colorado Ute) against the purchase of alternate energy power such as wind power, small or low head hydro, photovoltaic and industrial co-generation, reflected in the evaluation of the conservation alternative for this project? Are there no guidelines for offsetting and guarding against biased evaluations? Was the decision by Colorado Ute to fight the purchase of alternative energy power supported or endorsed by REA? To what extent is the opposition to this and other forms of conservation presumed by REA to reflect the position of individual R.E.A. Co-op consumer-members? Which of the other participants in this project have fought alternate energy purchases and then submitted negative evaluations of the conservation alternatives?

Response
Colorado-Ute, Western, PSC and REA promote and support conservation of energy, the development of small power producers, cogenerators, and other renewable energy sources. In the lawsuit referred to, Colorado-Ute did not oppose the purchase of alternative energy and power, but questioned the rates which must be paid by Colorado-Ute, and ultimately by Colorado-Ute's consumers for purchases of such alternative energy.

Comment 5
Does REA make any official distinction between growth focused career ambition motivation of the technical management cadre of Colorado-Ute and lifestyle preference, affordability and cost of living, values and motivations of individual REA Co-op members when weighing system "need" against social, environmental and economic costs?

Response
REA has carefully evaluated the proposed project and believes its construction is in the best interest of the electric customers of the three participants. REA's independent evaluation was not knowingly influenced by the Colorado-Ute management or any individual faction of members of REA financed cooperatives.

Comment 6
The "pooling and sharing" device also appears to have the potential for allowing investor owned systems to rely on capacity built with low interest rate loans available only to R.E.A. Co-ops. It also subverts the ability of Colorado P.U.C. to require strong evidence of need in Colorado Utes own service area by diffusing and distributing the need factor through other power systems where P.U.C. lacks jurisdiction and where profits to investors have high priority.

The "Purpose and Need" section of the E.I.S. does not address the concomitant loss of within state regulatory ability involved in the facilitation of pooling and sharing goals outlined for this project. This loss represents a degree of disenfranchisement of R.E.A. Co-op member-consumer individuals who regard the Colo. P.U.C. as their only buffer against being forced to finance the career ambition growth pursuits of Colorado Utes technical management cadre. The feeling of disenfranchisement is exacerbated by goals of this project which will force "pooling and sharing" of growth costs of investor owned systems with our nonprofit co-op system.

Response
Refer to response of Comment 3 of this letter and Section 2.0 of the SDEIS.

Comment 7
No one has asked the individual R.E.A. member consumers if or to what degree thay want total guarantee against power shortage at the price of environmental degradation, forced urbanization of their lifestyles, and unaffordable electric bills.

Response
The public has had many opportunities to provide their opinion on the proposed project. Please refer to Comment 8 of Section 3.3.11.

Comment 8
Public hearings are too time and place specific and too dominated by the extremists of both sides of the issues to provide accurate measurement of public and memberconsumer views and opinion. Even with written comment provisions all that is heard from are power industry careerists and vocal literate activists. They (we) are not the affected majority.

Response
A great deal of time and money is expended to notify the public of opportunities to provide input on projects such as the proposed 345 kV line. The public cannot be forced to comment; they will do so if they are interested.

Comment 9
You should poll the pawns! The socio-economic impact on affected individuals has not been adequately addressed. They would would get more consideration if they were ferrets eagles or owls.

Response
The public has been accorded many opportunities to express its opinion on the proposed transmission line. The socioeconomic impact of the project has been addressed (see Sections 5.10 and 5.11 of the SDEIS).

3.3.14 Shields/Enright
Comment 1
Therefore, I would charge the REA, as the lead agency, with altering the value, both aesthetic and monetary, of properties anywhere within the visual boundaries of the Mancos Valley and its surrounding forest should this line be constructed according to the plans of the SDEIS.

Response
The participants' in conjunction with other agencies and the general public, have attempted to select a route that would create the least amount of visual and land use impacts.

Comment 2
Therefore, I charge that this subsequent reduction in value be borne by the REA whose endorsement of the line has been, in fact, given without due consideration of the welfare of the public and the quality of the human environment, as the REA suggests.

Response
REA feels that the SDEIS adequately addresses socioeconomic impacts of the project.

Comment 3
In a similar action regarding a double circuit 345 kV transmission line constructed in the state of the New York, a 1967 Supreme Court ruled. "However, we consider in residential property or in potential residential property which has an enhanced value because of the beauty of the view and/or because of seclusion and privacy, that the power easement does cause a consequential damage if it interferes with said view or with said seclusion and privacy."

Response
No response is necessary.

Comment 4
Figure 3-13 shows the entire WAPA 230 kV corridor as "other corridors considered" but REA gives no consideration to that corridor anywhere in the text of the SDEIS as an alternative to that preferred by Colorado-Ute.

Response
Colorado-Ute needs to deliver power and energy to La Plata Electric Association at the proposed Long Hollow Substation. Due to its need to serve the Durango area load center, use of Western's Lost Canyon-Shiprock 230 kV corridor was eliminated from further consideration.

Comment 5
REA has accepted a written error that the proposed route, as it enters Montezuma County from the Norwood substation, would continue southerly to the Montezuma/ La Plata County border, PARALLELING WAPA'S 230 kV LINE ALL THE WAY. (p. 1-4). WAPA's 230 does not meet at the two-county border.

Response
The comment is correct. Alternative B departs from the Western 230 kV line approximately 48 km (30 miles) south of the San Miguel/Dolores County Line; however, it does not change the results of the analysis of the alternative corridors for this section.

Comment 6
REA has determined a need for the line, based on Colorado-Ute's projected needs; but REA admits it has not yet completed its review of Colorado-Ute's forecasts (p. 2-2). REA's SDEIS shows no documentation of Colorado-Ute's projected needs; REA accepts their validity without research. (p. 2-2) Mathematics used to show Colorado-Ute's energy requirements for 1983 have been used quite liberally. According to the SDEIS, "Colorado-Ute expects member energy requirements for 1983 to be approximately 7 percent above 1982. Tables 2-1 through 2-4 conclude a 6.15 percent increase. Such rounding of figures to the next highest indicates either a bias or faulty mathematics.

Response
Colorado-Ute and its member associations have prepared Power Requirements Studies in accordance with the procedures and guidelines set forth in REA Bulletin 120-1. This forecasting process was accomplished by staffs from Colorado-Ute and its members. The fourteen member association Power Requirements Studies have been approved by REA.

Colorado-Ute's 14-member energy requirements are expected to increase from an actual 2819.1 GWH in 1982 to an estimated 3008.4 GWH in 1983 (Table 2-2 in SDEIS) for an estimated increase of 6.71 percent.

Comment 7
REA continues to endorse the alleged need for such a large-capacity transmission line; yet admits (p. 3-25) "new growth in Southwestern Colorado has decreased."

Response
The rate at which Colorado-Ute's member loads are growing in southwestern Colorado has decreased since the original double-circuit 345 kV line was proposed. The current load forecast reflects this change and was an important factor in reducing the scope of the current proposal to a single-circuit line. Colorado-Ute's capacity has similarly been reduced from 70 percent of a double-circuit (approximately 700 MW) to the 50 percent of a single-circuit (approximately 250 MW).

Comment 8
Nothing in the SDEIS text clearly spells out parties in mitigation proceedings. For property owners in Montezuma County, construction of the line would be performed by one agency and maintained and financed by another. Any hopes for fair and expedient mitigation would be lost in this confusion.

Response
Colorado-Ute and Western will be joint participants in this portion of the line each financing 50 percent of the line. Mitigation commitments made to landowners will be honored by both parties.

Comment 9
REA hopes to convince its SDEIS reader that the major industry in Southwestern Colorado today is mining. (p. 4-25) I urge the REA to update its facts. If mining were the major industry, a need for larger-capacity lines might be justified. I suggest, however, that cattle are content without more powerlines through their grazing and croplands.

Response
The statement "today, mining of coal, uranium, and other energy related resources dominates the regional economy within the study area" is correct as written. Mining may play a lesser role in southwest Colorado today, but the statement is still true for the study area as a whole.

Comment 10
REA rejects the proposal of a Lake City-Durango 115 kV line because if would "significantly impact a highly scenic area." (3-19) This same lead agency prefers the more visually impacting 345 kV line to cross through highly scenic area of the National Forest surrounding the Mancos Valley, Mancos Hill and Hesperus.

Response
The Lake City-Durango 115 kV transmission line alternative was eliminated because it would do little to serve the needs of all the project participants.

Comment 11
Burns-McDonnell used a 1977-79 resource for its data on land use in the Mancos Valley (fig. 4-11) This data is no longer reliable. I urge a closer inspection of the livilihood of this region and the loss in land value and use which would result from the construction of this transmission line.

Response
Figure 4-11 is a small scale generalized representation of land use within the study area. The corridor profiles found in Section 4.12 of the SDEIS were developed from larger scale maps and REA believes they are suitable for the purpose of evaluation of potential environmental impacts.

Comment 12
REA contends that "the national interests of rural electrification achieved by this project outweigh the environmental benefits derived from protecting the prime farmlands from such use." (p. 5-44) I suggest that this is not a question of rural electrification; that it is a question of Colorado electricity consumers financing the cost of construction of transmission lines, generating facilities, and coal operations in their state for the lower-cost power provided to non-members outside the state of Colorado. I would also challenge the REA to a national interest survey for the truth.

Response
Please refer to Section 2.0: Purpose and Need of the SDEIS. Colorado-Ute's primary purpose for participation in this project is to improve service to southwestern Colorado.

Comment 13
In conclusion, I suggest that the REA has defeated its original purpose of providing electrification to rural America, a purpose for which it was conceived nearly half a century ago. Rural customers in Colorado are being asked to relinquish their values, their lands and their livlihoods, in some cases, in order to provide electricity to urban Americans outside the state of Colorado.

Response
REA would be providing financing assistance to Colorado-Ute to improve service to southwestern Colorado loads. Western as a joint participant would finance its share of the project. Western serves customers outside the State of Colorado based on a power resource allocation which gives preference to municipalities, rural cooperatives and public-owned utilities.

3.3.15 Foy Cogburn
Comment 1
Page 1-1; In the matter of establishing the need for the 345 kV Rifle-San Juan Transmission Line and associated facilities; this NEED still has not been established and approved by the Col. Public Utilities Comm.

Response
The Colorado Public Utilities Commission granted Colorado-Ute and Public Service Company a Certificate of Public Convenience and Necessity for the Rifle-San Juan 345-kv transmission line project on September 20, 1983.

Comment 2
and the Environmental Analysis being a larger part of the DEIS; the reviewing public has no knowledge of, nor way of knowing, the extent of corrections and answers to public comments. There are so many mistakes in this SDEIS that we have doubts that any corrections have been made or attempted to be made.

Response
Refer to response to Comment 1 in Section 3.3.11 regarding responding to comments on the original DEIS. REA has included some corrections and changes to the SDEIS in Section 2.0 of this FEIS.

Comment 3
With our Government insisting on budget cuts to reduce the national debt, the private sector is becoming more aware of the sneaky ways that have been used in the past to get these expensive projects passed and placing the burden of payment upon the utility users and taxpayers. Most all these Coops have become profit organizations even they claim a non-profit standing and tax exempt; they just add on more expenses.

Response
Your comment is noted; however, Colorado-Ute and its members are incorporated as nonprofit cooperative associations and any margins they earn in excess of expenses are allociated to the member consumers as "capital credits."

Comment 4
The proposed project does not conform to the Col-Ute by-laws as being soley for the "benefit for the consumer of the COOP; this fact is easily seen in the reading of this SDEIS, in that the project is for the benefit of the Western States Grid system; and, the Colorado consumers will be subsidizing the project. This is very unfair, and, as soon as the members and customers of the Coops can be educated of this fact, we will see much more input into the public hearings. The average member does not realize that they are subsidizing and guaranteeing repayment of a debt for private industry; which it all boils down to. There is a simple solution to this over-built power plant situation; the Craig plant could be sold and tied into the Western Grid system directly across Utah with very little environmental impact.

Response
Colorado consumers are not subsidizing the project. Colorado-Ute's participation in this project is for the purpose of providing adequate service to southwestern Colorado loads. The strengthening of interconnections with New Mexico is an important part of the project but is secondary to Colorado-Ute serving member loads. Please refer to responses to Comments 9, 13, and 15 in Section 3.3.11.

Comment 5
We must insist on a joint Review process where as all parties concerned in this project (including the private sector that is directly affected) can be brought together in an orderly meeting and each side tell it's story and discuss the whole situation so that all the facts and figures can be publicly brought out so that the members and tax-paying public can be informed and then and only then will we began to see a solution. Governor Lamm has a department in his cabinet for such. You may well know that the Col-Ute has refused this process; but we must insist that you have some bearing on this. A route must be identified so that those people directly affected will get involved Everyone knows that most individuals (private property owners) do not get involved until they know

that they are directly affected. When these people find that they are being gored and are involved, then your troubles will begin - you may think you are now having troubles - because there are still westerners that don't talk much and still believes in the old ways of "winning the WEST" We urge you to keep communications going for this project until a route is established and a JOINT REVIEW PROCESS can be arranged.

Response
Opportunties for the public to be informed about the project and to provide input have been available since early in the project in the form of public information meetings, open houses, public hearings, county permitting meetings, and PUC hearings.

The environmental impacts of transmission projects are usually evaluated using a corridor rather than a centerline approach. The corridor approach offers considerable flexibility over the centerline approach especially on projects involving numerous Federal, state and local agencies which have permitting authority. The corridor approach provides the public, involved governmental agencies and the utility the ability to establish an acceptable corridor and then define the actual centerline to avoid environmental constraints or agency and public concerns. The corridor approach has been used successfully in previous REA-financed transmission projects.

3.3.16 Anita Vogelaar
Comment 1
Repeatedly, the PUC has denied the application for a Certificate of Public Convenience and Necessity for this project - and then it seems that Colorado-Ute (and Western) and REA just proceed to reapply or to ask for a rehearing, reargument, or reconsideration. In addition, the SDEIS does not even mention the reasons that the PUC gives for denial and yet gives within the body of the statement every possible reason for building the line. If this fair presentation of the pro and cons of the project?

Response
The application for a Certificate for a double-circuit 345 kV line was denied by the PUC. Colorado-Ute, Western, and PSC reevaluated the project and then Colorado-Ute and PSC reapplied for a Certificate for a single-circuit 345 kV line because the need for such a project still existed. REA is required by NEPA and CEQ Requlations to conduct an independent review of the project and reasonable alternatives. Even though the PUC denied a Certificate for the double-circuit project, REA still believed there was a need for additional transmission capacity in southwest Colorado. Therefore, REA proceeded to conduct an evaluation of the new proposal. The PUC granted a Certificate to Colorado-Ute and PSC for the proposed project on September 20, 1983.

Comment 2
While I am not expert on the Preferred Corridor, I do have extensive knowledge of the Alternative Corridors B & E from Montrose Substation to Norwood Substation, Segments 15c, 15e, 20a, and 21. It would seem to me that consideration of an alternative that was dismissed in the early 1970's as environmentally unsound and so detrimental to the land that it

was recommended that perhaps the current Shiprock-Currencanti (sic) 230 kV line should be dismantled and sited elsewhere is somewhat indefensible from the standpoint of considering viable alternatives.

Response
Alternatives B and E were evaluated to comply with the Federal Land Policy and Management Act (FLPMA). FLPMA requires Federal land managers to consider existing utility corridors that cross Federal lands for additional use. Alternative A in the SDEIS is the preferred corridor for the section from Montrose Substation to Norwood Substation site. Alternative E (with segments 15c, 15e, 20a, and 21) does have some lower impact values compared to the other alternative corridors and, consequently, cannot be disregarded.

Since the Curecanti-Shiprock 230 kV transmission line is the backbone of the CRSP transmission system for western Colorado, it would be costly and not practical to dismantle this existing line.

Comment 3
Some of the alternatives that are dismissed as out-of-hand do, indeed, seem to offer persons living in the Southwestern region of Colorado a better life-style, better environment, and an opportunity to preserve economic and electrical resources for the use and benefit of those living in the area rather than subsidizing the profitable sale of electricity to users in other areas.

Response
The alternatives that were evaluated and eliminated would not meet the needs of the project participants. Colorado consumers will not be subsidizing the profitable sale of electricity to users in other areas as a result of this project.

Comment 4
I would encourage serious consideration of ways which impacts were evaluated. No weight whatsoever has seemingly been given to one of Colorado's major products - selling (through tourism) wide open spaces. In fact, a low visual impact rating is given to any tract of land which is more than 80 acres - don't we have a responsibility to land and scenic beauty if it is in a parcel larger than 80 acres?

Response
An assessment of the visual impact potential was based on both the ability of the landscape to conceal the transmission line from viewers (visual absorption capacity) and the user sensitivity of the area crossed by the corridor (SDEIS P. 3-45, also see Appendix B of the SDEIS.) The visual impact rating system was not based on tract size.

Comment 5
That the payment of land and easement acquisition would benefit landowners is questionable. Who is paying for the loss in land value that results from being in the visual path of the powerline? We found that our land reduced in value 50% for those portions which were in

visual proximity of the transmission line. Why? Because the value is scenic and wilderness. Our loss to just land value was substantial. Other direct losses, such as nuisance and vandalism far outweigh compensation.

Response
Please refer to responses to Comments 35, 87, 92, 97, and 109 in Section 3.3.11.

Comment 6
No mention is made of the impact (negative) on the land, wildlife, and landowner where the transmission line right-of-way opens secluded areas to access. Yes, I know that gates are locked - but keys seem to abound to provide access to private property for hunting and fishing - and these persons seem to have no regard for trespass and courtesy. Just ask those of us who have such secluded property and you will find a group of disgruntled persons who cannot help but feel important consideration be given to siting on public lands which already are accessible to the public.

Response
Construction of the transmission line in secluded areas could have a negative impact on the landowner and natural resources. The participants preference is to control access to the ROW by using locked gates which should reduce impacts to landowners and natural resources. The potential environmental impacts of the various alternative corridors have been evaluated without regard to land ownership.

Comment 7
No mention of soil-conservation ratings such as alpine and sub-alpine soils has been made - even those where it is appropriate-even though this affects recovery rates of vegetation and erosion.

Response
The map units shown on Figure 4-4 of the SDEIS use soil taxonomy nomenclature developed by the SCS and take into account sub-alpine and alpine soils. Map Unit 1, Typic Cryoboralf, is an example. This mapping unit is found at sub-alpine elevations throughout the study area, (see Figure 4-4). The formative units that make up the mapping unit name give an indication that it is a sub-alpine soil. "Cyro" means cold, "bor" means cool, "alf" stands for the soil order alfisols. Map unit number 16, Pergelic Cryumbrept, which is found at the highest elevations in the study area, i.e. Mt. Sneffles, has a poor reclamation potential.

Comment 8
All in all, I would question whether the SDEIS addresses itself to analysis in any detail of the impact on landowners, wildlife, and conservation concerns since there is a blase attitude that because the powerline is needed (in the REA's mind) it outweighs any points that bear a negative relationship to the justification for the line.

I feel that a very specific analysis of the proposed route should be made, not just a general comparison of different alternative routes. Big generalities always are flawed and this document abounds in them.

I would recommend that reviewers peruse the book Environmental Impact Assessement by Corwin, Heffernan, et. al Editors, published by Freeman, Cooper & Company in 1975. It raises better than I can some criteria by which one could seriously question the validity of the present philosophy behind transmission line development in Southwestern Colorado and the objectivity of the developers of the SDEIS when evaluating impacts of the proposed project.

Response
Impacts, both positive and negative, of the proposed project on landowners can be found in Sections 5.9, 5.10, and 5.11 of the SDEIS; and on wildlife in Sections 5.5 and 5.7. Energy conservation and load management are discussed in Section 3.3.1 where an explanation is given as to why they are not viable alternatives to meet the needs of the project participants.

The CEQ Requlations (40 Parts CFR 1500 - 1508) that implement the procedural provisions of NEPA, require an evaluation of alternatives; therefore, various alternative corridors were evaluated in the SDEIS. REA and the cooperating agencies have selected a preferred corridor based upon this evaluation. A proposed route within a corridor is not determined by the EIS process and a specific analysis is therefore not made.

3.3.17 Tom Maxwell
Comment 1
In SW Colorado the economy is primarily based on two industries: farming and tourism. While the SDEIS admirably outlines impacts of the proposed line on wildlife and timber, I feel more study should be devoted to impacts on those two industries. What will be the loss of land value and productivity to farmers whose land is crossed? And what will be the impact to scenery our area's greatest drawing card? And how will that in turn affect tourism? I care about impacted forest creatures, but I also am quite concerned about the economical impacts on industry this line would obviously make. So please include more mention of these.

Response
The proposed line would cross approximately 8 km (5 miles) of prime farmland, 8 km (5 miles) of irrigated cropland and 14.4 km (9 miles) of nonirrigated cropland. Towers to support the transmission line would take approximately 0.2 ha (0.6 acres) of prime farmland, 0.6 ha (1.4 acres) of irrigated cropland and 0.3 ha (0.8 acre) of nonirrigated cropland out of production. The degree of impact on farming operations cannot be quantified precisely and may vary greatly from landowner to landowner depending on customary farming practices, machinery sizes and other factors. In general, the ROW can continue to be cultivated. However, some landowners may not find it practical to farm under and in close proximity to tower structures; consequently, some land adjacent to the towers may be taken out of production. In areas where the line must

cross prime, irrigated or nonirrigated farmlands, the towers would be carefully located to minimize disturbances to farming practices. Since such a small amount of land would be taken out of production and since mitigative measures to reduce impacts on agricultural operations will be used, the impacts to farming should not be significant.

The potential visual impacts of the proposed project are discussed in Section 5.12, Page 5-58 of the SDEIS. By using the mitigation measures identified in Section 2.3 of this FEIS, project impacts on visual resources would be reduced. Care has been taken during corridor selection to use those corridors that will not be visible or as visible from major recreation attractions. In any one area, the proposed project would be a very small portion of the entire viewshed. Therefore, it is unlikely that the proposed project would cause a noticeable impact on the tourism industry.

Comment 2
I would also ask why alternatives to the line as proposed have not been more deeply explored. Why must we only look into the impacts Colo. Ute would have us suffer? I feel alternatives such as underground lines, smaller line, and merely upgrading WAPA's line should be studied. Telling their costs, impacts, and increases in energy flow compared to the line as proposed.

Response
The alternatives listed have been addressed in the SDEIS (see Section 3.3), including the reasons why REA feels they are not viable alternatives to the proposed project.

Comment 3
Since impacts on the county are mentioned, I feel more mention should also be made of benefits to the county the line offers. Is the only benefit to Montezuma County to provide enough energy to operate the Shell Project? Or are there other benefits that would outweigh the impacts? If we must have more energy to meet demands, how much would it cost over the next five years to purchase that energy from other utilities?

Response
All electrical consumers in Montezuma County will benefit from the proposed project because it will enable Colorado-Ute to continue to provide an adequate and reliable supply of power to Empire Electric Association. Please refer to the discussion on purchase of power in Section 3.3.2 of the SDEIS. The Rifle - San Juan line is needed regardless of whether power is purchased or not because there is a lack of transmission capacity in southwest Colorado.

Comment 4
Lastly, I would like to go on record as to my opinion on the line as a whole. I believe it is in the best interest of Colorado Ute, not Coloradoans. I believe it is to generate more money rather than to meet electrical needs. I believe the residents Ute has chosen to impact with

its money making monstrosity are impacted far more than they are benefited. And I am opposed to the line as proposed for the sake of our area's industry and aesthetic beauty. Thank You.

Response
REA's evaluation indicated that the project will benefit consumers in southwestern Colorado by providing an adequate and reliable source of power to meet present and future area needs.

3.3.18 Aileen Maxwell
Comment 1
Gentlemen: Last year the Public Utilities Commission denied the application by Colorado-Ute for this 345 kV transmission line project and I feel there is no more need for it now than at that time.

Response
The PUC denied the application for a double-circuit 345 kV transmission line; however, the PUC approved a Certificate for this project on September 20, 1983.

Comment 2
The environmental impact on this locality will be disastrous to our social and economic well being. Our greatest asset is our beautiful scenery which constitutes a great percentage of our economy due to the tourist trade. People come from all over the world to view our beautiful scenery and they certainly will not come to view these monstrosities that Colorado-Ute plans to construct in our beautiful mountain area. If these lines are constructed in our farmland, then our economy will also suffer as our main economy here comes from tourist trade and farming.

Response
See response to Comment 1 in Section 3.3.17 of this FEIS.

Comment 3
Why should we be forced to sacrifice our livelihood and our God-given heritage so that Calif. and other states can have more power?

Response
Please refer to Chapter 2.0 - Purpose and Need of the SDEIS for a discussion of the reasons why the project is needed.

Comment 4
The only reason Colorado-Ute is working so hard to get this line in is for the almighty dollar--they are BIG BUSINESS and could care less for our locality.

Response
Colorado-Ute proposes to construct this line so it can continue to supply an adequate and reliable source of electric power and energy to its members in southwest Colorado.

Comment 5
Our County Commissioners go along with Colorado-Ute to the extent of granting them a permit to cross our County even before P.U.C. held their meeting to deny it. One of our Commissioners is also on the Empire Electric Board and Empire Electric and Colorado-Ute work hand in hand.

Response
The PUC has issued a Certificate for this project on September 20, 1983.

Comment 6
Other alternatives should be explored that will not have the social and economic impact on this area that this line will have -- such as upgrading the WAPA line. This should give us all the power we will need.

Response
A reasonable group of project alternatives was evaluated in the SDEIS. Western's 230 kV transmission line is heavily loaded and cannot be taken out of service for uprating until additional transmission capacity (the proposed 345 kV line) is constructed.

Comment 7
I strongly urge you to consider the impact on our area. I feel we are being used by Colorado-Ute to obtain their own means at our expense.

Response
REA has evaluated impacts to the area and will take your concerns into consideration before making a final decision.

3.3.19 Jim Hunter
Comment 1
It splits our ranch properties to make the small parcels difficult to operate for the balance of our lifetime; (B) we are close to and near residential areas and this is a dangerous location to expand huge lines. We are approx. 8 miles from Delta, Colo and approx. 8 miles from Olathe, Colo in the path of possible future development. Elderly citizens reside in the area and the residents and property owners of this area are opposed to this line or any line at this location.

Response
The proposed corridor for the 345 kV line follows the existing Grand Junction-Montrose 115 kV line for this section of the project. The 115 kV line crosses the Hunter property. If the 345 kV line were to parallel the 115 kV line it would also cross the Hunter property. However, if the 345 kV line were separated from the 115 kV line to the west edge of the study corridor in this section, it would cross public lands managed by the BLM. Colorado-Ute will contact and work with the affected landowners and the BLM before selecting the final alignment for the 345 kV line in this section.

Comment 2
Our home construction for this area has been held up for approximately 1 1/2 years because of the proposed lines. Our plans have been drawn-for sometime and the location of the lines indefinite - this leaves us up in

the air and lines in this location would wreck our property. The land also has definite subdivision possibilities due to water, telephone and road accessibility.

Response
The participants will work with private landowners to minimize impacts of the transmission line location.

Comment 3
Our land is only a stones throw and adjacent to approximately 200,000 acres of BLM and Forestry land. Colorado-Ute shoud explore that area and negotiate with the BLM instead of our small area of small farmers, ranchers, and land owners.

Response
Refer to response to Comment 1 of this letter.

Comment 4
In closing I respectfully submit to you that most of the ranchers and landowners of my area feel that the proposed line is not needed and this project for the State of Colorado is not justified.

Response
The PUC ordered that a Certificate of be granted to PSC and Colorado-Ute for this project on September 20, 1983.

3.3.20 Katy Moss
Comment 1 - I am concerned with the vagueness of specific details and inaccuracy (ie Figure 4-29) and especially, the lack of public input. Your support in this important matter will be greatly appreciated.

Response
The public has been provided with numerous opportunities to supply input during the EIS process, including an opportunity to comment on the SDEIS. Concerning the accuracy of Figure 4-29, please see the response to Comments 73, 74, 77 and 78 in Section 3.3.11.

3.3.21 Robert Bement
Comment 1
It is obvious that the Supplemental Draft Environmental Impact Statement, June 1983 for the Rifle San Juan 345 kv Transmission Line has been very sloppily done. On figure 4-5 Vegetative Communities and Natural Areas, agricultural lands shown in yellow on the map actually cover only a small portion of the Agricultural Land in the Mancos Area.

On page 4-11 Agricultural Lands are defined to "include land used for crops, pasture or grazing. In addition, this category includes the woodlands and wastelands owned or rented by agricultural landowners." By this definition the map on Figure 4-5 is grossly in error for the Mancos area and I think little credence can be given this document if the work in the Mancos area is a sample of the kind of work done for the whole project area.

Response
Please see the response to Comment 65 in Section 3.3.11.

3.3.22 Thelma F. Bement
Comment 1
Please consider our plight. Now the big arm of the Forest Service has sided with the Colorado Ute Electric and without regard to future pipelines has decided Alternative B is the best route. I hope you will have time to read at least a portion of enclosed newspaper article.

Response
The FS issued a Finding of No Significant Impact for Alternative C between Norwood and the Montezuma/La Plata County line.

Comment 2
Please help us. You are our last recourse. Our neighbor, Jake Gonzales owns only 12 acres and already has lost a large portion of his land to 2 major pipelines. The second one is 20 feet from his front door.

Response
Small parcels of land will be avoided when practicable. The preferred corridor identified in the FEIS for this area (Alternative C) is located primarily on FS land and will avoid small privately owned parcels.

3.3.23 Roger Howard
Comment 1
I would just like to know for sure if the proposed corridor crosses my property Sec. 9 as the present power line does? Much of my 40 acres is hilly and I have only 2 proposed building sites. I would encourage the sharing of this line with the existing line.

Response
If the existing Grand Junction - Montrose 115 kV transmission line crosses your property, the proposed corridor crosses your property because it would parallel the existing transmission line. The participants do not plan to double-circuit the existing 115 kV line with the proposed 345 kV line.

3.3.24 James Denton Brown
Comment 1
Strongly oppose Alternatives A shown on page 3-65. Route would seriously impact existing developed areas and potential growth areas northwest of Farmington New Mexico. High visual impacts would also be likely. Alternative B, Page 3-65, is preferable.

Response
The project participants prefer Alternative B; however, use of this corridor would be dependent upon negotiating a ROW easement with the Southern Ute Indian Tribe.

3.3.25 Robert Brown
Comment 1
We favor Alternative B for the Rifle-San Juan 345 kV Transmission line. This alternative misses developed land and property that can be developed as Farmington continues to grow north.

Response
Refer to response in Section 3.3.24

3.3.26 Peter Ballode
Comment 1
I am a landowner that could be adversely affected by either alignment A or B. Therefore, I favor alignment C - which I understand is the shortest and least expensive.

Response
Alternative C is the Agencies preferred alternative between Norwood and the Montezuma/La Plata County Line.

3.3.27 Stella Montoya
Comment 1
I'm concerned with the southern part of the transmission line in La Plata County Colorado where the forest land ends. Your plans on the map indicate to me that you would like to enter Montoya Ranch coming south at this point, and we certainly are opposed to this. We have been negotiating a contract for a ski run to be built in the area south of Hwy. 160 and southeast of the Cherry Creek Camp ground. Since this would go all the way to the top of the mountain there is no way a transmission line could be built there.

Response
A specific route or alignment within the preferred corridor has not been identified at this time. The information you have submitted will be considered when an alignment is identified. Every effort will be made to site the transmission line in a location that would be compatible with the development of this proposed ski area.

3.3.28 Elizabeth Shaw
Comment 1
I am very concerned with the visual impact to the proposed 345 kV Rifle-San Juan Transmission Line and hope every consideration will be given in the final selection of the route. The main industry of S.W. Colorado is tourism and the natural beauty of this area is what people remember. Hwy 160 is a main East-West artery and hopefully it won't be destroyed by steel towers.

Response
Mitigation measures will to be used by the participants to minimize the visual impact of the project. Discussion of these measures can be are found in Section 2.3 of this FEIS.

Comment 2
From reading the SDEIS it seems Alternative C would be the lesser of 3 evils.

Response
Alternative C is the Agencies' preferred alternative between Norwood and the Montezuma/La Plata County Line.

3.4.0 Public Hearings

3.4.1 Introduction

REA held four public hearings to hear views and receive comments about the adequacy of the SDEIS and the environmental impacts of the proposed project. Meetings were held at Grand Junction, Montrose, Durango and Cortez, Colorado. Numerous comments were received at these hearings. The hearings are summarized in the following sections and specific comments and responses are listed in Table 3-3.

3.4.2 Grand Junction, Colorado (July 25, 1983)

Five people made oral comments with three people voicing support for the project. Comments and responses for the meeting are listed in Table 3-3.

3.4.3 Montrose, Colorado (July 26, 1983)

Seventeen people made oral presentations with 10 people voicing support for the project. Three written comment letters were also received. Comments and responses for the meeting are listed in Table 3-3.

3.4.4 Durango, Colorado (July 27, 1983)

Sixteen people made oral presentations with 10 people voicing support for the project. One comment letter was received. Comments and responses for the Durango meeting are listed in Table 3-3.

3.4.5 Cortez, Colorado (July 28, 1983)

Fourteen people made oral presentation and five people voiced support for the project. One comment letter opposing the use of Energy Corridor No. 3 was received. A listing of issues/concerns and responses is presented in Table 3-3.

Table 3-3. Issues/Concerns and Responses for the Public Hearings

Issue/Concern	Response (Refer to Listed Section in FEIS Unless Otherwise Noted)
Grand Junction (July 25, 1983)	
1. Property compensation with regard to future development potential.	Section 3.3.11, Comments 5 and 109.
2. Colorado-Ute's system is overbuilt.	Section 3.3.11, Comments 9 and 15.
Montrose (July 26, 1983	
1. Out-of-state sale of power.	Section 3.3.11, Comment 9. Section 3.3.12, Comment 9.
2. Corridors are vague.	Section 3.3.15, Comment 5.
3. Colorado-Utah transmission alternative.	Section 3.3.11, Comment 13. Section 3.3.12, Comment 2.
4. Lack of consideration of alternatives such as conservation, Dr. Shah's alternatives and localized generation.	Section 3.3.4, Comment 1. Section 3.3.11, Comments 36 and 37. Section 3.3.12, Comment 1. Section 3.3.14, Comment 10. Section 3.3.16 Comment 3. Section 3.3.17 Comment 2. Section 3.3.18 Comment 6.
5. Need has not been substantiated.	Section 3.3.4, Comment 1. Section 3.3.12, Comment 1. Section 3.3.15, Comment 1. Section 3.3.16, Comment 1.
6. Impacts to farming.	Section 3.3.2, Comment 7. Section 3.3.11, Comments 5, 87, 100 and 106. Section 3.3.17, Comment 1. Section 5.9.1 of SDEIS.
7. Transmission line noise and corona.	Section 5.13.1 of SDEIS.
8. Health effects.	Section 2.2.5.1. Section 3.3.4, Comments 2 and 3.

Table 3-3 Cont.

9.	Lack of evidence that Colorado-New Mexico intertie in the area is needed.	Section 2.5 of SDEIS.
10.	Compensation for crop loss.	Section 3.3.11, Comment 87.
11.	Collbran Contract	Section 3.3.12, Comment 3.

Durango (July 27, 1983)

1.	Inaccuracy in the data base for segments 31g, 31h, 32a, 32b and 32c.	Section 3.3.11, Comments 65, 67, 68, 70 and 73 to 82 and 85.
2.	115 kV loop system alternative.	Section 3.3.11, Comment 37. Section 3.3.6 of SDEIS.
3.	Exact location of the line in La Plata County	Exact location of the line in La Plata County has not been determined. The REA preferred corridor in La Plata County is 32a, 32c, 33, and 35a (Figure 3-13 SDEIS).
4.	Figure 4-5.	Section 3.3.11, Comments 57 and 65.
5.	EIS process should wait until PUC approval is obtained.	Section 3.3.4, Comment 1. Section 3.3.12, Comment 1. Section 3.3.15, Comment 1. Section 3.3.16, Comment 1.
6.	Sale of power to California.	Section 3.3.11, Comment 9. Section 3.3.8, Comment 18.
7.	Lack of serious consideration of alternatives such as conservation and localized generation.	Section 3.3.4, Comment 1. Section 3.3.11, Comment 36. Section 3.3.13, Comment 4. Section 3.3.16, Comments 3 and 8.
8.	Draft easement form should be included.	Section 3.3.11, Comment 109.
9.	Impact on property values.	Section 3.3.11, Comments 5 and 87.
10.	Impact of the project on utility rates.	Section 3.3.11, Comment 9. Section 3.3.12, Comment 9.
11.	Impact to proposed ski area.	Section 3.3.27.
12.	Overestimation of power use.	Section 3.3.11, Comments 9 and 15. Section 3.3.12, Comment 7. Section 3.3.14, Comment 6.

Table 3-3 Cont.

Cortez (July 28, 1983)

1.	Project not needed to serve local needs; EIS should address alternatives to meet local needs.	Sections 2.2.2, 3.3.1 and 3.3.3 of SDEIS. Section 3.3.4, Comment 1. Section 3.3.11, Comments 36 and 37, Section 3.3.12, Comment 1. Section 3.3.14, Comment 10. Section 3.3.16, Comment 3. Section 3.3.18, Comment 6.
2.	Present expansion of the Lost Canyon substation and the tie-in into the substation.	Section 3.3.9, Comments 1 and 2. Circuit breakers are being added at the Lost Canyon Substation to sectionalize Western's existing Curecanti-Shiprock 230 kV Line. In the event of an outage in a portion of the line, the circuit breaker addition will allow the Lost Canyon Substation to receive power from the opposite portion of the line. The circuit breaker addition is not part of the proposed Rifle-San Juan 345 kV transmission line project. The new circuit breakers are capable of 345 kV operation so they won't have to be changed if and when the Western Curecanti-Shiprock line is upgraded to 345 kV.
3.	Why do outages occur in Durango Cortez area?	Section 2.2.2 of SDEIS.
4.	Social impacts particular on schools have not been analyzed.	The project will probably be constructed in three sections, each requiring an estimated 120 to 200 construction workers. The work force would be split into smaller crews along different sections of the line. The entire construction period would be approximately 24 to 30 months during which time no more than 50 workers are expected to be present at any one place. Local labor will be used to the extent practicable. Nonlocal labor is not expected to bring dependents because of the short construction period. Therefore, the impacts to any one school system should not be significant because of the make-up of the labor force and the fact the labor force would be spread out along the line.
5.	Tax revenue.	Section 3.3.11, Comment 7.

Table 3-3 Cont.

6.	Status of county permits.	Section 1.4.
7.	Effect of project on utility rates.	Section 3.3.11, Comment 9. Section 3.3.12, Comment 9.
8.	Alternative C should be the preferred route.	Alternative C is Agencyies' preferred alternative between Norwood Substation site and the Montezuma/La Plata County Line.
9.	Cost projections are based on 1982 dollars and should be updated.	Prior to obtaining bids on the construction contract for the project, cost projections will be updated.
10.	Underground the transmission line.	Section 3.3.9 of SDEIS.
11.	Impact on property values.	Section 3.3.11, Comments 5 and 87.

APPENDIX A
Comment Letters

United States Department of the Interior

OFFICE OF THE SECRETARY
OFFICE OF ENVIRONMENTAL PROJECT REVIEW
Room 688, Building 67
Denver Federal Center
Denver CO 80225-0007

IN REPLY
REFER TO:

AUG 15 1983

ER 83/821

Mr. Dennis Rankin
Western Area-Electric
Rural Electrification Administration
14th and Independence Avenue, S.W.
Washington, D.C. 20250

Dear Mr. Rankin:

We have reviewed the supplemental draft environmental impact statement (EIS) for the Proposed Rifle to San Juan 345 kV Transmission Line and Associated Facilities, Colorado and New Mexico, and offer the following comments.

GENERAL COMMENTS

Public Lands

The proposed project, as described in the draft EIS, would impact Federal lands administered by the Bureau of Land Management (BLM) in Colorado and New Mexico. Given this, incorporation or resolution of the following observations and comments in the final EIS should ensure that the right-of-way application will be approved without significant additional delays.

This draft EIS utilized some of the information contained in BLM's Glenwood Springs Resource Management Plan (DEIS published November 1982, FEIS published June 1, 1983). This fact should be appropriately documented in the final.

Indian Lands

No serious permanent environmental impacts resulting from the proposed construction are likely on Indian lands. However, if Alternative B is selected, the corridor will pass through approximately nine miles of Southern Ute land. It is important that the cultural resources surveys be conducted along the proposed corridor prior to implementation of the project. If the appropriate cultural resources surveys are completed and the necessary mitigative measures are incorporated, the final EIS analysis should be adequate for approval of the portions of the right-of-way which cross Southern Ute land.

Fish and Wildlife Resources

The primary impacts of construction of the proposed transmission line on the fish and wildlife resources of the project area are adequately described and would probably not be significant, providing mitigation measures outlined in

the document are implemented. In addition, it will be necessary to provide assurance that the proposed mitigation is accomplishing the intended purpose through annual inspections. Any vegetation planted for mitigation that has died should be replanted. To help prevent excessive erosion, access roads constructed for the transmission line should be closed to vehicular use by the public. It appears that much of the fish and wildlife data used in the document is relatively old (prior to 1978). The accuracy of the document could be improved by using the most recent wildlife data available rather than merely incorporating data from the previous EIS. If more recent information is available, it should be used.

Mineral Resources

Limited portions of the proposed transmission line alignments traverse known mineral resource areas. However, transmission lines generally do not preclude mineral recovery and can be rerouted in the future if necessary. Completion of this project should increase the availability of power, which would benefit the mineral industry.

SPECIFIC COMMENTS

Land Resources

The project's access roads, unless locked by gate, can provide access for many other types of users. Therefore, the impact of additional access roads in the area on other resources (i.e., recreational activities such as hunting and ORV use and the impacts of increases in these types of uses on yet other resources, i.e., animals, soils, visual quality) should be analyzed in the final statement.

The final EIS should address the impacts of the project on livestock grazing in more detail. For example, in order to develop adequate mitigating measures, the impacts to ranchers' fences during the construction phase should be analyzed. In addiditon, a description of the impacts resulting from construction and surface disturbance on grazing pastures and loss of forage (in Animal Unit Months) should be provided.

The draft EIS makes no mention of paleontological resources or of surficial geology. A discussion and analysis of both of these resources should be included in the final.

If the proposed 345kV line is constructed and energized, will this available capacity allow Colorado Ute enough latitude in their transmission system to carry out series compensation modifications and uprating of existing transmission lines? If so, these options should be included in the analysis.

Page 3-4: Given the possibility that resource values may restrict the construction of additional transmission lines in the future, REA is urged to include as a design alternative utilization of a single circuit tower that can be converted to a double circuit tower. If either of the towers being considered (figure 3-1 and 3-2, pp. 3-5 and 3-6) can be upgraded to carry a double circuit 345 kV, the final EIS should note this possibility.

Page 3-10: BLM has a well-established firewood permitting system. In order to avoid confusion and potential increases in firewood trespass, the right-of-way clearing contractors should cut and remove the wood rather than leaving the cut wood stacked along the right-of-way. (The BLM can provide a list of commercial wood operators should the contractor wish to sell the wood to them and have them remove it.)

Page 4-34: Discussion of Recreation Resources should be more specific to the recreation resources available in the area (such as a state park or lake adjacent to an alternate corridor).

Page 5-13: Section 5.3.7 - Adverse impacts to water quality would occur even if the proposed mitigation is performed. Even though the sedimentation impacts would be localized and short-term, the adverse impact should be acknowledged.

National Natural Landmarks

Page 4-34: The subject document identifies a potential National Natural Landmark known as Ophir Needles as an area within the project study area. The location of this site is southeast of the transmission line study area, not within the boundaries. The Natural Landmarks section on the above mentioned page should identify Cameo Slide, Mesa County, Colorado in segment 3, and Rico Dome and Dolores River Valley, Dolores County, Colorado in segment 29, and be addressed under this section. In recognition of the natural features of these two areas, we urge that efforts be taken to minimize adverse impacts for these sites. Information on the nature of both areas is available from Ms. Carole Madison, Division of Recreation Grants and Review, National Park Service, telephone (303) 234-6443.

Fish and Wildlife Resources

Page 4-18, Last sentence on page: In 1983 the 26 miles of the Gunnison River upstream of the confluence with the North Fork of the Gunnison River was designated as gold medal and wild trout water. These designations indicate that the Gunnison River above the North Fork provides outstanding angling opportunities for large trout and that it will not be stocked with hatchery fish. The last sentence on page 4-18 and the first sentence on page 4-19 should be revised to reflect this new management policy by the Colorado Division of Wildlife.

Page 4-19, Dolores River: At the present time the quality of the Dolores River fishery varies considerably in the project area. This will be the case even more so after completion of the Bureau of Reclamation's McPhee Dam and Reservoir in 1984. This feature of the Dolores Project will provide regulated flows to enhance the stream fishery downstream of the dam. As a result of these flows, the first 11 miles of river downstream of the dam would be managed as a trout fishery. An additional 45 miles of the river would be managed for warm water species of fish. The statement on the Dolores River should be revised to reflect these improved stream conditions.

Page 4-21: The Colorado River Squawfish has been found in the Gunnison River downstream of Delta. Contact Rick Kreuger, U.S. Fish and Wildlife Service, Grand Junction, Colorado (303) 243-2778 for more information.

Page 4-23: The razorback sucker has been found in the Gunnison River as far upstream as Delta, Colorado (Bio/West, Logan, UT by Paul Holden).

Page 4-33, National Momuments, second paragraph: Desert bighorn sheep have been recently transplanted into the Colorado National Monument.

Page 5-31, Threatened and Endangered Species: There appears to be a slight contradiction throughout this section. For example, it is stated in the second paragraph: "a revised Biological Assessment is being prepared and REA will consult with USFWS on any effect this project may have on these species." However, in the case of most species, it apparently has already been determined that the project would have no adverse effect on the listed species. Either this determination is premature or the revised Biological Assessment is unnecessary.

Page 5-76, Wildlife, last paragraph: We suggest the following statement be added to this paragraph. "If it becomes apparent that a significant number of waterfowl or other birds are being killed by striking the lines, it may become necessary to mark or flag selected portions of the line with colored markers or other devices."

SUMMARY COMMENTS

It is obvous that a tremendous amount of work has been done since the original Preliminary Draft EIS was distributed in 1981. The Supplemental Draft EIS is a comprehensive, well written document. We appreciate being given the opportunity to comment, and we hope our comments will aid in the preparation of the final EIS.

Sincerely yours,

Robert F. Stewart

Robert F. Stewart
Regional Environmental Officer

United States Department of Agriculture

Forest Service

Reply to 1950 Forest Service NEPA Process

Date August 15, 1983

Subject Supplemental DEIS - Rifle to San Juan 345 KV Transmission Line and Associated Facilities, USDA-REA-WAE-EIS (ADM) 83-1-D

To Director, SW Area Electric, REA, Room 0010

We have reviewed the supplemental draft EIS on the 345 KV Transmission Line from Rifle to San Juan. Our comments are enclosed in triplicate.

David E. Ketcham

DAVID E. KETCHAM
Director of
Environmental Coordination

Enclosures

Comments to the Supplemental Draft Environmental Impact Statement

"Rifle to San Juan 345 kV Transmission Line and Associated Facilities"

Forest Service

ERRATA Sheet - shows Alternative B without the tap line as having only one mile more of commercial forest being impacted than Alternative C. It should be more like 6 miles more.

Pages 1-3 and 3-59 Page 1-3, first paragraph states "Depending upon system conditions and other developments, the proposed 345 kV transmission line may include a 345 kV tap line to the Lost Canyon Substation . . ." and on page 3-59, first paragraph, fourth sentence states ". . . the proposed Rifle-San Juan 345 kV transmission line may include a tap line from the 345 kV line into the Lost Canyon Substation." There seems to be some confusion on the need for this tap line. In a letter dated May 11, 1983 from Colorado Ute to Paul C. Sweetland, Forest Supervisor, San Juan National Forest, it was stated that there was "no electrical requirement to connect Rifle-San Juan line into Lost Canyon Substation, either initially or in the future, and we do not anticipate tapping the line for this purpose." This position needs to be clarified by Colorado Ute and REA.

Page 1-4, first paragraph is misleading when it states that the proposed line would parallel Western's 230 kV line to the Montezuma, La Plata County line. In fact, it does for a distance but it is proposed to leave it as shown in figure 1-1 of the SDEIS.

Page 1-9, Major Concerns and Issues does not address what has been voiced so much by the public, i.e., multiple rights-of-way affecting their land use.

Table 3-7, Item 6, Erosion Hazard. The 103.0 should be 123.0 and the total should be 129.7.

Page 3-10, last paragraph talks of purchasing sufficient rights-of-way, where landowners are willing, to allow construction of a possible future second 345 kV line. There is no mention of this in the proposal.

Page 3-12, Access Road Construction implies that an access road will be needed along the transmission line for its entire length. We believe that total access along the transmission line is not necessary or required for construction or operation and maintenance.

Page 3-44, Land Use does not address subdivisions or potential subdividable lands, which is a Land Use.

Page 3-53, fifth paragraph states "The Agencies preferred corridor between Grand Junction and Montrose is Alternative B." Alternative B does not effect or cross National Forest System lands. The Forest Service has not identified a preferred corridor in this area.

Page 3-61, third paragraph states that C would cross the most commercial timber, but B crosses more commercial timber. Alternative C would cross more only if the tap line is built.

Page 3-62, third paragraph states "The Agencies will select a preferred corridor after the evaluation by the joint study team is completed." See the enclosed Decision Notice and Finding of No Significant Impact for the preferred corridor.

Page 5-19, sixth paragraph states "The edge effect would be most dramatic in densely forested areas where tall trees would gradate to smaller trees and shrubs and finally grasses and forbs." The method that has been suggested to clear rights-of-way for this project still creates a "slot" or "tunnel" effect. That method was used in past right-of-way clearing. The gradation method, if used in even age stand of trees really creates a slot because of limited small trees in the stand. The right-of-way type of clearing that will be used on National Forest System lands is to top trees and selectively remove trees under the conductor and along each side at a safe electrical distance. This is about 12 to 15 feet from conductor to vegetation. This type of right-of-way clearing reduces or eliminates the "slot" or "tunnel" effect that is created by the other method of right-of-way clearing.

Page 5-50, Impacts on Human Resources. The FEIS should address multiple rights-of-way impact on the land and other human resource impacts. For example, what is the impact of multiple rights-of-way on a ten acre tract of land?

Page 5-54, Socio-economic Impacts, states that easement acquisition would benefit landowners but fails to mention that in some cases could be an overall net loss to the landowner.

Page 5-72, Item 2 under Geologic Hazards. Need to add the following mitigations:

"Temporary access roads will be aligned and graded to conform to the natural landscape."

"On National Forest System lands, access roads will not be constructed in unstable areas."

Page 5-73, add the following mitigation measures under Soils (also could be used under Visual Resources):

"Tower structures and sites will be designed to conform with the terrain. Leveling and benching of tower and assembly sites will not be allowed."

"Construction of leveled earth equipment platforms, for the use of cranes in the assembly of structures, will be allowed at the end of temporary spur roads. Only one platform per structure site will be allowed, unless otherwise authorized."

Item 4 under Soils states "Disturbance of steeply sloping . . ." A clarification should be made on "steeply sloping areas", we suggest anything over 35% be classified as steeply sloping.

Item 2 under Water Resources, "form" should be "from".

Page 5-76, Item 1, last sentence is not clear. It states "Wetlands and riparian areas that cannot be entirely avoided would be spanned without construction in the wetlands." If you cannot avoid the wetlands, how can you avoid construction?

Page 5-79, Item 4. This is not a mitigation measure, it is only a requirement for payment of destroyed or cut trees.

Last item under Human Resources, what is being mitigated?

Page 5-80, first item states "Appropriate permits would be obtained prior to final centerline location and construction." What is being mitigated?

Page 5-81, Items 2 and 3 under Electrical Effects. These two items are not mitigation measures, they are informational statements.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII
1860 LINCOLN STREET
DENVER, COLORADO 80295-0699

AUG 23 1983

Ref: 8PM-EA

William E. Davis, Director
Western Area - Electric
Rural Electrification Administration
14th and Independence Avenue, S.W.
Washington, D.C. 20250

Dear Mr. Davis:

The Region VIII office of the Environmental Protection Agency has reviewed the supplemental draft EIS, "Rifle to San Juan 345 kV Transmission Line and Associated Facilities" and offers the following comments. We consider the draft to be deficient in certain critical areas.

REA indicates the need for the facility as a foregone conclusion. However, the circumstances have not changed which led to the Colorado Public Utility Commission's (PUC) denial of the Certificate of Public Convenience and Necessity. The PUC concluded that existing power lines could carry twice the current load, which would meet the needs of Southwest Colorado through 1986. PUC also indicated that WAPA (Western Area Power Administration) could increase its 230 kV capacity by 1/3 (with low cost expenditures) so as to meet needs through 1989. The 1982 forecasted demand was 13% while actual load growth was only 7% that year. The 1983 year to date (June) annual demand has only increased 2.2%. The evidence that projected electrical load has not increased as expected indicates significant overprojection by Colorado Ute.

The review of conservation alternatives and alternative power supply technologies is very limited. The EIS does not reflect an in-depth study of engineering costs and environmental considerations of such alternatives. Recently, Colorado Ute announced it had created a subsidiary to invest in small hydro, solar, and co-generating alternatives. If such small scale facilities are practical, as indicated by Ute, then decentralized facility location could affect the location and need for this transmission line. With the validation of lower demand projections, one or more of these alternatives may be more viable. Their environmental impacts deserve closer scrutiny. EPA, therefore, recommends a detailed study of these and other alternatives, such as hydro, wind, and coal-fired activities.

While the REA correctly states that its maximum calculated induced current beneath the transmission lines is below the National Electrical Safety Code standards, we feel that a design resulting in lower induced currents would be prudent (see attached detailed comments on potential human health effects of electromagnetic fields).

Based on procedures EPA has established to rate the adequacy of draft EIS's, this EIS will be listed in the Federal Register as an ER-2. This means EPA has reservations regarding the environmental burden of the proposal and that additional information on alternatives and justification for need is necessary for an adequate EIS. Thank you for the opportunity to review this document.

Sincerely yours,

John G. Welles
Regional Administrator

Attachment

EPA Region VIII Radiation
Programs Office Specific Comment on the
Supplemental DEIS for the Rifle to San Juan
345 kV Transmission Line and Associated Facilities

Page 1-10: The fourth paragraph states, "No published scientific studies to date have shown adverse effects on humans from electrostatic and electromagnetic fields produced by 345 kV lines". It should be noted however, that current research is raising significant questions concerning the bioeffects of electric and magnetic fields. An example is Dr. Nancy Wertheimer's epidemiological studies which have found correlations between 60 Hz magnetic fields and the incidence of cancer. We recommend a more extensive review of the current literature in this area.

Page 3-10, third paragraph: Here it is stated that the minimum right-of-way will be 150 feet in width. From Figure D-3, this width corresponds to an electric field at the edge of the ROW of 1.8 kV/m for the horizontal configuration and 0.9 kV/m for the delta configuration. We believe that the greatest field at the edge of the ROW should be 1 kV/m. Hence, it is our opinion that the horizontal configuration design should be modified to lower the edge-of-ROW electric field strength. Additionally, if construction of an adjacent transmission line is a serious possibility, as Section 3.2.3 suggests, the future availability of additional land to expand the ROW should be considered.

Page 5-63, third paragraph: This section states that the line will not induce currents greater than 3.5 mA through large metallic objects according to REA calculations. It is uncertain from the DEIS what this number represents because two sentences later, the DEIS states, "...the maximum induced electrostatic current of the largest anticipated vehicle would not exceed the 5 mA level..." Assuming that 5 mA is the theoretical maximum induced current and not the probable actual current, and realizing that values as high as 90% of the theoretical maximum induced current have been measured, a 4.5 mA induced current is within the range of possibility. This is more than twice the current that many adults would consider painful and which could cause an adult to withdraw involuntarily. Such startle reactions are potentially dangerous to workers who might recoil into moving agricultural or construction machinery, for example.

An additional concern is that it is likely that at 4.5 mA, a child would be unable to release the source of an induced current. This level approximates currents which could result in tetany in the chest muscles and possibly respiratory arrest. While this is an extremely unlikely event that has never, to our knowledge, occurred as a result of a power-line induced current, a recent Department of Energy Report (DOE/EV-0056) references two situations in which children were killed by currents of 7-8 mA. Accordingly, we feel REA would exercise good judgment in considering a lower induced-current design.

In this situation, REA is suggesting that the potential exposure be allowed to be within an appreciable fraction of the lethal level for a child. We question the wisdom of this even though 4.5 mA is below the 5 mA National Electrical Safety Code standard and the American National Standards Institute standard.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
REGION EIGHT
555 ZANG STREET, BOX 25246
DENVER, COLORADO 80225

June 28, 1983

IN REPLY REFER TO

HEP-08

Rural Electrification Administration
Mr. William E. Davis, Director
Western Area - Electric
14th and Independence Ave. S.W.
Washington, D.C. 20590

Dear Mr. Davis:

Thank you for the opportunity to review the Colorado 46 Ute Draft Supplemental Environmental Impact Statement. We have the following comment on the document.

We note that the document has been sent to the Colorado and New Mexico clearing houses; however, since the Highway Departments of both States require a permit before crossing State or Federal highways, we would suggest that they receive copies of this document for review. This action would assure their involvement in this important project.

Sincerely,

Robert L. Jacobsen

Robert L. Jacobsen

U.S. Department
of Transportation

**Federal Aviation
Administration**

Northwest Mountain Region
Colorado, Idaho, Montana
Oregon, Utah, Washington,
Wyoming

17900 Pacific Highway South
C-68966
Seattle, Washington 98168

JUL 11 1983

William E. Davis
Director, Western Area-Electric
Rural Electrification Administration
14th and Independence Avenue., S.W.
Washington, D.C. 20250

Dear Mr. Davis:

We have reviewed the draft Environmental Impact Statement on your proposed Rifle to San Juan Transmission Line Project and do not foresee any impact on aviation or its activities.

During your planning process for determining final transmission line routing, keep in mind that notice to the Federal Aviation Administration (FAA), is required when any structure would exceed 200 feet above ground level or when any structure within 20,000 feet of a public use airport with a runway more than 3200 feet in length exceeds a 100:1 slope from the airport (within 10,000 feet of a public use airport with a runway not more than 3200 feet in length exceeds a 50:1 slope from the airport). Enclosed is FAA Advisory Circular, "Proposed Construction or Alteration of Objects That May Affect the Navigable Airspace," for your use. Should you need more information, please call our Airspace and Procedures Office in Seattle, (206)431-2530 or (FTS)446-2530).

Thank you for the opportunity to review your proposed project.

Sincerely,

Joseph W. Harrell
Policy and Planning Officer

Enclosure

STATE OF COLORADO
Richard D. Lamm, Governor
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WILDLIFE
Jack R. Grieb, Director
6060 Broadway
Denver, Colorado 80216 (297-1192)

M E M O R A N D U M

TO: Stephen O. Ellis
State Clearinghouse

FROM: C. J. Grand Pre
Wildlife Program Specialist

SUBJECT: Rifle to San Juan 345 KV Transmission Line and Associated Facilities Supplemental Draft Environmental Statement for Colorado-Ute Electric Association, Inc.

DATE: August 15, 1983

The Colorado Division of Wildlife has reviewed the above-cited draft environmental impact statement and finds that most wildlife/wildlife habitat issues have been adequately addressed.

There are a few items, however, that should receive additional consideration. These items, which are outlined in an attached supplement, include safety markers for high voltage lines, access restrictions, revegetation, mitigation, corridor closures, construction scheduling, and ROW selection.

In an effort to maintain important wildlife values, we urge that our recommendations and comments be given maximum consideration.

We thank you for allowing us the opportunity to examine this proposal. If we can be of further assistance, please call 297-1192.

ag

cc: SW Region
NW Region
U. S. Fish and Wildlife Service
Environmental Protection Agency
File

S U P P L E M E N T

RIFLE-SAN JUAN 345 KV TRANSMISSION LINE

The following concerns and recommendations are issued by the Division of Wildlife:

1. Several areas were located along the proposed corridor that will be hazardous to aircraft in our line of work if not marked for high visibility. Those areas are identified as: Dry Creek T47N, R11W, S2; Horsefly Creek T46N, R11W, S19; North Creek T45N, R11W, S30; McKenzie Creek T45N, R11W, S31; San Miguel River T44N, R12W, S14; Beaver Creek T43N, R12W, S4; North Side Dolores River Canyon T37N, R14W, S5; Lost Canyon T37N, R13W, S30; West, Middle, East Mancos River Canyons are candidate and may require identification upon closer inspection; and it is recommended that the towers and span be marked with highly visible orange spheres.

2. Road closures should be implemented on all roads which were constructed or opened for the purpose of line construction. Those areas where roads or vehicular access did not previously exist should be contained with controlled access points (locked gates) and be used only as necessary for maintenance of the line. If the preferred alternative is selected, the Division specifically requests that vehicular access into Horsefly and McKenzie canyons be closed permanently following construction.

3. Any state wildlife area land needed for the ROW should be replaced (rather than ROW purchased) with equal value land, preferably adjacent to the affected property. A power line ROW would negate most development practices the DOW might implement in the future, therefore, this land should be replaced. Also, state wildlife areas serve a purpose of recreation and, in some cases, high quality recreation which includes the opportunity for people to use and enjoy an area without visually degrading structures throughout the area. We consider the Bodo, Fish Creek, and Lone Cone Wildlife Areas to fall into this category. We are reluctant to even recommend high visual structures to be placed on lines and structures at canyons or long span areas, but do so in the name of safety as our incidence of aircraft-line contact is high.

4. Calving and fawning areas are to be avoided during the period May 15 through June 15. This is recommended for elevations 7500-10,000 feet.

5. Land use agencies will recommend a mixture of vegetative species to be used in revegetating the ROW following construction. The DOW recommends that browse (low shrub) species be included in this mix on big game winter range areas. Land use agencies should require that erosion problems be addressed annually as part of the ROW agreement. The Division prefers that a straight line effect be avoided

along any corridor. The DOW recommends that corridors undulate along the edge to prevent the straight line effect. Undulating lines will benefit wildlife more and could be considered as a mitigation effect. Also, shrubs less than 15 feet in height should remain as much as possible.

6. The Statement reports that the line will be raptor proofed upon construction according to the standard guidelines established for this protection. The Division concurs with this action.

7. The DOW prefers Alternative E alignment in the Government Springs area south of Montrose. Alternative E is adjacent to a present line and would not go through new areas as the preferred alternative does.

8. Construction during hunting seasons (October 15 through November 15) will be incompatible with activities on state wildlife areas that have big game. The general public will attempt to use line construction access roads on public lands during hunting seasons. This can cause interference with work crews, affect their safety, and allow considerable unnecessary off road vehicle use.

9. The Bodo Wildlife Area contains a land use covenant which may require approval by Nature Conservancy and the Bureau of Outdoor Recreation for implementation of line construction on the area (Note: The covenants apply to the Mapco pipeline). Mitigation in the form of land exchange will most likely be recommended as was the Mapco case.

10. The DOW has no recommendations other than the preferred alternative on the southern route.

CITY - COUNTY PLANNING
grand junction-mesa county 559 white ave. rm. 60 grand jct.,colo. 81501
(303) 244-1628

July 6, 1983

William E. Davis, Director
Western Area-Rural Electrification Administration
14th & Independence Avenue, S.W.
Washington, D.C. 20250

Dear Mr. Davis:

The following comments are a result of this Department's review of the Rifle-San Juan 345-KV Transmission Line SDEIS.

1. (P. 1-10) In the area of human health and welfare, all data on the biological and health hazards of transmission lines should be researched. A review of only the published studies is not acceptable. In addition, the Bibliography lists only two publications related to the biological effects of transmission lines. This Department recommends that a complete assessment of the biological and health effects of transmission lines on humans be included in the EIS and a complete bibliography of researched material also be included.

2. (Table 2-1, 1-2) These tables show a projected increase in power and energy requirements for Grand Valley Rural Power. Annexations by Grand Junction, Fruita and Palisade will transfer areas served by GVRP to Public Service Company as per their franchise. Have annexations been considered for these projections? If so, what is the rationale for increased power and energy demand? If not, an analysis of possible losses to Public Service should be included.

3. (P. 2-8) What are "severe economic and social penalties"? A generalization of this magnitude is not an acceptable rationalization for the need for this project.

4. (P. 2-22) What is the source of the population for Grand Junction and suburban areas? What geographic area does this cover. This Department estimates the 1983 population for Mesa County to be approximately 87,500 persons, with approximately 75,000 persons living between Fruita and Palisade.

5. (P. 3-4) What are "acceptable levels of radio/television interference"? Any interference of radio and/or television reception to residents living in proximity of this proposed line would not be acceptable.

6. (P. 5-19) Increasing the diversity of wildlife is not necessarily a benefit. Disturbing the eco-system may increase competition between species thereby adversely affecting some populations. Before the assumption that "wildlife would likely benefit", can be made, more detailed study and analysis is required.

7. (P. 5-64) A summary of the literature available on biological hazards should be included in the EIS. This Department is concerned about the possible biological hazards associated with transmission lines. Information on biological hazards of transmission lines should be made available to interested parties, as well as REA. Since this is a very controversial issue, a more definitive analysis should be included. The statement that "REA. . .has concluded that the proposed 345-KV transmission line would not constitute a biological hazard" is totally insufficient. Please also see comment #1.

8. (P. 5-66) If WAPA intends to uprate its 230KV transmission line, why is this proposal necessary. Is it not duplication? If a parallel line to the proposed project is anticipated, adequate R.O.W. should be obtained at the present time, to avoid conflicting land uses if the system is expanded.

9. (P. 5-76) "Human disturbance to wildlife...could be restricted...." "could be" is not a satisfactory mitigation measure.

10. (P. 5-82) What is the basis of the assumption of "short-term" wildlife disturbance? Alteration of the eco-system may not be short-term. Why is the promotion of more diverse species considered a positive effect? Increased competition due to increased diversity may adversely affect certain populations. See comment #6.

11. (P. 5-82) If the facility is abandoned, the R.O.W. should be reclaimed. It is recommended that a reclamation plan be required at the time of abandonment.

12. (General) Throughout chapter 5, the terms "may", "likely" and "apt" appear much too frequently. The purpose of this document is to assess the environmental consequences of this

project. The above referenced terms connate a lack of data and understanding. If insufficient data is available, more research is indicated.

13. (Purpose and Need) According to the SDEIS, Colorado Ute will own 37 1/2% of the capacity of the proposed line from Rifle to Grand Junction and 50% from Grand Junction to San Juan. With minor exceptions (as noted above) Colorado Ute has specified and projected their needs for this project. But, the SDEIS has no projections for Public Service Company's nor WAPA's share of the capacity. The total capacity and projected loads of all there utilities on this proposed line should be included in order to adequately assess the total need of the project.

Sincerely,

Raymond J. Gronwall

Raymond J. Gronwall
Senior Planner

RJG/sw

MONTEZUMA COUNTY
Administrative Office
Montezuma County Courthouse Rm. 302
Cortez, Colorado 81321 ***303-565-8317***

August 5, 1983

William E. Davis, Director
Western Area-Electric
Rural Electrification Administration
14th and Independence Avenue,S.W.
Washington, D.C. 20250

RE: Response to the Rifle to San Juan 345KV Transmission Line E.I.S.

Dear Mr. Davis:

In reviewing the EIS and how it relates to Montezuma County I find one major inadequacy and have several other comments on improving the information in the document.

Our major goal here is to select a route for this line across Montezuma County. Much information is presented on the effects of each of the alternatives. Yet the information presented does not help arrive at a conclusive decision. Does this line need to tie into the Lost Canyon Substation or not? Until this question is answered a route containing the least impacts cannot be chosen.

If demands increase as expected, when will the proposed system become inadequate for the needs at Lost Canyon?

-Installation of the proposed line will relieve loads on the two existing lines (C/U 115KV and Western 230KV) in the area. Also, the proposed Long Hollow substation will provide additional "transmission support for the Lost Canyon, Cortez, and Cahone areas"(1). Western's capacity will be doubled through the area. With the wheeling of power, it appears that Empires' expected demands could easily be met through 1991.

Will construction of the proposed line in any way negate the need for uprating Western's 230KV line?

-Although Westerns' line is a separate proposal from this one, additional information on it is needed to evaluate and minimize the impacts of the proposed line on Montezuma County.

(1)EIS,P.3-34

Additional comment on the EIS Include:

Section 2.0 Purpose and Need

Table 2-3[2] describes the annual peak requirements of five Colorado Ute members, and table 2-3[3] describes shortfall in transmission capacity. Reviewing this data does not give a clear understanding of the situation. Is it necessary for a utility provider such as ColoUte to be able to meet the greatest peak demand that can be expected when other lines are available in the area? It seems the public interest would best be served by being able to meet normal projected high loads, and allowing the Regional interconnected Transmission system, described in Sec. 2.5,to provide additional power if necessary.

Summing the columns in table 2-3 is incorrect. These are peak loads that occured at one time during a year. To add then is to say that they all occured at the same time. A summary of the power Colorado Ute provided to their members at peak times during the year would be more realistic, and should be included for comparison.

Table 2-3 shows that in 1991 the Shell CO_2 load is expected to be 62mw. It is expected to increase further in the following years. If this is the case, why did they build a 115KV System, capable of carrying only 50mw?(p.2-5)

Table 2-5 show that Colo Ute expects to need 210mw of additional capacity in 1991; yet by owning ½ of this 345 line, they will only have an additional 125mw at capacity. Thus the system will be inadequate upon completion.

Section 3.0 Alternatives Including The Proposed Action

3.0 Alternatives

3.2.3 Right of Way Considerations

More information is needed for affected entities to evaluate clearing needs, visual impacts, and use of alternate support structures. Describing clearing requirements more fully would be beneficial. Colo Ute should work closely with affected parties concerning these items.

3.4.2 Rifle- Grand Junction 345KV, Grand Junction to Shiprock 230KV Transmission Line.

This section and table 3.1 states that this proposal meets the needs of Colo Ute & PSC, while Western would have to construct an additional line from Rifle to Shiprock, Western is already planning on new construction as stated in Sec. 3.7.2.4 and table 5.4.

(2) EIS p.2-6

(3) EIS p.2-9

Uprating the Curecanti-Shiprock 230 KV line to 345 KV is very desireable, as it (1) allows the use of existing towers and Right-of-ways, (2) allows the Colo Ute line to avoid almost all private lands in Montezuma County, and (3) avoids the undesirable and unnecessary impacts of a tie from the Colo Ute line to the Lost Canyon Substation.

3.4.8 Rifle- San Juan 345 Line

This section states that by building the proposed project, Western will not have to construct new facilities. Montezuma County has been told that Western will uprate its 230 line, and thus we will not need to build a tie from the Colo Ute to Lost Canyon Substation. Again, please clarify this discrepancy.

3.6.3 Alternative Tower Designs

There was considerable concern voiced from residents of this area with the visual impacts caused by this line. Of great concern was where the line will cross the view of the LaPlata Mountains (line section 30e). It seems that this section of the line, and possibly many forested and woodland areas could be enhanced by the use of H-Frame wood structures. Table 3-4a (p.3-39) shows no detriments for this type of application. What criteria would make these structures impractical? Their use appears as if it would be preferential, and should be used whever possible.

3.7.1.2 Resource Catagories and Date Item Values

Human resources- I am not in agreement with the values assigned to low density areas. Private lands where the average tract size is greater then 80 acres has been given a low impact rating. The impact of a line crossing a persons property whom has worked to purchase and/or maintain a large tract of property, should not be equated with the impact on public lands. This catagory should be given a moderate impact rating.

Visual Resources- This is a very difficult impact to assess, especially on the scale needed for this study. I recommend that visual impacts be studied on the ground before final line location. This effort should be required of Colorado-Ute, and be done while in close contact with land managers, local governments, and land owners. (I should note that the study on visual impacts done in the Montezuma County "corridor study" also needs to be strengthened through field work).

Section 4.0 Affected Environment

4.6.1 Vegitative Communities- Agricultural lands (including pasture and grazing lands) have been overlooked on figure 4-5 and figure 4-27. On private lands especially it is more important to note that the land is used for grazing then the fact that it is a mountain shrub community type.
4.9 Visual Resources- poorly mapped. -see comments above.
4.10 Land Use- Figure 4-11 does not show the four catagories of land use described in Appendix B. Commercial forest is not mapped.
-Prime Farmlands (Prime soils as designated by the SCS) are not shown in Montezuma County, but many acres of these soils have been mapped by SCS.
- What is potential commercial forest?
- Commercial forests on private lands have been overlooked (Figure 4-27)
- If potential commercial forestlands are included potential prime farmlands should also be included (as described by the SCS).
- The following recreation areas in Montezuma County were not noted,although they were within the corridors studied: Forks Campground, Bauer Lake, and Jackson Gulch Reservoir.

Those agencies preparing an Impact Statement must remember to put special effort into the lands that are not managed by them- namely the private lands. The private sector is repeatedly left incorrectly inventoried, and unprotected, Federal agencies have the responsibility of assisting the public in their laws of incorporation. This document is very weak throughout in its analysis of the private sector lands.
A great deal of effort has gone into the preparation of this EIS. Based on the information contained in it, along with further research and local concerns, I would like to recommend that no tie to the Lost Canyon Substation is necessary, and that alternative C be choosen through Montezuma County. The line constructed should be a single circuit 345KV line. Montezuma County needs additional system support, and would like to have this line built as soon as possible. This response to the EIS is made with the intent of improving the document, not delaying the line.

Sincerely,

James Paradiso

Energy Impact Coordinator
Montezuma County Planning Department
JP/gb

Board of Commissioners

County of San Miguel

Post Office Box 548
TELLURIDE, COLORADO 81435
Phone (303) 728-3632

August 18, 1983

Mr. William E. Davis
Director, Western Area Electric
Rural Electrification Administration
14th and Independence Avenues, S.E.
Washington, D.C. 20250

Re: Proposed Colorado-Ute
345kV power line

Dear Sir:

We enclose the Resolution of the Board of Commissioners of San Miguel County, Colorado as a public comment by our local governing body with respect to the proposed 345kV power line which may be constructed by Colorado-Ute Electric Association.

In order to explain the contents and conclusions of the enclosed Resolution, I offer the following:

1. During extensive public hearings held by the Board of Commissioners as a result of Colorado-Ute's request for a special use permit (required to construct a power line in our County), the Board requested that an alternative route through the far western portion of our county be considered. Colorado-Ute refused to make such an analysis. The Board based their decision on the belief that the residents and visitors to our County deserved such an analysis. The Board determined that the proposed route would be allowed only if no additional towers were constructed in that corridor; if additional towers or structures were to be built a far western county route must be considered. The far western area of the county is least populated and utilites located there would have the least impact on our residents and our county.

Colorado-Ute has appealed,to our District Court, the Commissioners' decision referred to above. No decision by the Court has yet been rendered.

2. Colorado-Ute has stated their intention to build with REA funds all portions of the proposed 345kV line except that segment passing through our County. It is my belief that such a plan is for the purpose of applying

both political and judicial pressure on the County so that Colorado-Ute may obtain "through the back door" what it could not obtain "through the front door."

3. Colorado-Ute, we believe, is attempting to acquire rights-of-way wide enough for more than one set of towers or structures. Such acquisitions are made by Colorado-Ute with full knowledge that the required permits for such a power line location are not in hand. It is my belief that Colorado-Ute is now planning for the day that multiple towers and lines will pass through our County. It is the Board's position that any multiple line permanent utility corridor should be located in the far western portion of our county.

In summary, the Board desires that you consider this letter and the Board's resolution as our evaluation of the EIS and our recommendation to REA respect to the allocation of any funding so that the citizens of our County are protected and so that the funds are properly and reasonably spent.

Very truly yours,

BY: _____
Fred H. Ellerd, Chairman

BY: _____
Dan E. Wilson, County Attorney

DEW:ch
Encl.

RESOLUTION NO. 1983-42

WHEREAS, pursuant to House Bill 1041 San Miguel County (County) has been authorized to exercise land use powers which include county review and approval of the siting of public utilities in and through San Miguel County; and

WHEREAS, the County has previously adopted utility siting regulations as part of the County's land use and zoning controls; and

WHEREAS, the Planning Commission of San Miguel County developed and has amended the County Comprehensive Master Plan in order to provide for the minimizing of the impacts of utility siting; and

WHEREAS, the Bureau of Land Management acknowledged the County's role and authority with respect to land use planning, evidenced by that memorandum of understanding dated February 20, 1979 (Attached); and

WHEREAS, an Environmental Impact Statement (EIS) has been prepared with respect to a 345kV transmission line proposed to be built by Colorado-Ute Electric Association (Colo-Ute) which crosses portions of San Miguel County; and

WHEREAS, this EIS designates five alternative routes for the line through and over San Miguel County at page 3-54; and

WHEREAS, the EIS suggests, and the County believes, on information and belief, that Colo-Ute is attempting to obtain rights-of-way for a permanent multiple line utility corridor; and

WHEREAS, it has been the consistent position of the County that alternative routes through the extreme Western portion of the County should be considered and is the preferred location; and

WHEREAS, Colo-Ute has failed to evaluate the far western portion of the County with respect to an utility corridor for the 345kV line despite repeated demands made by the County; and

WHEREAS, all five routes that have been considered in the EIS and which cross San Miguel County are based on the premise that a Norwood substation would be built; and

WHEREAS, this EIS and other information indicate the Norwood substation may not be built; and

WHEREAS, as a result the data on which the alternative routes were analyzed may be out-of-date and based on invalid assumptions; and

WHEREAS, Colo-Ute has indicated that it intends to build, with funding from the Rural Electrification Administration, from Rifle, Colorado to the North boundary of this County and from San Juan, New Mexico North to the South boundary of this County without having previously resolved the location of the route through San Miguel County; and

WHEREAS, the County believes that this planned construction is unreasonable and is for the sole purpose of forcing the County to allow a route that is unacceptable to the County;

THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF SAN MIGUEL COUNTY, COLORADO:

That the San Miguel County Board of County Commissioners support

as preferred routes, routes which are not identified in the EIS but which

lie further west than alternatives A-E;

FURTHER, the Board resolves that of the five routes described, C and D are the least damaging to the health, safety, and welfare of the citizens of San Miguel County;

FURTHER, the Board requests that no funds be spent by Colo-Ute or distributed to Colo-Ute until all necessary permits for the construction of the entire 345kV power line are obtained from all affected governmental entities.

PASSED THIS 15th DAY OF August, 1983.

BOARD OF COUNTY COMMISSIONERS
OF SAN MIGUEL COUNTY, COLORADO

FRED H. ELLERD, Chairman

THOMAS HALE, Commissioner

RAYMOND SNYDER, Commissioner

ATTEST:

SHAUNA PALMER, Deputy Clerk

Attachments: Bureau of Land Management memorandum of understanding
Forest Service memorandum of understanding re land use planning

cc. Planning
(Atty)
Mins
File
REA ✓
Colo. Uti.
BLM
For Serv
W.M. Brisco
Forum
Times (Art)
WMCA

P. O. Box "4"
Hesperus, Colorado 81326
July 29, 1983
Phone 505 334 6695

Mr. William Davis, Director
Western Area--Electric
REA
Agriculture South Building, Room 3304
Washington, D. C. 20250

Subject: Colorado 46 Ute
Supplemental Draft Environmental Impact Statement

Dear Sir:

The following are comments on the Rifle-San Juan 345 kv Proposal SDEIS for Colo-Ute, Western, and Public Service Co. of Colorado.

1.1 Introduction page 1-2, 5th Paragraph (Para).
Since a final EIS on the origional proposal was never issued and since the Environmental Analysis was a large part of the DEIS, the reviewing public of the SDEIS has no knowledge of nor way of knowing the extent of corrections and answers to public comments on the DEIS or if these were incorporated into and corrections made in these documents. From the mistakes in the SDEIS, it appears few corrections were made in the DEIS or EA.

It would be appropriate to print the public comments on the DEIS in the final EIS here so that the public would have the benefit of all questions raised and answers given.

6th paragraph
The revised project is not being reviewed by La Plata County because no new application or formal contact has been made by Colorado-Ute (C-U) to the County. Because of this, the revised plan has never gone before the La Plata County Planning commission. There have been no county planning meetings for public comments on the present proposal.

1.5.1 Fed Action Alternatives, Page 1-7
Various stipulations for construction and operation--what are these--include here a sample copy of the BLM Grant of Right-of-way and a FS Authorizing Document.

1.6 Major concerns and Issues, page 1-9, Para # 2
Access Roads many times will not be in the 345-kv line ROW.
What is the total estimated acreage for roads in addition to the 2025 ha (5000)acres 345 kv and 50 ha (1250 acres 115 kv?

Para #3
The line changes land use from agriculture to heavy industrial for the ROW. This paragraph assumes that agriculture will remain a viable and economical use of the private land for the life of the project.

This even now is not the case with land use changing to recreation and subdivision.The potential use of this land for these other purposes should be addressed. What is the lines affect on the sale value 1983 costs of the ROW land and the affect on sale value 1983 costs of adjacent lands before and after the line? Sample properties in the Hesperus area can be used. This is an environmental and socioeconomic concern shared by all private owners. It is their environment.

Agricultural lands also have the potential to produce commercial timber, these lands have an equal value and status with Federal Commercial Forest Lands.

Para 4
Since Western has admitted in the so called scoping process that they will pay no property tax revenues to the counties, etc, is Western still going to own from Norwood vicinity South to San Juan? What counties will not be receiving this revenue?

1.7 Agency Preferred Alternative
REA has concluded the project is desirable and necessary to that REA can loan or guarantee the loan of the many millions--a feather in its cap. Based on REA's evaluation and on public agency input, the decision was made. The Colorado Public Utilities Commission has not yet determined the question of need. The private sector or "PUBLIC" has had little if any input into this document and has not been represented fairly or at all by REA. Rea appears to have cut and stacked its own deck to choose the preferred corriror.

2.1 Intro
If enough participants and thus reasons for the line can be introduced anytype of line can be needed. In short the true purpose is to have a large capacity line to rid C-U of its excess power production from its Craig III Power Plant. Where and how will C-U get rid of this Craig III power if the line is not built or is built, to what entities will power be sold? What is the true price to the C-U customer?

2.2.1 Description of Member Loads
C-U can expect requirements in 1983 to be approx. 7 percent above 1982", include here the true story and figures for the first six months of 1983. These are no where hear the expected percentages.
2.2.3 What is meant by "A large capacity conductor will be installed to provide the capability of providing emergency support to Lost Canyon area loads in addition to serving the Duranto Area."?

What is a large capacity conductor? Where will this (What line segments) conductor be installed? Does this at some future date include upgrading or building a new 115 line from Lost Canyon to Durango?

If it can provide emergency support to Lost Canyon why could not Lost Canyon then supply emergency support to La Plata Electric? If it could, the expensive 345kv line into La Plata County is not

required and a more direct route for 345 is preferred like along the existing 230 Western line.

2.3.2.2. Transmissin of Firming Energy Required
Why doesn't CRSP purchase Craig III power plant from C-U and build line segments into Utah to tie into the grid? This relieves C-U from a financial burdon and gives Western its sources of power.

What does Western pay to C-U per kw/hour for firming energy? What does C-U charge each of its member coops for like energy from the same sources.

2.3.2.3.
It appears that there has been extreme over building of generation capacity near Craig and Hayden and that when Craig III comes on line C-U's misguided planning will come apparent and power will be sold at bargain basement prices if the 345 line is built. Is the line intended to get C-U out of the bind it has gotten itself and REA into?

2.3.2.5 Trans of energy...
How can this supplementary power be lower cost than the hydro power? Hydro is the cheapest unless someone like the C-U member is subsidizing the coal generation to bring the price lower. If the huge coal plants had been sized within reason to their load service areas, there would not be excess cheap power available to Western and CRSP. To what extent are the 14 COOPS and their members of C-U subsidizing the cost of this cheap power and the facilities needed to produce and deliver it?

Poor planning on Western's part, over zealous growth in power sales by Western, and ignorance of the true water supply and demands of the Colo. River Basin appear to be the real culprits rather than a wish to maximize the Fuel Conservation Program. If they were truly maximizing fuel, the Hydro plants would be going and coal wouldn't be burning.

2.4.1
What is the present (July 1983) Status of the Uniton Oil Shale Project?

2.5 last Para.
What portion of the line will be paid for by these other entities? Why should there be excess capacity available since C-U is not chartered in Colorado to supply power outside of Colorado?

3.2.1 Project Description Para 3
Besides cost which is [redacted] an environmental factor, why not use a single pole 345 tower? This would require only a 100 foot ROW and greatly reduce total environmental impact.

The tower would have a nonglare coating to reduce reflection. Will towers when requested by Federal agencies also be color anodized or painted to blend more environmentally into the landscape? If counties request such colored towers, is C-U/ Western (C-U/W) and REA agreeable to this?

Para 3 and Figures 3-1 and 3-2

Para. 4, and Figures 3-1 and 3-2
What is the highest and lowest tower height to be used if the towers under consideration average 115' and 105' respectively?

Para. 13, page 3,8
Is C-U going to extend to Lost Canyon or is it not? They know if Western is going to upgrade and when.

Figure 3-3. This tower may be mislabled--should it be 115 kv?
3.2.2 Page 3-10 Counstruction Methods, Last para. of section
What is the cost per mile using nonconventional methods as compared to road building and conventional methods?

What agencies, bodies, or entities can "not permit" conventional methods? For what reasons are they "Not Permitted"? What type of terrain dictates helicopter construction? Will the guidelines in these two documents also apply to private lands if the landowner so desires? Will they apply if the counties request them for private lands?

3.2.3. page 3-10 -11 Para 1
"All easements acquired would provide for payment of damages to crops and certain other items damaged" List in full these certain other items.
Para 2
Agriculture is possibly not the highest and best use for the land. I see no mention of purchase of development rights? What are the participant's intentions concerning payment here and for loss of scenic easements on Private properties. Payment should be required by REA for private owners for inflicting an industrial zone strip into areas of agricultural or subdivision or recreation use.

Para 3.
I assume this applies to private properties also, does it, REA?

3.2.4 3-11 Para 1
Inspection by contractors to C-U/W is entirely inadequate and unacceptable. Continuous inspection of both Government and private lands should be performed solely by C-U/W as compliance with environmental regulations, guidelines, and stipulations cannot be insured or corrected in a final inspection. Only preventing environmental degradation insures environmental protection. Once a compliance is broken it can never be mitigated or corrected fully so non-compliance of environmental concerns should rest with C-U/W and REA. If non-compliance should occur, REA by granting financing assistance to C-U for construction has to stipulate that provisions of the SDEIS and Feis will be met. What provisions and bonding are required by REA to guarantee environmental and other concerns of the Final EIS are met on private land? What recourses do counties and private individuals have with non-compliance of environmental regulations, guidelines and stipulations?

What is REA's role in this recourse? Can REA be sued directly or by individuals if non-compliance occurs.

Para. 2 of section page 3-11
The construction contractor is hired by C-U/W and has little if any binding contact with federal, state or private owners. It is incorrect and misleading to say in SDEIS that damage would be repaired by construction contractor when the duty and obligation falls solely on C-U/W and REA. This should be corrected in the Final EIS. C-U/W and REA should be required to monitor all Construction, pre-construction, and post construction and other aspects at all times.

3.2.5 Page 3-12 Access road Const. Para 2
Would the specific standards for access roads for federal lands also be granted and used on private lands if requested by the land owner. If not, whynot?

How would permission for their use be obtained. If by negotiation withthe land owner, outline the specific steps used by C-U/W in negotiation and include the legal documents required by the FS and BLM and those allowed to Private owners.

para 3.
Gates would be installed and locked if required--required by whom? The landowner
The fed or state body
Colorado-Ute/Western
What type of gate? What type of braces to protect fence? REA needs to require in the Final EIS that Colo. State Highway department standards be met in any fence repair or installation.

3.31 Energy Conservation, para. 2
If the participants and member coops have studied and encourage energy conservation...such as off-peak use of home appliances, why are C-U and its members so violently opposed to demand meters and why did they create an all out war with the Coloraco PUC for requiring demand meters?

This paragraph needs correction.

3.3.4 Page 3-16
New 115-kv transmissions lines will be required even with the 345 kv line to transmit the increased power available to member substations and to new member substations and to service areas created by and after construction of the new 345 line. La Plata Electric board members have publically stated a new line will be needed to Pagosa Springs within 10 years and are in the process of acquiring ROW for a new 115 kv line to tie in and loop with a new line proposed by San Miguel Power to Silverton and then next phase to Cascade substation. The Forest Service and BLM are well aware of these applications to them. What goes here? Include these proposals already on the books in the Final EIS!

Where and what are some of these new 115 lines? Instead of C-U owning these lines they may be C-U member Co-op owned and built, but they are still 115 distribution lines.

3.3.7 Does the existing transmission system have sufficient capacity to support the outage of the proposed 345-kv line?

3.3.9 3.20 -21
It is a shame that the Colo. Highway Dept and the utilities do not get together and lay the lines down the highways and utilize the heat for melting snow and ice from highways in the winter. Surely a federal grant is available to cover the cost.

3.4.2 1st para
If western would "Most likely use one of the alternative corridors" why does not Colo-Ute do the same in Montezuma and La Plata counties like the present 230 kv route.

3.4.4 3.4.5 3-25
Would most likely use alternative corridors/ This is speculation and if they would most likely use alternative corridors what are they doing with C-U in this location (preferred). C-U can meet La Plata Electrics needs with at most a double circuit 115 line.

3.4.7
If new growth in southwestern Colo. has decreased since Feb. 5, 1982, Utes growth projections in Final EIS have to be corrected to refect current data and information in 2.2.1 and Table 2-1 and 2-2 an other places in the study.

3.4.9 Page 3-26 1st para.
Independent action creating greater overall environmental impact? Is this based on speculation statements in 3.4.2, 2.4.4, and 3.4.5 that lines would most like be built in alternate corridors. Does 3.4.9 take into account the proposed actions of upgrading of the 230 line and the additional proposed 345 line to parallel the 345 line covered here? This should be added to final EIS.

2nd para.
The 345 kv transmission line is in the public interest? This is entirely a subjective statement. What public and how is it in its interest? Expand on this statement and also include who like the private land owner and customers of C-U who will be sacrificed to pay for the "public interest".

3.6.1 3-29 2nd para
The public had no input into interagency meetings or notification of these meetings and the public scoping meetings did not meet REA's own requirements for public notification and were probably illegal because of this.

3.6.2.6 para 2
and Table 3-4 and figure 3-6
How much bearing does the fact that C-U bought this substation site in 1979 have on the attempt to justify this particular substation location and the study of alternative locations.

Para 6
So what if expansion would require expansion onto BLM land and relocation of a county road. These public lands should be used for the public good and these are no reason for not expanding this site.

Table 3-4
The fact that no attempts were made to purchase other substation locations shows that this location was decided long before the DEIS process and the SDEIS just attempts to justify a foregone conclusion and does not really meet NEPA and CEQ regulations.

3.6.3 Alternative tower Designs
If a county requires double circuit structures and/or certain structures for environmental reasons in their permitting, C-U/W will comply? REA will require C-U/W to live up to and meet County permitting requirements?

A column for 345-kv Double Circuit Single Steel Pole is needed in this table for comparison.

3.7.1.2 3-43
Since "importance is reserved for the individual decision-maker" and since the private land owner had no participation in the decision process or assigning numeric values, the whole process is discrimination in the true civil rights violation definitions.

Land use on non irrigated cropland should be uprated to H because nonirrigated is solely the present use of the land. Highest and best use potential need consideration.

Human Resources-- Low density and nonsettled areas should be uprated to H also since potential human resources in these areas have been ignored.

Commercial forest exists on private lands and has not been identified anywhere in the SDEIS for the La Plata County area.

Recreation needs adding here--Why were no recreation areas identified on private lands. The Hesperus Ski area cross country ski trails entend into the preferred Corridor C in the La Plata County line to the Long Hollow Substation Segment. The private land in sections 4, 9, 10, 12, 13, 14, 14, and 15 T 35 N R 11 W, N.M. P.M. is of high recreatioal utilization in both summer and winter. This has been ignored thus far in the EIS process and should be incroporated in the Final EIS.

2nd para.
I couldn't agree more with the section "Conversely, the close proximity of the two lines could produce greater impacts, etc.

Table 3-10 Figure 4-5
Vegetation (Resource Data item) is missing. The "Agricultural lands" is defined under 4.6.1.10 page 4-11 and 4-12 under main topic Vegetation, 4.6 page 4-9. It needs to be included here Table 3-10 and in Figure 4-5. The information shown on Figure 4-5 is entirely wrong for La Plata County for private lands for a radious of 7 miles around the town of Hesperus.

Table 3-10 Montezuma- La plata County Line to Long Hollow (MLPCL to LH) Private land seems to havebeen ignored as to Geologic Hazard. This needs correcting in the Final EIS. Section 9, T 35 N, R11W and Section 10 and 15 also have greatly unstable grounds.
Table 3-10 Land Use--add the word "potential" to commercial Forest and add milage of actual Forest lands on Blm and private lands in alternative C M-LPCL TO LH.
Recreation (Human Resources) is also missin for private lands or is the line to miss all of the NW 1/4 of Section 15 and all but the SW 1/4 of Section 9 T35N R11W, N.M.P.M. for Alternative C Figure 3-15. M-LPCL to LH

Was Figure 3-15 used to obtain miles and score for table 3-10? If so table 3-10 needs redoin in Final EIS. Figure 3-15--All alternatives have to be remapped and redone. Substation location on all is 3 to 6 miles too far North.

Figure 3-15 shows graphically apparent manipulation as far as alternative creation to obtain the preferred. Distance means expense and more impact so why is alternative c the only one that diagonals? All others have straight lines with basically 90° corners. To be truly alternatives, A,B, .and E should cut out 90° turns and diagonal also to make them competitive and comparable to obtain the best route.

3.7.2.5 Alternative c page 3-64
Commercial forest should have "potential" added before it and Commercial Forest on BLM land and Private land should be added to mileage.

4.5.4 Upper Colo. 3rd para. ← 4.5.3 2nd Para
Because yields are small and quality may be poor these wells and groundwater are many times used for domestic and stock watering purposes. The effect of blasting in pier excavation and mitigation measures for disruption of well and spring water supply needs addressin somewhere in the Final EIS.

Figure 4-5
Using the SDEIS own definition of Agricultural lands 4.6.1.10 page 4-11 Figure 4-5 for Montezuma and La Plata counties is in error. The criteria established in 4.6.1.10 should show much more private agriculture lands in the Mancos, Mancos Hill to Hesperus areas. Map needs redoing and milages on tables and corridor segments all require redoing with correct data. I invite and suggest that REA does an onsite survey of the Hesperus vicinity as their information is wrong for Figure 4-5. SDEIS Figure 4-11 also points out how wrong 4-5 is. 4-11 needs correcting by adding more agriculture lands in Hesperus vicinity

Does the map show manipulation of fact to graphically and fictionally fit criteria to REA's and participants desired results.

Conifer-aspen should have the word potential added as map does not reflect existing conditions in La Plata County. Mountain shrub in Hesperus Vicinity should be Agriculture by definition 4.6.1.10 or should be Conifer-aspen if the Definition "Potential

to produce commercial timber" 1.6 Major Concerns and Issues page 1-9 is used as it was on National Forest Land.

Figure 4-10 Land Ownership
State Lands should be added to give an accurate picture of ownership. Indian Reservation Lines do not reflect current Southern Ute Indian Reservation. BLM ownership maps for Montezuma and La Plata County should be utilized to correct this Figure 4-10.
Most information obtained for corridor purposes from this figure for these counties could be wrong. Preferred Alternative C M-LPCL to LH is entirely wrong for ownership. See and correct 4-82 and 4-83, Figure 4-29.

Figure 4-11
More agriculture land exists in the Hesperus-Thompson Park vicinty--add to map.
The Hesperus Ski area on private lands is also in the area and needs to be added to the map.

Flood plain areas are expanded completely out of proportion in La Plata County area with floodplains marked being over 800 feet high.

4.10.4 Potential to produce commercial timber 1.6 Major Concerns and Issues page 1-9 and here "Potential commercial forest value are identifeid in the corridor profiles in Section 4.12."

In these profiles potential commercial forest should be identified also on BLM and Private lands in the Hesperus-La Plata County area. Alternative C M -LPCL to LH crosses already forested land in Sect 9 and 15 T 35N, R11W. Figure 4-19 should be corrected for all segments.

4.10.6
Recreation Resources needs to have Private Recreation Resource Areas such as Hesperus Ski Area added to this topic, added to table 4-9, and to 4.12 profile segments.

Figure 4-29

At no point does segment 32 a in reality go below 8,000 feet elevation as it does in Figure 4-29. The elevation scale for segment 32c is off many places by several hundred feet--correct these

Vegetative communities for 32c need correcting. There are segments labled MS that are CA. Much labled SG should be AG.

Human Resources, 32c needs to have Recreation entered for Section 15 and section 9 T35NR11W, N.M.P.M.

Human resources should have a medium density added. 80 Acre limit determination had no private input into criteria meaning no Public input.

Land Ownership listed for 32c Figure 4-29 are incorrect. 32c shows only 1/2 mile of contiguous P. This is impossible. Correct this using BLM ownership maps covering this segment. There is a mile of state land in this segment with several disconnected Public Tracts as well as private.

Agricultural areas Figure 4-29 There are more nonirrigated than are shown in 32c.

Recreational Resources 32c needs to show Hesperus Ski Area for alpine and cross country courses and winter and summer recreation in sections 4,9, 10, 11, 12, 14, 15 T35N R11W.

Commercial forest with standing trees exists in Seg 32c. This is not shown in Figure 4-29 and needs to be added. If potential commercial forest is used on private based on the U.S. FOREST Service criteria for 32a, Figure 4-29, then most of Seg. 32c has commercial forest. Not to include it here would constitute discrimination against private owners and could constitute a civil rights violation.

Segments 32a, 32c, and 32b would cross or run in full view of US 160 or Colorado 140 so need to be covered here. They <u>are</u> adjacent to the highway.

If seg 32c crosses Highway Colorado 140 before crossing the La Plata river it will be crossing Fort Lewis Agricultural Experiment Station property. This needs to be added to Ownership.

5.2.3 Page 5-5
Discuss what constitutes close supervision of construction activities. Promoting return of the affected areas to a non-erodible condition is not acceptable on private lands. A guarantee to stop erosion is required in the Feis for these lands.

5.3.1. page 5-10
Spillage and discarding of oils should be prohibited by REA on or off of corridor segments.

5.4.4 page 5.17
M-LPCL to LH--There is more conifer-aspen vegetation than listed here. The 9.6 km is only Forest Service Ground in 32a. Vegetative communities etc. map Figure 4-5 needs Correcting. 32c has several miles of standing timber. Figure 4-28 needs substantial changes made to reflect on site verification.

5.4.5 Page 5-19 2nd para. It is good to see mention of increased erosion potential. This is a major impact to private lands. REA willrequire C-U/W to mitigate and control this erosion on private lands by using a straw mulch, sheep-footed in until a reseeded ground cover is obtained to control erosion naturally.

Para 3 REA recognizes that Domestic livestock populations will also be affected by removal of cover and food resources and will require the participants to compensate private land owners because the ROW size and affected area would be greater on private lands than on Federal or Indian lands--in proportion. State so in Final EIS.

Para 5
The vunerability to invading weed species affects private lands even more than public. Discuss what is meant by "proper reclamation techniques" and list these in the final EIS.

5.4.6 Cumulative

Para 2 A comprehensive study of segments covered in Figure 4-29 needs to be handled. This need was requested in the scoping process by letters to Rea dated January 27, 1983 and sent again after the so called Durango Scoping meeting. The majority of the concerns were not covered.

Para 3 This paragraph should be deleted. Permanent disturbance occurs for private land on and adjacent to all of the ROW easements and access roads. Use is restricted completely to only those allowed by C-U/W and adjacent property value is forever diminished in the mountain areas.

5.4.7
Feathering is to be guaranteed by REA on Private lands on which actual on the ground conifer-aspen communities exist? This should be a requirement by REA. in the Final EIS.
5.5.3 Locking the gates will not prevent trespass and illegal hunting because the powerline ROW will provide easy illegal access on both public and private lands. This ROW opens the flood gate to numerous illegal activities. REA will require C-U/W to mitigate this inconvenience to private owners by paying legal fees required to prosecute trespassers and vandals on and off the ROW both during construction and after.

5.5.5 points out this improved access and mentions activities other than hunting. The words "and unlawful" should be added before hunting and after Lawful in this section to appropriately describe the true circumstances as does 5.8.1 which points out adverse effects on cultural resources. The line is an invasion of privacy and property rights on private lands.

Add here a statement like that found in 5.8.7 2nd para.
I suggest "The primary unavoidable adverse impact would result from increased vandalism and tresspass to property made more accessable by access roads. Improved access may attract individuals seeking to disturb or harm private property. Limiting the use of access roads would lessen the impact but not completely eliminate it."

5.5.7 Adverse effects Para 1
Define completely in this paragraph the term "Temporary Disturbance".
5.8.1 Para 1
This paragraph points out the invasion of public and private lands and diminishion of owners rights through trespass. It should be easily expanded to most things besides cultural resources.

5.8.5 Secondary Impacts
Vandalism and theft because of the ROW is a major concern of the private owner. Discuss procedures C-U/W intends to use to prevet vandalism to private property during and after construction and maintenance.

5.8.7 Adverse Impacts Para 2
Good paragraph. What methods (list them) are to be used in limiting the use of access roads.

8.9.1
Surface mining and surface use on private lands will be affected by the line. Will C-U/W be required by REA to move the line at their own expense if it is required by the mineral owner in order to extract minerals on private land. This is a requirement on federal lands and the private owner should be guaranteed the same by REA.

Agriculture Para 3
Land can continue to be cultivated under the towers but some landowners may not find it practical. List here the reasons this would not be practical and why owners would be inconvenienced.

5.9.3 Migigation, 2nd para.
list here possible examples of resolutions to an energy lease-transmission line conflict.

Does "affected parties" also mean private land and mineral owners.
Para 4
define thoroughly what conditions are meant by "where practical." and practical to whom? The private land owner?

Add after repaired, the words "to as good as or better condition than existed before construction"

Para 5
After "disturbances" add "to the future use of the farm land by the land owner."

5.9.4 M-LPCL to LH P. 5-48
When the recreation, commercial forest, agriculture and cropland mileages and figures are corrected for the preferred alternative "C", this section may change substantially.
It should be corrected.

5.9.5 Adverse Impacts
The impact could be minimized, will it be? Expand by listing specifics on how S-U/W will minimize impacts on private lands. More than 793 acres of commercial forest will be removed—as this study identified little to no commercial forest on private lands and missed much for BLM.

5.10.1 General Impacts, Last para.
Access Roads...create new access...increasing recreational opprotunities. Add here "and opprotunities for tresspass and vandalism."

5.10.3 Mitigation
Discuss here the concept of negotiations with private landowners List the step by step procedure. Include sample copies of easement and ROW forms for FS and BLM and Private Lands. Discuss condemnation procedures for both Colo, and N. Mex.

2nd para.
Who and what are the appropriate administering agencies that would be involved on private land? Is the land owner included here?

5.10.4 Slt. Cor Impact com. page 5-53
M-LPCL to LH
Alternative C crosses the Hesperus Ski area location. If this is not a Recreation area perhaps REA needs to restructure its criteria and add private recreation areas where their actions here will have much larger socioeconomic impacts.

This recreation area was pointed out in the scoping process. Alternative C is high Density when several hundred people utilize the location daily.

5.11.1 Direct Impacts
Short term impacts from payments to landowners. REA is required also to mention the socioeconomic impacts more long term to private owners of inability to use as colateral for loans the easement and ROW property, the resulting loss of total monitary value of the adjoining property especially at time of sale, the locking of the ROW into an industrial type of land use for the life of the project, the loss of converting to ROW to other uses by the private owner. Inconvenience and danger as pointed out in 5.13.2 5.13.3, 5.13.4 also are a direct and secondary impact.

Anticipatory Impacts: The loss monitarily, time wise, and mentally and physically to the private landowner in dealing with C-U/W and REA and the multitude of meetings, hearing, PUC processes, monitoring of construction, and general invasion of privacy and property rights are examples. Reading the EA, DEIS, and SDEIS for which federal agencies are compensated as they were for writing and commenting on, is also a substantial loss to the private owner.

Compensation for the private time required in Anticipatory procedures and impacts is required of C-U/W and REA for the Private Owner.

Since September 1979 any private land owner possibly to be impacted has to be covered in the finalEIS. These people and their rights were ignored thus far by REA even when civil rights and equal rights possible violations by REA were called to question.

Correct this problem. If it is not done it will constitute deliberate violation of civil rights and property rights.by REA and C-U/W.

Para 2
"payment would benefit" but is it a fair and just payment since it is a one time payment when Federal lands receive a yearly payment and many, many protections? Can a fair and just payment be obtained without spending the majority of it on attorney fees to get payment? What amount of the payment will be required to force C-U/W to live to the obligations for protection to land outlined in the Final EIS.

Western's absence is obvious..C-U/PSC pay taxes; Western does not.

The counties like La Plata and Montezuma where Western will own and operate the line will not receive taxes. REA should point out the areas of line to be owned and operated by Western as was pointed out in the last so called Scoping meeting in Durango and level with the public.

5.11.2
Shared ownership and operation of the line is not the final result. C-U and Western will take over specific portions of the line for ownership and maintanence. This section and table 5-1 is invalid.

Para 2
Civil rights of private property owners have probably already been violated by REA; Further violation will constitute deliberate violation.

5.12.3 Will the standards set out in the National Forest Landscape Management Utility Handbook USDA 1975 and in the Environmental Criteria for electric Transmission Systems USDA, SUDI be utilized on private land at the landowners request? REA needs to stipulate this compliance.

Non specular towers etc. would be utilized. Does this include color anodized metal to camouflage even further. If not it should be stipulated by REA in the Final EIS.

Do the areas of high visual sensitivity where use of alternative design structures will be also include private lands and landowner requests. REA should stipulate to this for C-U/W.

5.12.4 M-LPCL to LH
Alternative C. Crosses near or through the Hesperus Ski Area.
This section is wrong.

5.13.1 and 5.13.1.1 REA should require prevention of wet weather interference.

5.13.2 5.13.3 Colorado-Ute has not complied with REA Bulletin 62.4 in the past on its present line so why should C-U be expected to now.

5.14 Cumulative Impacts
2nd para.
Mapco Construction is not completed as clean up and restoration is not finished three years after line was laid.

5.15 After "project" the last word of first sentence add words "on private lands".

Is plan of construction, operation, and rehabilitation to be prepared for private lands to cover site specific stipulations to be placed in the ROW and easement documents for private lands? If not, Why? REA could find itself in a civil and equal rights violation.
2nd para. Is the lead agency REA to insure "that essential commitments are carried out and mitigation measures performed on private lands" also.

If so, add the words "on both government and private lands" after "mitigation measures performed." (2nd Paragraph) If not, Why?

The mitigation plan requested by REA should include and cover throughly all private lands crossed by the line so that private lands and owners can be on an equal basis with government lands and agencies.

The measures on 5-72 through 5.84 should be revised and corrected to reflect changes in text and content of the SDEIS when made Final.

The Final EIS Document is the way the project should be, what happens if C-U/W do not meet commitments outined in the document. REA has a commitment to private owners to Guarantee that their (REA'S)actions of financing or guaranteeing financing will prevent destruction environmentally and economically of private property crossed. REA is ultimately responsible.

Jack W. Scott
S+I Scott + Co.

Box 1041
Crested Butte, CO 81224
August 1, 1983

Dennis Rankin
Western Area - Electric
Rural Electrification Administration
14th and Independence Ave., S. W.
Washington, DC 20250

RE: Supplemental Draft Environmental Impact Statement (SDEIS) for the Rifle To San Juan 345-KV Transmission Line and Associated Facilities, dated June 1983

As a member of the Gunnison County Rural Electric Association and a consumer of electricity in the Colorado-Ute system, I submit the following comments on the subject SDEIS.

My personal and primary concern is that the need for this proposed project has not been justified, and as a consumer my electric rates will be unnecessarily increased. There are three entities involved in this proposal (Colorado-Ute, WAPA, and PSC) with three quite different sets of needs. While it may be true that the 345 KV line can satisfy these needs, it is also true that, as proposed, consumers in the Colorado-Ute system will end up subsidizing consumers elsewhere. There seems to have been no attempt to find either a least cost solution to everyones needs or to devise an equitable allocation of costs based on expected benefits to each party. Let me be more specific.

In chapter 3, "Alternatives Including the Proposed Action" a number of alternatives are dismissed because they do not individually satisfy all the needs of all the parties. This is a sham. No attempt seems to have been made to combine a few of these and other possibilities so as to create viable alternatives that would satisfy all needs. For example, the twice daily peaking of the Colorado-Ute load is a primary cause of its capacity problems, yet load leveling by demand or time of day pricing or other means is dismissed. NEPA requires the analysis of a full range of reasonable alternatives. This does not seem to have been done. The stand-alone alternative approach is simply not reasonable, and reasonaele combinations of the simple alternatives have been ignored.

The strongest justification for the 345 KV line seems to come from WAPA needs. For several years WAPA has been studying its problems. Its decision to go with the present proposal may have been strongly influenced by the economic advantages of the subsidy by Colorado-Ute members. No analysis is included in the SDEIS of alternative links in the western states grid such as a line from Craig/Hayden to Salt Lake City. Such a link might well be more beneficial to the region than the Rifle/San Juan link. WAPA surely has this kind of analysis available as well as analyses of other alternatives to meet its needs. Why is this vast body of information ignored?

JUSTIFICATION FOR COLORADO*UTE IS BASED ON A CAPACITY SHORTFALL IN SOUTH WESTERN COLORADO AS SHOWN IN TABLE 2-5. THIS ANALYSIS OVERLOOKS THE OBLIGATION OF WAPA TO DELIVER POWER TO THIS AREA. A NUMBER OF RURAL ELECTRIC COOPERATIVES NOW IN THE COLORADO-UTE SYSTEM WERE PREFERENCE CUSTOMERS IN THE COLORADO RIVER STORAGE POWER SYSTEM. WHEN COLORADO-UTE WAS FORMED, IT ASSUMED THESE PREFERENCE RIGHTS FOR DELIVERY OF POWER. THE SDEIS DOES NOT DISCUSS THE CURRENT STATUS OF AGREEMENTS CONCERNING AMOUNT AND POINT OF DELIVERY OF POWER BY WAPA TO COLORADO-UTE, AND HENCE THE SIMPLISTIC ANALYSIS OF TABLE 2-5 IS INVALID. FURTHERMORE, NO CONSIDERATION IS GIVEN TO BUYING NEW MEXICO POWER FOR THE EXTREME SOUTH AND ESPECIALLY FOR THE EMPIRE ELECTRIC CO_2 LOAD WHICH MAY BE INTERRUPTABLE.

THE DIVISION OF COST, MAINTENANCE, AND CAPACITY AS DESCRIBED ON PAGE I-3 IS STRANGE. BOTH COLORADO-UTE AND WAPA ARE MOVING POWER FROM NORTH TO SOUTH, YET THEIR CAPACITY ON THE FIRST LEG FROM RIFLE TO GRAND JUNCTION IS SMALLER THAN FOR THE REMAINDER OF THE LINK. IN OTHER WORDS, THEY CANNOT FULLY USE THE SOUTHERN PART OF THE LINK WITHOUT FURTHER ENLARGING THE NORTHERN PORTION. ENVIRONMENTAL IMPACTS WOULD BE REDUCED IF DOUBLE CIRCUIT TOWERS WERE INSTALLED INITIALLY (BUT PERHAPS ONLY A SINGLE CIRCUIT WIRED) BETWEEN RIFLE AND GRAND JUNCTION.

ANY CAPACITY PROBLEMS FOR COLORADO-UTE IN SW COLORADO HAVE BEEN CAUSED PRIMARILY BY CHANGES IN WAPA OPERATIONS INCLUDING ACQUISITION OF FIRMING ENERGY, INTRA-PROJECT GENERATION EXCHANGES, AND FUEL CONSERVATION PROGRAMS. BEFORE THESE CHANGES, POWER FLOWS WERE FROM SOUTH TO NORTH. WAPA DELIVERED POWER TO COLORADO-UTE IN THE SW, AND COLORADO-UTE GENERATED AND DISTRIBUTED FROM THE NORTH. THE COLORADO-UTE SYSTEM THUS HAD GOOD REDUNDANCY AND SIMPLE DISTRIBUTION. TODAY, HOWEVER, AFTER WAPA CHANGES, THE POWER FLOWS ARE FROM NORTH TO SOUTH LEADING TO ALL THE PROBLEMS IN SW COLORADO WHILE BENEFITS GO TO CONSUMERS IN ARIZONA (SALT RIVER PROJECT) AND NEW MEXICO. THIS IS A KEY PART OF THE NEED QUESTION. WAPA SHOULD DELIVER POWER TO COLORADO-UTE IN THE SW AS ORIGINALLY AGREED, AND UTILITIES IN NEW MEXICO AND ARIZONA SHOULD PAY FOR THE REQUIRED NEW LINE SINCE IT IS THEIR POWER FROM THE CRAIG/HAYDEN AREA THAT IS CREATING THE PROBLEM.

COLORADO-UTE WAS FORMED TO GENERATE, PURCHASE, AND DISTRIBUTE POWER TO ITS MEMBER COOPS, ONLY. (TO THIS CAN BE ADDED ACTIVITIES SUCH AS WHEELING, EXCHANGES, AND POWER POOLING CUSTOMARY IN THE UTILITY INDUSTRY.) THUS COLORADO-UTE HAS NO GROWTH IMPERITIVE BEYOND WHAT IS NECESSARY TO SATISFY ITS MEMBERS' NEEDS. IT IS NOT AT ALL CLEAR FROM THE SDEIS HOW MUCH CAPACITY OF THE PROPOSED 345 KV LINE (IF ANY) WILL BE NEEDED BY COLORADO-UTE OVER THE NEXT FEW YEARS. TABLE 2-2 SEEMS TO BE THE BASIS FOR LOAD PROJECTIONS, BUT THIS IS NOTHING MORE THAN A SURVEY OF THE VARIOUS COOPERATIVES THAT, BY AND LARGE, ARE NOT STAFFED TO DEVELOP THIS KIND OF INFORMATION. THIS IS PIE IN THE SKY. WHERE IS THE INDEPENDENT ANALYSIS BY REA USING STATE-OF-THE-ART METHODOLOGY AS REQUIRED BY LAW? IN PARTICULAR, PRICE/DEMAND ELASTICITY SHOULD BE INCLUDED IN THE ANALYSIS.

THE FACT IS THAT ONLY MINOR IMPROVEMENTS IN THE COLORADO-UTE DISTRIBUTION SYSTEM ARE NEEDED TO SATISFY SW AREA NEEDS FOR THE FORSEEABLE FUTURE. TODAY POWER IN THE AREA COMES LARGELY FROM WAPA, NUCLA, BULLOCK, AND THE COLBRAN HYDRO UNITS. ADDITIONAL LOW HEAD HYDRO POWER CAN SOON BECOME AVAILABLE FROM THE MONTROSE CANAL PROJECT, AND POWER CAN BE PURCHASED FROM NEW MEXICO. COLORADO-UTE INTENDS TO DISCONNECT ALL THESE SOURCES AND USE THE 345 KV LINE TO BRING POWER FROM CRAIG 3. PUTTING ALL THE EGGS IN ONE BASKET IN THIS WAY CAN ONLY REDUCE SYSTEM RELIABILITY AND INCREASE THE VULNERABILITY OF THE SYSTEM TO NATURAL AND HUMAN DISRUPTION.

A THOROUGH ANALYSIS OF LOADS AND REGIONAL SYSTEM INTERCONNECTIONS IS LIKELY TO SHOW THAT THE MAIN REASON FOR THE 345 KV LINE IS TO DISPOSE OF POWER FROM CRAIG 3 -- POWER THAT IS NOT NEEDED BY MEMBERS OF THE COLORADO-UTE SYSTEM. USING ABSURD POWER SALES PROJECTIONS, COLORADO-UTE HAS FORECAST NO RATE INCREASES WHEN CRAIG 3 COMES ON LINE. IT IS MORE LIKELY THAT WE WILL SEE A 40% RATE INCREASE DUE TO CRAIG 3 AND ANOTHER 10% INCREASE DUE TO THE 345 KV POWER LINE. FACED WITH THIS PROBABILITY, COMSUMERS ARE LIKELY TO OPPOSE ENTERING CRAIG 3 INTO THE RATE BASE -- ESPECIALLY SINCE THE PLANT WAS BUILT WITHOUT PROPER REVIEW AND AUTHORIZATION. IT IS THUS ENTIRELY POSSIBLE THAT OWNERSHIP OF CRAIG 3 MAY REVERT TO THE REA. IF THIS COMES TO PASS, THEN COLORADO-UTE WILL NOT NEED THE 345 KV LINE, AND IT WILL BE IMPORTANT THAT ANY NEW LINE FINANCED BY THE REA BE IN THE BEST POSSIBLE LOCATION FOR INTEGRATING THE CRAIG 3 OUTPUT INTO THE REGIONAL POWER GRID UNDER WHATEVER MANAGEMENT ARRANGEMENT THE REA MAY DEVISE.

MY CONCLUSIONS ARE THUS THAT THE REA HAS FAILED TO CONSIDER AN ADEQUATE RANGE OF REASONABLE ALTERNATIVES, IT HAS FAILED TO CONDUCT AN INDEPENDENT ASSESSMENT OF COLORADO-UTE'S NEED FOR THE LINE, IT HAS FAILED TO SHOW THAT THE 345 KV LINE IS ACTUALLY NEEDED BY COLORADO-UTE (SEPARATE FROM THE NEEDS OF OTHER ENTITIES), AND IT HAS FAILED TO SHOW THAT THE 345 KV LINE IS THE BEST SOLUTION TO WHATEVER NEEDS COLORADO-UTE MAY HAVE.

BEYOND THIS ISSUE OF NEED THERE ARE ADDITIONAL ITEMS IN THE SDEIS INDICATING A RATHER CARELESS ATTITUDE TOWARD THE FACTS OF THE SITUATION. I REFER, FOR EXAMPLE, TO THE LAST PARAGRAPH OF SECTION 1.6 WHEREIN IS THE STATEMENT "NO PUBLISHED SCIENTIFIC STUDIES TO DATE HAVE SHOWN ADVERSE EFFECTS ON HUMANS FROM ELECTROSTATIC AND ELECTROMAGNETIC FIELDS PRODUCED BY 345 KV LINES". I REFER YOU TO THE BULLETIN OF THE ATOMIC SCIENTISTS FOR APRIL 1980, PAGE 28, WHEREIN IS DISCUSSED THE 1978 DECISION BY THE NEW YORK PUBLIC SERVICE COMMISSION THAT THE 60 HZ ELECTRIC AND MAGNETIC FIELDS FROM 765 KV POWER LINES CONSTITUTE A HEALTH RISK. THIS DECISION WAS BASED ON SCIENTIFIC TESTIMONY AND WAS UPHELD IN COURT. 765 KV VS 345 KV IS NOT THE ISSUE HERE SINCE TOWER HEIGHTS ARE ESTABLISHED TO GIVE ESSENTIALLY EQUAL FIELD STRENGTHS AND HENCE EQUAL HAZARD ON THE GROUND. NEARLY 60 REPORTS ARE IN THE SCIENTIFIC LITERATURE ON THE EFFECTS OF LOW FREQUENCY ELECTRIC AND MAGNETIC FIELDS INCLUDING MANY SHOWING EFFECTS ON ANIMALS AT FIELD STRENGTHS EQUAL TO OR LESS THAN

THOSE EXPECTED FROM THE 345 KV LINE. A NUMBER OF FOREIGN PAPERS ADDRESS THE EFFECTS ON HUMANS. STUDIES NOW IN PROGRESS MAY INDICATE THE NEED TO DECENTRALIZE POWER GENERATION IN ORDER TO MINIMIZE THE NEED FOR LONG DISTANCE, HIGH-VOLTAGE POWER LINES. A CONCLUSION OF THE BULLETIN ARTICLE IS THAT "THE HEARING AND OTHER RELATED EVENTS REVEALED THE OUTLINE OF AN INDUSTRY ATTEMPT TO CONCEAL EVIDENCE ABOUT HEALTH RISK." IT APPEARS THAT THE REA MAY BE JOINING IN THIS CONSPIRACY. THIS IS CONTRARY TO THE STATUTORY DUTY OF THE REA AS LEAD AGENCY FOR THE PREPARATION OF THE EIS "TO PROTECT THE WELEFARE OF THE PUBLIC" AS STATED ON PAGE 1-5. CONSIDERATION OF THIS HEALTH RISK IS EXPECTED TO FAVOR DECENTRALIZED ALTERNATIVES OVER THE CURRENT COLORADO-UTE PROPOSAL.

IN SUMMARY, THE PROPOSED 345 KV LINE IS LIKELY TO ADVERSELY AFFECT THE HEALTH AND ECONOMIC WELFARE OF CONSUMERS IN THE COOPS OF THE COLORADO-UTE SYSTEM WITHOUT PROVIDING ANY DEMONSTRATED BENEFITS. WE DON'T NEED IT. WE DON'T WANT IT. IT IS A WASTE OF OUR MONEY. IF OTHERS WANT A POWER LINE, LET THEM BUILD IT, AND LET THEM PAY FOR IT.

SINCERELY,

R. C. WINGERSON

(1

Clark Weston
3905 Hwy 550
Durango, Colo., 81301

Wm. E. Graves, Director
Western Area Electric
Rural Electrification Admin.
14th and Independence Ave., S.W.
Washington, D.C. 20250

Sir

Please enter the following remarks in the official record pertaining to the Supplemental Draft E.I.S. on the Rifle to San Juan 345 kV transmission lines and associated facilities.

Six active nest of southern spotted owls were recently found in the Mesa Verde Park area near Cortez by a post graduate biology student under Prof. Craig of the University of Colo. at Boulder. This species has been proposed for protected status by the U.S. Fish and Wildlife Service. Much of the proposed route is suitable habitat for the species. Surveys and mitigation measures should be part of the E.I.S.

The "Purpose and Need" section of the E.I.S. does not indicate the effect on Colorado River Basin water allocations represented in the water conserved in

coal fired generation of "pooled and shared" power. Significant amounts of water allocated to one state could be, in effect, transferred to use in another state via electrical power without concomitant water allocation adjustments.

It appears possible that priorities of water use and conservation in water competing states could be diverted away from power generation and the "pooled and shared" power exploited as a means of inducing secondary transfers of water rights, replacing junior water rights in one state with power consumption in another.

I see no provision to ensure that pooled and shared power concepts facilitated by this project are not used by Colorado Ute to justify construction of transmission and generation capacity in excess of the needs of its own service area. What assurances are there that this is not a Trojan Horse strategy for other power systems to exploit resources, environment, financing and water in Western Colorado to avoid the problems these factors would cause in their own service areas? How are the pricing, timing, manner of repayment, and criteria for implementation of "pooling and sharing" to be controlled to assure that R&A co-ops in Colorado will not be subsidizing growth costs in other member systems especially those that are investor owned? What percentage of the need for this project is attributable to the "pooling and

sharing concept? How are the legal costs of fighting all the way to the Supreme Court (as was done by Colorado Ute) against the purchase of alternate energy power such as wind power, small or low head hydro, photovoltaic and industrial co-generation, reflected in the evaluation of the conservation alternative for this project? Are there no guidelines for offsetting and rewarding against biased evaluations? Was the decision by Colorado Ute to fight the purchase of alternative energy power supported or endorsed by R.E.A.?

To what extent is the opposition to this and other forms of conservation promoted by R.E.A. to reflect the position of individual R.E.A. Co-op Consumer-members? Which of the other participants in this project have fought alternate energy purchases and their submitted negative evaluations of the conservation alternatives? Does R.E.A. make any official distinction between the focused career conditioned motivations of the Technical Management Cadre of Colorado Ute and lifestyle preferences, affordability and cost of living values and motivations of individual R.E.A. Co-op members when weighing system "need" against social, environmental and economic costs?

The "pooling and sharing" device also appears to have the potential for allowing investor owned systems to rely on capacity built with low interest rate loans available only to REA Co-ops. It also subverts the ability of Colorado PUC, to require strong evidence of need in Colorado like our service area by diffusing and distorting the need factors through other power systems where PUC has jurisdiction and where projects investors have high priority.

The process and final section of the Eldorado does not address the concomitant loss of northern state regulatory ability involved in the facilitation of pooling and sharing goals outlined for the project. This loss represents a degree of disenfranchisement of REA coop member-consumers individuals who regard the Colo. PUC as their only buffer against being forced to finance the empire ambition growth pursuits of Colorado Ute technical management cadre. The feeling of disenfranchisement is exacerbated by goals of the project which will force "pooling and sharing" of growth costs of investor owned systems with our non profit co-op system.

We've been asked the individual REA member-consumers if or to what degree they want total guarantee

against power shortage at the price of environmental degradation, [illegible] and industrialization of their lifestyles, and unaffordable electric bills.

Public hearings are the time and place specifically designated by the extremists of both sides of the issue to provide accurate measurement of public and member-consumer mind and opinion.

Only with written comment provided will that is heard from are power industry executives and moral litmus activists. They (we) are not the effected majority.

You should pull the papers! The socio-economic impact on affected individuals has not been adequately assessed. They would receive more consideration if they were fed to lions or bulls.

Carl Weston
3405 Hwy 550

12303 C.R. 44
Mancos, CO. 81328
26 July, 1983

William E. Davis, Director
Western Area-Electric
Rural Electrification Association
14th & Independence Ave., S.W.
Washington, D.C. 20250

RE: RIFLE TO SAN JUAN 345-KV TRANSMISSION LINE AND
ASSOCIATED FACILITIES
SUPPLEMENTAL DRAFT ENVIRONMENTAL IMPACT STATEMENT
JUNE 1983

Dear Mr. Davis:

The Rural Electrification Association has determined, by its own admission, that its proposed financial participation in Colorado-Ute's proposed single circuit 345-KV transmission line is a major federal action significantly affecting the quality of the human environment. And that, acting as the lead agency, the REA has evaluated all alternatives to this line, has also determined the line necessary as proposed by C-Ute, including C-Ute's preferred route, tower structures, and mitigation plans, and has assured, through its endorsement of C-Ute's proposal, protection of the welfare of the public (p. 1-5)

I would urge the REA to concur with a Supreme Court ruling in the state of New York (Berman vs. Parker) that..."The concept of the public welfare is broad and inclusive...the values it represents are spiritual as well as physical; aesthetic as well as monetary. It is within the power of the legislature to determine that the community shall be beautiful as well as healthy; spacious as well as clean; well-balanced as well as carefully patrolled."

Therefore, I would charge the REA, as the lead agency, with altering the value, both aesthetic and monetary, of properties anywhere within the visual boundaries of the Mancos Valley and its surrounding forest should this line be constructed according to the plans of the SDEIS; and that these charges would be supported by another Supreme Court ruling (Keinz vs. state of New York, 1957) that..."Reduction in value due to impairment of view must be considered."Furthermore... "the view might be a mountain side or a valley as well as a lake. In either event, the view augments the value of the premises... and if the view is spoiled, the market value of the premises remaining is spoiled." Furthermore..."The extent of the reduction is no more speculative than many other factors affecting value. It may be a matter of judgment but it is also a matter of dollars... and the Constitutional policy requires that such reduction in value not be borne by the owner..."

Therefore, I charge that this subsequent reduction in value by borne by the REA whose endoresement of the line has been, in fact, given without due consideration of the welfare of the public and the quality of the human environment, as the REA suggests.

In a similar action regarding a double circuit 345-KV transmission line constructed in the state of New York, a 1967 Supreme Court ruled..."However, we consider in residential property or in potential residential property which has an enhanced value because of the beauty of the view and/or because of seclusion and privacy, that the power easement does cause a consequential damage if it interferes with said view or with said seclusion and privacy."

REA HAS ENDORSED ERRORS, MISINFORMATION AND DISCREPENCIES IN THE SDEIS

1. Figure 3-13 shows the entire WAPA 230-KV corridor as "other corridors considered" but REA gives no consideration to that corridor anywhere in the text of the SDEIS as an alternative to that preferred by Colorado-Ute.

2. REA has accepted a written error that the proposed route, as it enters Montezuma County from the Norwood substation, would continue southerly to the Montezuma/LaPlata County border, PARALLELING WAPA'S 230-KV LINE ALL THE WAY. (p. 1-4) WAPA's 230 line does not meet at the two-county border.

3. REA has determined a need for the line, based on Colorado-Ute's projected needs; but REA admits it has not yet completed its review of Colorado-Ute's forecasts (p. 2-2) REA's SDEIS shows no documentation of Colorado-Ute's projected needs; REA accepts their validity without research. (p. 2-2) Mathematics used to show Colorado-Ute's energy requirements for 1983 have been used quite liberally. According to the SDEIS, "Colorado-Ute expects member energy requirements for 1983 to be approximately 7 percent above 1982. Tables 2-1 through 2-4 conclude a 6.15 percent increase. Such rounding of figures to the next highest indicates either a bias or faulty mathematics.

4. REA continues to endorse the alleged need for such a large-capacity transmission line; yet admits (p. 3-25) "new growth in Southwestern Colorado has decreased."

5. Nothing in the SDEIS text clearly spells out parties in mitigation procedings. For property owners in Montezuma County, construction of the line would be performed by one agency and maintained and financed by another. Any hopes for fair and expedient mitigation would be lost in this confusion.

6. REA hopes to convince its SDEIS reader that the major industry in Southwestern Colorado today is mining. (p. 4-25) I urge the REA to update its facts. If mining were the major incustry, a need for larger-capacity lines might be justified. I suggest, however, that cattle are content without more powerlines through their grazing and croplands.

7. REA rejects the proposal of a Lake City-Durango 115-KV line because it would "significantly impact a highly scenic area." (3-19) This same lead agency prefers the more visually-impacting 345-KV line to cross through the highly scenic area of the National Forest surrounding the Mancos Valley, Mancos Hill and Hesperus.

8. Burns-McDonnell used a 1977-79 resource for its data on land use in the Mancos Valley (fig. 4-11) This data is no longer reliable. I urge a closer inspection of the livlihood of this region and the loss in land value and use which would result from the construction of this transmission line.

9. REA contends that "the national interests of rural electrification achieved by this project outweigh the environmental benefits derived from protecting the prime farmlands from such use." (p. 5-44) I suggest that this is not a question of rural electrification; that it is a question of Colorado electricity consumers financing the cost of construction of transmission lines, generating facilities, and coal operations in their state for the lower-cost power provided to non-members outside the state of Colorado. I would also challenge the REA to a national interest survey for the truth.

In conclusion, I suggest that the REA has defeated its original purpose of providing electrification to rural America, a purpose for which it was conceived nearly half a century ago. Rural customers in Colorado are being asked to relinquish their values, their lands and their livlihoods, in some cases, in order to provide electricity to urban Americans outside the state of Colorado.

Responses to these charges will be appreciated.
Thank you.

Sincerely,

Susan Shields

Patrick Enright

cc/ Colorado Public Utilities Commission,
U.S. Senator William Armstrong,
U.S. Senator Gary Hart,
U.S. Representative Ray Kogovsek,
Colorado Senator Dan Noble,
Colorado Representative Ben Campbell

PUBLIC HEARING COMMENT FORM

Rifle-San Juan 345 kV Transmission Line

Name: Foy Cogburn | Representing: member of LaPlata Electric Copp | Date: 8/3/83

Address: 1394 Hwy. 550 south , Durango, Colorado 81301 , 303-259-0602

Please provide any comments relative to the potential environmental impacts of the Rifle-San Juan 345 kV transmission line project, or the Supplemental Draft Environmental Impact Statement for this project. Comments may be sent to Mr. William E. Davis, Director, Western Area - Electric, Rural Electrification Administration, Agriculture South Building, Room 3304, Washington, D.C. 20250, within two weeks of this meeting. By aug 8, 1983

In reference to the "Supplemental Draft Environmental Impact Statement"

page 1-1 ; In the matter of establishing the need for the 345 KV Rifle-San Juan Transmission Line and associated facilities; this NEED still has not been established and approved by the Col. Public Utilities Comm. and the Environmental Analysis being a large part of the DEIS; the reviewing public ha no knowledge of, nor way of knowing, the extent of corrections and answers to public comments. There are so many mistakes in this SDEIS that we hav e doubts that any corrections have been made or atempted to be made. The Public or PRIVATE SECTOR are not exarts and we are not being paid to do your job, but people who live in the area know and can see the mistakes. There have been several people study this thing out and you have likly already received a listing of a great many of the errors and mistakes so we will not relist them on our comments here.

With our Government insisting on budget cuts to reduce the national debt, the private sector is becomming more aware of the sneaky ways that have been used in the past to get these expensive projects passed and placing the burden of payment upon the utility users and the tax-payers. Most all these Coops have become profit organizations even they claim a non-profit standing and tax exempt; they just add on more expenses.

The proposed project does not conform to the Col-Ute by-laws as being souly for the "benefit for the consumer of the COOP; this fact is easily seen in the reading of this SDEIS, in that the project is for the benifit of the Western States Grid system; and, the Colorado consumers will be subsidizing the project. This is very unfair, and as soon as the members and customers of the Coops can be educated of this fact, we will see much more input into the public hearings. The average member does not realizze that they are subsidizing and guaranting repayment of a debt for private industry; which it all boils down to. There is a simple solution to this over-built power plant situation; the Craig plant could be sold and tied into the Western Grid system directly across Utah with very little environmental impact.

Signature

- continued on attached page ->

We must insist on a joint Review process where as all(all)parties concerned in this project (including the private sector that is directly affected) can be brought together in an orderly meeting and each side tell it's story and discuss the whole situation so that all the facts and figures can be publicly brought out so that the members and tax-paying public can be informed and then and only then will we began to see a solution. Governor Lamm has a department in his cabinet for such. Youx may well know that the Col-Ute has refused this process; but we must insist that you have some bearing on this. A route must be identified so that those people directly affected will get involved. Everyone knows that most individuals (private property owners) do not get involved until they know that they are directly affected. When these people find that they are being gored and are involved, then your troubles will begin- you may think you are now having troubles - but by then you will know you are having trouble- because there are still westerners that don't talk much and still believes in the old ways of"winning the WEST" We urge you to keep comunications ~~(public joint review)~~ going for this project until a route is established and a JOINT REVIEW PROCESS can be arranged.

It appears that COMON SENCE HAS VANISHED INTO THE PLITE OF POLITICS , AND THIS FACT IS VERY LIKLY TO DROWNED US ALL.

Thank You for your consideration, please give our governamental process a chance, it has worked before; and it will again if we let it.

Foy Cogburn

August 5, 1983

Mr. Dennis Rankin
Western Area-Electric
Rural Electrification Admini;tration
145h and Independence Ave., S.W.
Washington, D.C. 20250

Comments on:
"Supplemental Draft Environmental Impact Statement"
on Colorado-Ute 345 KV Rifle to San Juan Powerline

I am writing to express concern about the proposed power-line.

Repeatedly, the PUC has denied repeatedly the application for a Certificate of Public Convenience and Necessity for this project - and then it seems that Colorado-Ute (and Western) and REA just proceed to reapply or to ask for a rehearing, reargument , or reconsideration. In addition, the SDEIS does not even mention the reasons that the PUC gives for denial and yet gives within the body of the statement every possible reason for building the line. Is this a fair presentation of the pros and cons of the project?

While I am not expert on the Preferred Corridor, I do have extensive of the Alternative Corridors B & E from Montrose Sub-station to Norwood Substation, Segments 15c, 15e, 20a, and 21. It would seem to me that consideration of an alternative that was dismissed in the early 1970's as environmentally unsound and so detrimental to the land that it was recommended that perhaps the current Shiprock-Currencanti 230 KV line should be dismantled and sited elsewhere is somewhat indefensible from the standpoint of considering viable alternatives.

Some of the alternatives that are dismissed as out-of-hand do, indeed, seem to offer persons living in the Southwestern region of Colorado a better life-style, better environment, and an opportunity to preserve economic and electrical resources for the use and benefit of those living in the area rather than subsidizing the profitable sale of electricity to users in other areas.

I would encourage serious consideration of ways which impacts were evaluated. No weight whatsoever has seeming been given to one of Colorado's major products - selling (through tourism) wide open spaces. In fact, a low visual impact rating is given to any tract of land which is more than 80 acres - don't we have a responsibility to land and scenic beauty if it is in a parcel larger than 80 acres?

As a landowner in the above mentioned alternative corridors B and E, Montrose Substation to Norwood Substation, I am aware of some of the very high costs which both the landowner and the environment pays when transmission lines are sited with only the utilities viewpoint in mind. Some areas which the SDEIS overlooks are ones which historically I can speak to:

1. That the payment of land and easement acquisition would benefit landowners is questionable. Who is paying for the loss in land value that results from being in the visual path of the powerline? We found that our land reduced in value 50% for those portions which were in visual proximity of the transmission line. Why? Because the value is scenic and wilderness. Our loss to just land value was substantial. Other direct losses, such as nuisance and vandalism far outweigh compensation.

2. No mention is made of the impact (negative) on the land, wildlife, and landowner where the transmission line right-of-way opens secluded areas to access. Yes, I know that gates are locked - but keys seem to abound to provide access to private property for hunting and fishing - and these persons seem to have no regard for trespass and courtesy. Just ask those of us who have such secluded property and you will find a group of disgruntled persons who cannot help but feel important consideration be given to siting on public lands which are already accessible to the public.

3. No mention of soil-conservation ratings such as alpine and sub-alpine soils has been made - even those where it is appropriate - even though this affects recovery rates of vegetation and erosion.

All in all, I would question whether the SDEIS addresses itself to analysis in any detail of the impact on landowners, wildlife and conservation concerns since there is a blase attitude that because the powerline is needed(in the REA's mind) it outweighs any points that bear a negative relationship to justification for the line.

I feel that a very specific analysis of the proposed route should be made, not just a general comparison of different alternative routes. Big generalities always are flawed and this document abounds in them.

I would reccommend that reviewers peruse the book Environmental Impact Assessment by Corwin, Heffernan, et.al. Editors, published by Freeman, Cooper & company in 1975. It raises better than I can some criteria by which one could seriously question the validity of the present philosophy behind transmission line development in Southwestern Colorado and the objectivity of the developers of the SDEIS when evaluating impacts of the proposed project.

Sincerely,

Anita Vogelaar

Anita Vogelaar
2205 Ridge Road
Kalamazoo, Michigan 49008

PUBLIC HEARING COMMENT FORM

Rifle-San Juan 345 kV Transmission Line

Name Tom Maxwell Representing Local Opinion and Interests in Montezuma County Date August 7, 1980

Address P.O. Box 16 Cortez, CO 81321

Please provide any comments relative to the potential environmental impacts of the Rifle-San Juan 345 kV transmission line project, or the Supplemental Draft Environmental Impact Statement for this project. Comments may be sent to Mr. William E. Davis, Director, Western Area - Electric, Rural Electrification Administration, Agriculture South Building, Room 3304, Washington, D.C. 20250, within two weeks of this meeting.

In SW Colorado the economy is primarily based on two industries: farming and tourism. While the SDEIS admirably outlines impacts of the proposed line on wildlife and timber, I feel more study should be devoted to impacts on those two industries. What will be the loss of land value and productivity to farmers whose land is crossed? And what will be the impact to scenery, our area's greatest drawing card? And how will that in turn affect tourism? I care about impacted forest creatures, but I also am quite concerned about the economical impacts on industry this line would obviously make. So please include more mention of these.

I would also ask why alternatives to the line as proposed have not been more deeply explored. Why must we only look into the impacts Colo. Ute would have us suffer? I feel alternatives such as underground lines, a smaller line, and merely upgrading WAPA's line should be studied, telling their costs, impacts, and increases in energy flow compared to the →

Signature

line as proposed.

Since impacts on the county are mentioned, I feel more mention should also be made of benefits to the county the line offers. Is the only benefit to Montezuma County to provide enough energy to operate the Shell Project? Or are there other benefits that would outweigh the impacts? If we must have more energy to meet demands, how much would it cost over the next five years etc. purchase that energy from other utilities?

Lastly, I would like to go on record as to my opinion on the line as a whole. I believe it is in the best interest of Colorado Ute, not Coloradans. I believe it is to generate more money rather than to meet electrical needs. I believe the residents Ute has chose to impact with its money making mentality are impacted far more than they are benefitted. And I am opposed to the line as proposed for the sake of our area's industry and aesthetic beauty. Thank you.

Tom Maxwell
signed

PUBLIC HEARING COMMENT FORM

Rifle-San Juan 345 kV Transmission Line

Name	Representing	Date
MRS. AILEEN MAXWELL	CONCERNED CITIZEN	AUGUST 7, 1983

Address

P. O. BOX 16, CORTEZ, COLORADO 81321

Please provide any comments relative to the potential environmental impacts of the Rifle-San Juan 345 kV transmission line project, or the Supplemental Draft Environmental Impact Statement for this project. Comments may be sent to Mr. William E. Davis, Director, Western Area - Electric, Rural Electrification Administration, Agriculture South Building, Room 3304, Washington, D.C. 20250, within two weeks of this meeting.

Gentlemen: Last year the Public Utilities Commission denied the application by Colorado-Ute for this 345 KV transmission line project and I feel there is no more need for it now than at that time. The environmental impact on this locality will be disastrous to our social and economic well being. Our greatest asset is our beautiful scenery which constitutes a great percentage of our economy due to the tourist trade. People come from all over the world to view our beautiful scenery and they certainly will not come to vi these monstrosities that Colorado-Ute plans to construct in our beautiful mountain area. If these lines are constructed in our farmland, then our econo will also suffer as our main economy here comes from tourist trade and farming Why should we be forced to sacrifice our livehood and our God-given heritage s that Calif. and other states can have more power? The only reason Colorado-Ut is working so hard to get this line in is for the almighty dollar--they are BIG BUSINESS and could care less for our locality. Our County Commissioners go along with Colorado-Ute to the extent of granting them a permit to cross our County even before P.U.C. held their meeting to deny it. One of our Commissioners is also on the Empire Electric Board and Empire Electric and Colorado-Ute work hand in hand. Other alternatives should be

(OVE

explored that will not have the social and economic impact on this area that this line will have---such as upgrading the WAPA line. This should give us all the power we will need.

I strongly urge you to consider the impact on our area. I feel we are being used by Colorado-Ute to obtain their own means at our expense.

Sincerely,

Mrs. Aileen Maxwell

Mrs. Aileen Maxwell

150 County Rd 22
Monrovia
Colo
81401

V
J

HUNTER RANCH Jim & Virginia Hunter

To Wm E Davis - Director
Rural Electrification Administration
c/o Dennis Rankin and Staff
14th and Independence Ave S.W.
Washington D.C.
20250

Aug 7, 1983

Re - E.I.S.
345 K.V. line
proposed.

Dear Sirs:

In regard to the proposed Ault - Story 345 - K.V. Transmission line and associated facilities. This proposed line would cause damage to my family and I as follows: A. It splits our ranch properties to make the small parcels difficult to operate for the balance of our lifetime. (B.) We are clos to and near residential areas and this is a dangerous location to - of and huge lines. We are appox. 8 miles from Wells, Colo and approx. 8 miles from Platte, Colo in the path of possible future development. The elderly citizens reside in the area and the residents and property owners of this area are opposed to this line or any line at this location.

(C.) Our home construction for this area has been held up for approx. 1½ years because of the

150 County Rd 22
Montrose Colo
81401

VJh **HUNTER RANCH** Jim & Virginia Hunter

Proposed lines. Our plans have been drawn for sometime and the location of the lines indefinite - This leaves us up in the air and lines in this location would wreck our property. The land also has definite subdivision possibilities due to water, telephone and road accessibility. (2) ... Our land is only a few miles N/W and adjacent to approx. 200,000 acres of B.L.M. and Forestry land. Colorado Ute should explore that area and negotiate with the B.L.M. instead of our small area of small farmers, ranchers and land owners.

Our ranch is located as follows: part of Lot 1 and part of SE¼ of the NE¼ all in Sec. 6 - T 50 N R 11 W N.M.P.M. and S½ S½ SE¼ Sec 31 T 51 N 11 W N M P M.

Enclosing I respectfully submit to you that most of the ranches and landowners of my area feel that the proposed line is not needed and this project for the State of Colorado is not justified!

Sincerely, Jim Hunter
Rancher Montrose County

M AND F INVESTMENT
914 GLENNEYRE ST
LAGUNA BEACH CA 92651 05AM

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WILLIAM DAVIS, DIRECTOR
WESTERN AREA ELECTRIC
REA AGRICULTURE SOUTH BLDG RM 3304
WASHINGTON DC 20250

RE: COLORADO 46 UTE SUPPLEMENTAL DRAFT ENVIRONMENTAL IMPACT STATEMENT.

I AM CONCERNED WITH THE VAGUENESS OF SPECIFIC DETAILS AND INACCURACY (IE FIGURE 4-29) AND ESPECIALLY, THE LACK OF PUBLIC INPUT. YOUR SUPPORT IN THIS IMPORTANT MATTER WILL BE GREATLY APPRECIATED.
KATY S MOSS
914 GLENNEYRE ST
LAGUNA BEACH CA 92651

12144 EST

MGMCOMP

5241 (R 7/82)

TO REPLY BY MAILGRAM MESSAGE, SEE REVERSE SIDE FOR WESTERN UNION'S TOLL - FREE PHONE NUMBERS

PUBLIC HEARING COMMENT FORM

Rifle-San Juan 345 kV Transmission Line

Name: Robert E. Bement | Representing: Myself | Date: 3 Aug 1983

Address: PO Box 534, Manco, Colorado 81328

Please provide any comments relative to the potential environmental impacts of the Rifle-San Juan 345 kV transmission line project, or the Supplemental Draft Environmental Impact Statement for this project. Comments may be sent to Mr. William E. Davis, Director, Western Area - Electric, Rural Electrification Administration, Agriculture South Building, Room 3304, Washington, D.C. 20250, within two weeks of this meeting.

It is obvious that the Supplemental Draft Environmental Impact Statement, June 1983 for the Rifle San Juan 345 kV Transmission Line has been very sloppily done. On figure 4-5 Vegetative Communities and Natural Areas, agricultural lands shown in yellow on the map actually cover only a small portion of the Agricultural Land in the Manco Area.

On page 4-11 Agricultural Lands are defined "include land used for crops, pasture or grazing. In addition, this category includes the woodlands and wastelands owned or rented by agricultural landowners." By this definition the map on Figure 4-5 is grossly in error for the Manco area and I think little credence can be given this document if the work in the Manco area is a sample of the kind of work done for the whole project area.

It would be a grave error to make any decision based on the Environmental Impact Statement until it is corrected and checked for authenticity.

I wonder how much money was spent on this shoddy work.

Robert E. Bement
Signature

PO Box 534
Manco, Colo 81328

PUBLIC HEARING COMMENT FORM

Rifle-San Juan 345 kV Transmission Line

Name Representing Date

Thelma J. Bement Landowner Aug 31st

Address

P.O. Box 524, Mances, Co. 81328

Please provide any comments relative to the potential environmental impacts of the Rifle-San Juan 345 kV transmission line project, or the Supplemental Draft Environmental Impact Statement for this project. Comments may be sent to Mr. William E. Davis, Director, Western Area - Electric, Rural Electrification Administration, Agriculture South Building, Room 3304, Washington, D.C. 20250, within two weeks of this meeting.

Mr. Davis.

Please consider our plight. Now the big arm of the Forest Service has sided with the Cols. Ute Elec. and without regard to future pipelines has decided Alternative B is the best route. I hope you will have time to read at least a portion of the enclosed newspaper articles.

Please help us. You are our last recourse - Our neighbor, Jake Gonzales owns only 12 acres and already has lost a large portion of his land to 2 major pipelines. The towers are to 20 feet from his front door.

Signature

Thelma J. Bement

PUBLIC HEARING COMMENT FORM

Rifle-San Juan 345 kV Transmission Line

Name: Roger Howard | Representing: self | Date: 7/25/83

Address: 730 26½ Rd

Please provide any comments relative to the potential environmental impacts of the Rifle-San Juan 345 kV transmission line project, or the Supplemental Draft Environmental Impact Statement for this project. Comments may be sent to Mr. William E. Davis, Director, Western Area - Electric, Rural Electrification Administration, Agriculture South Building, Room 3304, Washington, D.C. 20250, within two weeks of this meeting.

I would just like to know for sure if the proposed corridor crosses my property Sec 9, as the present power line does? Much of my 40 acres is hilly & I have only 2 proposed building sites. I would encourage the sharing of this line with the existing line.

R. Howard
Signature

LSIA WSA

① Where
② Hamlin

VL INFORMATION 1-800-359-2732 24/7/365

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COMMENTS CONCERNING FIRE TO SAN JUAN TRANSMISSION LINE SITE

STSUDLY OBJECT ALTHNATIVES & SHOW ON IOC 3-45. POWER POLE SPECIALLY IMPACT EXISTING IRVELOPMT FIRES AND IOTENTIAL GROWTH AREAS DOTAWERS OF PRAIRIDOW NEW MEXICO. AIR VISUAL IMPACTS POWER ALSO IF LIKELY. ALTHNATIVE 4, IOC 3-45, IF PIPPERILF.

JAMES IENIOL FLOW

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ROBERT BROWN
1527 YALE ST APT 2
SANTA MONICA CA 90404 06AM

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(1) WAEE
(2) Dennis Rankin

WILLIAM E DAVIS, DIRECTOR
WESTERN AREA -ELECTRIC
14 AND INDEPENDENCE AVE SOUTHWEST
WASHINGTON DC 20250

RURAL ELECTRIFICATION ADMINISTRATION

WE FAVOR ALTERNATIVE B FOR THE RIFLE-SAN JUAN 345-KV TRANSMISSION LINE. THIS ALTERNATIVE MISSES DEVELOPED LAND AND PROPERTY THAT CAN BE DEVELOPED AS FARMINGTON CONTINUES TO GROW NORTH.
ROBERT BROWN, BARBARA BROWN, BETTE-LOU BROWN, AND PETER BROWN

10:59 EST

MGMCOMP

241 (R 7/82)

TO REPLY BY MAILGRAM MESSAGE, SEE REVERSE SIDE FOR WESTERN UNION'S TOLL - FREE PHONE NUMBERS

PUBLIC HEARING COMMENT FORM

Rifle-San Juan 345 kV Transmission Line

Name | Representing | Date

PETER BALLODE | | JULY 28, 1983

Address

27703 CR T.5, DOLORES, CO. 81323

Please provide any comments relative to the potential environmental impacts of the Rifle-San Juan 345 kV transmission line project, or the Supplemental Draft Environmental Impact Statement for this project. Comments may be sent to Mr. William E. Davis, Director Western Area - Electric, Rural Electrification Administration, Agriculture South Building, Room 3304, Washington, D.C. 20250, within two weeks of this meeting.

I AM A LANDOWNER THAT COULD BE ADVERSELY AFFECTED BY EITHER ALIGNMENT A OR B. THEREFORE, I FAVOR ALIGNMENT C — WHICH I UNDERSTAND IS THE SHORTEST AND LEAST EXPENSIVE.

Peter Ballode

Signature

Proposed
Colorado 4 Tc
Transmission Line
Near Hesperus, Colo.

Montoya Sheep and Cattle Co.
1592 Hwy. 170
La Plata, New Mexico 87418

July 22, 1983

Dear Folks:

I'm concerned with the southern part of the transmission line in La Plata County Colorado where the forest land ends. Your plans on the map indicate to me that you would like to enter Montoya Ranch coming south at this point, and we certainly are opposed to this. We have been negotiating a contract for a ski run to be built in the area south of Hwy. 160 and southeast of the Cherry Creek Camp ground. Since this would go all the way to the top of the mountain there is no way a transmission line could be built there.

Recreation in this area is of the utmost importance for the economy of this county, I feel we have a real potential here. Farmington folks tell me because of the overcrowding at Purgatory that it is worth driving the extra miles to Aspen, because they can spend more time skiing instead of waiting in line.

Therefore LaPlata County is losing revenue they need to other resorts in other counties and taking needed revenue and since we are so close to the Montezuma County line we could have a lot of people come down from there.

With unemployment a problem, it is another factor to be considered. I feel we would lose needed tax dollars if you were to permit the transmission line to cross our land, and would be much less damage for it to stay in there existing right of way.

I thank you for your consideration and do hope you will understand our situation and not cross our land.

P: Enclosed are a map of area + of ski run for your information. Thanks

Sincerely,

Stella Montoya

Stella Montoya
Montoya Sheep and Cattle Co., Inc.

PUBLIC HEARING COMMENT FORM

Rifle-San Juan 345 kV Transmission Line

Name | Representing | Date

Elizabeth P. Shaw | private landowner | 8-1-83

Address

Box 628 - 41279 Hyw 184 Marcos, Colorado - 81326

Please provide any comments relative to the potential environmental impacts of the Rifle San Juan 345 kV transmission line project, or the Supplemental Draft Environmental Impact Statement for this project. Comments may be sent to Mr. William E. Davis, Director, Western Area - Electric, Rural Electrification Administration, Agriculture South Building, Room 3304, Washington, D.C. 20250, within two weeks of this meeting.

I am very concerned with the visual impact to the proposed 345 KV Rifle-San Juan Transmission line & hope every consideration will be given in the final selection of the route. The main industry of S.W. Colorado is tourism and the natural beauty of this area is what people remember. Hwy 160 is a main East-West artery and hopefully it won't be destroyed by steel towers. From reading the SDEIS it seems Alternative C would be the lesser of 3 evils

Elizabeth P. Shaw
Signature

United States Department of Agriculture

Soil Conservation Service

P. O. Box 17107
Denver, CO 80217

July 12, 1983

William E. Davis, Director
Western Area-Electric
Rural Electrification Administration
14th & Independence Ave., S.W.
Washington, D.C. 20250

Re: Comments on Supplemental Draft Environmental Impact Statement/Rifle to San Juan 345-KV Transmission Line and Associated Facilities - June, 1983.

Dear Mr. Davis:

My staff has reviewed the above document with particular emphasis on adverse impacts to the soil and water resources that may occur on private lands within the scope of the project.

Our interpretations indicate: 1) that 0.63 acre of prime farmland will be adversely impacted, 2) revegetation and sediment control will be accomplished on disturbed areas, 3) rights-of-ways (ROW) will, insofar as possible, be taken along field boundaries, etc. to avoid conflicts with agricultural land use, and 4) ROW corridors will be established only after consultation with affected landowners and land management agencies. In view of the foregoing, we believe this project will have an insignificant impact on areas of agricultural concern.

I do wish to congratulate you and your staff on the well-written and thorough discussion and impact disclosure of this project. Thank you for the opportunity to review the EIS document and make comments.

Sincerely,

Sheldon G. Boone
State Conservationist

cc: Peter C. Myers, Chief, SCS, Washington D.C.

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

SOUTHWEST REGION
P. O. BOX 1689
FORT WORTH, TEXAS 76101

DATE: July 29, 1983

IN REPLY REFER TO: ASW-43A

SUBJECT: Environmental Impact Statement - Rifle to San Juan 345-kv Transmission Line and Associated Facilities

FROM: Manager, Budget and Planning Branch, ASW-43

TO: George J. Bagnall
Chief, Distribution and Transmission Engineering Branch
Western Area - Electric
Rural Electrification Administration
Washington, D. C. 20250

Southwest Region has reviewed the proposed construction of the 345 kilovolt transmission line between Rifle, Colorado and the San Juan generating station near Farmington, New Mexico. We find that it will have no adverse impact on FAA facilities now installed or planned.

E. B. McCoy

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
650 CAPITOL MALL
SACRAMENTO, CALIFORNIA 95814

REPLY TO
ATTENTION OF

July 28, 1983

SPKED-W

Mr. George J. Bagnall
Chief, Distribution and Transmission
Engineering Branch
Western Area - Electric
Rural Electrification Administration
Washington, D.C. 20250

Dear Mr. Bagnall:

This is in reply to your letter of June 13, 1983 requesting comments on the Supplemental Draft Environmental Impact Statement for Rifle - San Juan 345-KV Transmission Line and Associated Facilities.

We previously reviewed the DEIS dated July 1981 and supplied comments at that time. A copy of our earlier letter is enclosed. Those comments are appropriate to the Supplemental DEIS.

Thank you for the opportunity to provide review comments.

Sincerely,

for George C. Weddell
Chief, Engineering Division

Enclosure

DEPARTMENT OF THE ARMY
SACRAMENTO DISTRICT, CORPS OF ENGINEERS
650 CAPITOL MALL
SACRAMENTO, CALIFORNIA 95814

SPKED-W

11 August 1981

Mr. Frank Bennett, Director
Power Supply Division
Rural Electrification Administration
Washington, DC 20250

Dear Mr. Bennett:

This is in reply to your agency's request for us to review the Draft Environmental Impact Statement for Rifle - San Juan 345-kV Transmission Line and Associated Facilities.

We have reviewed the draft statement and have concluded that the proposed transmission line and associated facilities would not conflict with Corps of Engineers flood control projects and plans or our responsibilities with respect to navigation. Further, the statement adequately describes the considerations for implementing rivers and floodplain crossings to avoid flood damages within the 100-year floodplains. The draft EIS has given consideration to possible impacts to wetlands and has concluded that wetlands would be avoided or spanned. When the wetland mapping is completed and transmission line plans are developed, it is suggested that possible wetlands impacts be reviewed and that coordination of the need for a Department of the Army Section 404 Permits under the Clean Water Act (33 USC 1344) be carried out directly with our Regulatory Office in Grand Junction, Colorado. The contact and address are:

Mr. Rodney Wood
Corps of Engineers
US Courthouse, Room 230
400 Rood Avenue
Grand Junction, CO 81501
(303) 243-1199

We appreciate the opportunity to review the draft statement.

Sincerely,

GEORGE C. WEDDELL
Chief, Engineering Division

RICHARD D. LAMM
Governor

JERIS A. DANIELSON
State Engineer

OFFICE OF THE STATE ENGINEER
DIVISION OF WATER RESOURCES

1313 Sherman Street-Room 818
Denver, Colorado 80203
(303) 866-3581

August 2, 1983

MEMORANDUM

TO: State Clearinghouse

FROM: Hal D. Simpson, Assistant State Engineer

SUBJECT: Rifle to San Juan 345-kV Transmission Line, Supplemental Draft Environmental Impact Statement (DEIS)

This is to acknowledge receipt of your request for review of the above referenced DEIS. We have no objections to the construction of the transmission line provided that existing water rights are not injured by construction of towers in the vicinity of existing streams or diversion structures.

HDS/JRH:pka

PLANNING DIVISION
(STATE CLEARINGHOUSE)
REVIEW CERTIFICATION FORM

MIS 6

STATE PLANNING DIVISION
DEPT. OF FINANCE & ADMINISTRATION
505 DON GASPAR
SANTA FE, NEW MEXICO 87503
(505) 827-2073

TO: Dennis Rankin
U.S.D.A. Rural Electrification Admin
14th & Independence Ave. SW.
Washington, D.C. 20250

DATE: 8/26/83

SUBJECT: ☐ PRELIMINARY REVIEW ☑ FINAL REVIEW ☐ STATE/AREA PLAN ☐ ENVIRONMENTAL IMPACT STATEMENT

PROJECT TITLE: Ryfle to San Juan 345 KV Transmission Line

APPLICANT: _____

SAI NUMBER: NM 83 06 28-051 FEDERAL CATALOG NUMBER: 10.850

FEDERAL AGENCY: U.S.D.A. Rural Electrification Administration

PROPOSED FUNDING (PER 424 FORM)	AMOUNT
FEDERAL	$_____
APPLICANT	_____
STATE	_____
LOCAL	_____
OTHER	_____
TOTAL	_____

FOR FINAL APPLICATION ONLY:

REVIEW RESULTS:

✓ The application is supported.
_____ The application is not in conflict with State, Areawide or Local plans.
_____ Comments are attached for submission with this application.

David F. Martinez
LEAD AGENCY REVIEW COORDINATOR

Economic Analysis Division
AGENCY

TO THE APPLICANT:

You may now submit your application package, this form and all review comments to the Federal or State Agency(s) from whom action is being requeste .

Please notify the Planning Division (Clearinghouse) of any changes in this project. Refer to the SAI number on ALL correspondence pertaining to this project.

Cecilia Perea
STATE CLEARINGHOUSE

Aug 26, 1983
DATE

Peter C. Perea
STATE PLANNING DIVISION DIRECTOR

8/26/83
DATE

Approved July, 1979
Secretary, DFA

White: to Applicant.
Green: for Federal Agency.
Canary: SPD Copy.
Pink: Lead Agency.
Goldenrod: Federal Funds Tracking

NEW MEXICO DEPARTMENT OF AGRICULTURE

ADMINISTRATIVE SERVICES
Box 3189/Las Cruces, New Mexico 88003
Telephone (505) 646-3007

July 15, 1983

Mr. David F. Martinez
Department of Finance and Administration
421 State Capitol
Santa Fe, New Mexico 87503

Dear Mr. Martinez:

Enclosed are the MIS-4 forms for the Supplimental Draft Environmental Impact Statement (DEIS) Rifle to San Juan 345-KV Transmission Line and the DEIS Taos-San Luis Valley 345-KV Transmission Line.

After careful review we find little impact to the agricultural resources within New Mexico that will not be mitigated.

Thank you for this opportunity to comment.

Sincerely,

Charles H. Greene
Division Director

CHG/ms

APPENDIX B
Electrical Effects Bibliography

BIBLIOGRAPHY

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APPENDIX C
Sample ROW Agreements

Parcel No. _____

EASEMENT

EASEMENT made this _____ day of _____, 19___, between _____

_____

of the County of _____, State of Colorado (hereinafter called "Grantor", whether one or more) and Colorado-Ute Electric Association, Inc., a Colorado corporation, having a principal office at 1845 S. Townsend Avenue, City of Montrose, County of Montrose, State of Colorado (hereinafter called "Colorado-Ute").

1. In consideration of the sum of _____ dollars paid by Colorado-Ute to Grantor, the receipt of which is hereby acknowledged, and of the further agreements and considerations stated herein, Grantor hereby grants, bargains, sells, and conveys to Colorado-Ute and its successors and assigns forever, an easement and right-of-way for the construction, reconstruction, replacement, removal, upgrade, maintenance and operation of an electric transmission line consisting of poles or structures and appurtenances thereto, supporting one or more electric circuits, together with the right to alter, repair or remove the same in whole or in part at any time, which right-of-way shall extend _____ feet on each side of the center line of the described real property as shown on the attached Exhibit A (plus such additional area as is necessary to properly guy angle and deadend structures, if any, located upon said right-of-way), situated in _____ County, Colorado, and described as follows:

2. Grantor further grants to Colorado-Ute and its successors and assigns the right of ingress to and egress from the above-described right-of-way by means of existing roads and lanes, if there is such, on Grantor's adjoining lands, or by such route(s) as shall be agreed upon by Grantor and Colorado-Ute, as shown on the attached Exhibit B. Grantor may relocate any such road(s), provided that access to the right-of-way, satisfactory to Colorado-Ute, is maintained.

3. Colorado-Ute shall have the right to trim and to cut down and clear away any and all trees, brush, and shrubbery either on or off the right-of-way which now or hereafter in the opinion of Colorado-Ute may interfere with the safe operation and maintenance of the line or other equipment. Any and all trees cut and removed hereunder which are valuable for timber or wood shall remain the property of Grantor. All tops, lops, brush, and refuse wood shall be burned, chipped, scattered or removed by Colorado-Ute.

4. Colorado-Ute shall have the right to install, maintain, and use gates in all fences which now or hereafter cross the right-of-way.

5. Grantor shall have the right to use the right-of-way for any purposes which will not, by the written determination of Colorado-Ute or its assigns, constitute a hazard to life or limb, or interfere with Colorado-Ute's full utilization of the rights hereby granted. By way of example (and not as a limitation), unless written permission is granted, Grantor shall not erect or construct any building or other structure (including mobile homes or travel trailers), or store flammable or explosive materials, or conduct fueling operations, or construct, install or operate above ground mechanical irrigation facilities which could make an electrical contact with the conductors, or drill wells or conduct mining operations, or appreciably alter the grade of the ground surface, within the right-of-way. Colorado-Ute shall not unreasonably withhold such permission.

6. Grantor agrees that all poles or towers, wires, and other facilities installed on the right-of-way at Colorado-Ute's expense shall remain the property of Colorado-Ute, removable at the option of Colorado-Ute, or its successors and assigns, and further agrees to the joint use or occupancy of the line by any other person, association, or corporation for electrification or telephone purposes.

7. Colorado-Ute shall use due care and diligence in the exercise of the rights and privileges granted herein, to avoid damage to crops, livestock, fences, irrigation systems or other improvements or personal property within the right-of-way, including any access road(s). If any such damage occurs, and is caused by Colorado-Ute during the exercise of such rights and privileges, Colorado-Ute will compensate, or cause compensation to Grantor, or will repair such damage.

8. In the event the transmission line is removed and the right-of-way is permanently abandoned, this easement shall be terminated by a quit claim deed from Colorado-Ute, or its successors and assigns, to Grantor(s), their heirs or assigns.

9. Grantor(s) warrant that they are the owners of the above-described lands and that the said lands are free and clear of all liens and encumbrances, except those held by the following persons:

_____

_____

10. This easement agreement shall be binding upon the heirs, successors and assigns of Grantor and the successors and assigns of Colorado-Ute.

IN WITNESS WHEREOF, the undersigned Grantor(s) have set their hands this _____ day of _____, 19 ___.

(Please type or print name below signature)

_____ _____

_____ _____

_____ _____

(Note: Use acknowledgement Form A for individuals, husband and wife, partnerships; use Form B for corporations)

FORM A

ACKNOWLEDGEMENT

STATE OF COLORADO)
ss.
COUNTY OF)

The foregoing instrument was acknowledged before me this _____ day of _____, 19__, by _____.

WITNESS my hand and official seal.
My commission expires _____.

_____
Notary Public

_____
Address

FORM B

CORPORATE ACKNOWLEDGEMENT

STATE OF COLORADO)
ss.
COUNTY OF)

The foregoing instrument was acknowledged before me this _____ day of _____, 19__, by _____, President, and _____, Secretary, of _____.

WITNESS my hand and official seal.
My commission expires _____.

_____
Notary Public

_____
Address

LC 132T
(Rev 6-83)

Contract No.:

UNITED STATES OF AMERICA
DEPARTMENT OF ENERGY
WESTERN AREA POWER ADMINISTRATION

TRANSMISSION LINE

CONTRACT AND GRANT OF EASEMENT

THIS AGREEMENT made as of the day of , 19 , between

(GRANTOR), whether one or more, and THE UNITED STATES OF AMERICA, Department of Energy, Western Area Power Administration, (UNITED STATES), represented by the officer executing this agreement, pursuant to the Reclamation Act, Act of June 17, 1902, 32 Stat. 388, and acts amendatory thereof and supplementary thereto, and the Department of Energy Organization Act, Act of August 4, 1977, 91 Stat. 565.

WITNESSETH:

That the parties hereto covenant and agree as follows:

1. The GRANTOR, for and in consideration of the sum of dollars ($) and the provisions contained in this agreement, does hereby grant and convey to the UNITED STATES OF AMERICA, and its assigns, a perpetual easement and right-of-way for electric power and transmission purposes in, upon, over and under the land described in Exhibit A, attached hereto and made a part hereof.

2. The grant of easement shall include the unimpeded right to enter the above-described easement area and to locate, construct, reconstruct, operate, maintain, repair, rebuild, upgrade, remove, permit the attachment of wires of others, and patrol a transmission line consisting of one line of poles or structures and appurtenances thereto, supporting conductors of one or more electric circuits of any voltage together with the present and future right to clear the easement area and to keep the same clear of brush, timber, inflammable or unauthorized structures or any other materials deemed by the UNITED STATES to be fire hazards. Growing crops shall not be considered to be fire hazards. Rights granted herein shall include, where necessary, trimming or cutting trees or branches over or on or extending within the easement area. All materials so removed shall become the property of the UNITED STATES and shall be disposed of by the UNITED STATES in any manner it deems suitable.

3. The rights granted herein are subject to the easements of record or in use as well as outstanding mineral rights in third parties.

4. The UNITED STATES shall exercise due care and diligence in the exercise of rights and privileges granted herein. The UNITED STATES agrees to repair or compensate the GRANTOR for damage to agricultural crops, fences, irrigation systems, drainage systems or other improvements within the transmission line right-of-way that occurs as a result of and during the construction, reconstruction, upgrading, operation and maintenance, or removal of the transmission lines. Payment for such damage shall be made on the basis of an approved appraisal furnished by the UNITED STATES.

5. The GRANTOR covenants to and with the UNITED STATES that the GRANTOR is lawfully seized and possessed of the land aforesaid; that the GRANTOR has good and lawful right and power to sell and convey the same; that the same is free and clear of encumbrances, except as herein provided, or as may be acceptable to the UNITED STATES; and the GRANTOR will forever warrant and defend the title to said easement and the quiet possession thereof against the lawful claims and demands of all persons whomsoever.

6. The GRANTOR shall, at the GRANTOR's cost, procure and have recorded all assurances of title and affidavits which the GRANTOR may be advised by the UNITED STATES are necessary and proper to show in the GRANTOR complete fee simple unencumbered title to said property, subject only to interests, liens, or encumbrances expressly provided herein. Abstracts or certificates of title, or title insurance will be procured by the UNITED STATES at its own expense unless otherwise provided in this contract. The expense of recording this contract and grant shall be paid by the UNITED STATES.

The UNITED STATES shall reimburse the GRANTOR in an amount deemed by the UNITED STATES to be fair and reasonable for the following expenses incurred by the GRANTOR:

(a) Recording fees, transfer taxes, and similar expenses incidental to conveying the easement described herein to the UNITED STATES.

(b) Penalty cost for prepayment of any pre-existing recorded mortgage entered into in good faith encumbering said real property.

The GRANTOR agrees to furnish the UNITED STATES evidence that these items of expenses have been billed to and paid by him, and further agrees that the UNITED STATES alone shall determine the fairness and reasonableness of the expenses to be paid.

7. In the event that liens or encumbrances other than those expressly provided herein, do exist, the UNITED STATES may, at its option, remove any and all such outstanding liens and encumbrances by reserving from the purchase price herein set forth the necessary amount and discharge same with the money so reserved, but this provision shall not be construed to authorize the incurrence of any lien or encumbrance as against this contract, nor an assumption of any lien or encumbrance by the UNITED STATES.

8. Should the UNITED STATES initiate court action to acquire good title from the GRANTOR to the above-described easement, GRANTOR agrees that this instrument shall be evidence of fair market value for purposes of establishing value of the easement acquired by the UNITED STATES.

9. The GRANTOR shall have the right to cultivate, graze, use, occupy, and have access to and across the easement area described herein for any purposes which will not constitute a hazard to life or limb or interfere with any of the rights and privileges herein granted to the UNITED STATES. The UNITED STATES will notify the GRANTOR in writing of any activity of the GRANTOR'S within the easement area that constitutes a hazard to life or limb, or interferes with any of the rights and privileges herein granted to the UNITED STATES.

The following activities are prohibited within the easement area unless written permission is granted from

(a) GRANTOR shall not erect any structures; by way of example, structures shall include, but are not limited to buildings, mobile homes, signs, storage tanks, septic systems, swimming pools, tennis courts, or similar facilities.

(b) GRANTOR shall not drill wells or conduct mining operations.

(c) GRANTOR shall not construct, install or operate above ground mechanical irrigation facilities which constitute a safety hazard.

(d) GRANTOR shall not appreciably change the character of existing topography, normal farming practices excluded.

(e) GRANTOR shall not grant permission to the public for the use of the easement area except as herein provided.

The above limitations, however, do not preclude the right to construct roads for private or public use across (but not longitudinally along) said transmission line easement area(s) so long as said roads are constructed in accordance with all applicable safety codes and are a minimum of 20 feet from transmission line structures and appurtances thereto.

The UNITED STATES shall not unreasonably withhold permission, and it shall be the intention of the UNITED STATES to allow the GRANTOR a reasonable right to use and have access across the easement area when and where such use shall not interfere with the rights of the UNITED STATES as provided herein. If, however, GRANTOR proceeds without permission to conduct any of the prohibited activities named in this article or takes any action that constitutes a hazard to life or limb or interferes with any of the rights and privileges herein granted to the UNITED STATES, the UNITED STATES shall have the right, upon discovery of such activity, to take any action deemed appropriate to prevent such activity including the right to remove if necessary.

10. In the event of permanent abandonment of any or all rights to the easement granted herein to the UNITED STATES, said abandonment shall be effected by the execution and recording of a quitclaim deed by the UNITED STATES in favor of the GRANTOR, and the easement granted herein, or any portions therein abandoned, shall terminate. The UNITED STATES, or its assigns, shall have the right to remove, within a reasonable time, all structures, facilities and equipment, placed on the easement by or on behalf of the UNITED STATES, from such abandoned area whether before or after execution of the quitclaim deed.

11. The provisions hereof shall inure to the benefit of and be binding upon the heirs, executors, personal representatives, administrators, successors, and assigns of the GRANTOR, and the assigns of the UNITED STATES.

12. No member of or Delegate to Congress or resident commissioner shall be admitted to any share or part of this contract or to any benefits that may arise herefrom; but this restriction shall not be construed to extend to this agreement if made with a corporation or company for its general benefit.

IN WITNESS WHEREOF, the parties hereto have signed their names, the day and year first above written.

GRANTOR

THE UNITED STATES OF AMERICA

_____

By _____
(Signature)

_____
(Signature)

_____
(Title)

Tract No.

APPENDIX D
USFWS Correspondence

United States Department of the Interior
FISH AND WILDLIFE SERVICE
ENDANGERED SPECIES OFFICE
1406 FEDERAL BUILDING
125 SOUTH STATE STREET
SALT LAKE CITY, UTAH 84138-1197

IN REPLY REFER TO:

29 July 1983

George J. Bagnall
Distribution and Transmission Engineering Branch
Western Area-Electric
Rural Electrification Administration
Washington, D.C. 20250

Dear Mr. Bagnall:

We have reviewed your letter of 29 June 1983 with its attached biological assessment and supplement for Colorado-Ute Electric Association's proposed 345 kV transmission line between Rifle, Colorado and the San Juan Generating Station in northwestern New Mexico. We concur with the biological assessment.

The proposed Rifle San Juan transmission line, as discribed in your biological assessment and the Rifle to San Juan Supplemental - Draft Environmental Impact Statement of June 1983 is not likely to affect any species currently listed as threatened or endangered by the FWS including the following: black-footed ferret (Mustela nigripes), bald eagle (Haliaeetus leucocephalus), peregrine falcon (Falco peregrinus), Colorado squawfish (Ptychocheilus lucius), spineless hedgehog cactus (Echinocereus triglochidiatus var inermis), Uinta Basin hookless cactus (Sclerocactus glaucus), Mesa-Verde Cactus (Sclerocactus mesae-verdae), and Knowltons cactus (Pediocactus knowltonii).

We appreciate your concern and diligence in conserving endangered species.

Sincerely,

Fred L. Bolwahnn
Field Supervisor

United States Department of the Interior
FISH AND WILDLIFE SERVICE
ENDANGERED SPECIES OFFICE
1406 Federal Building
125 South State Street
Salt Lake City, Utah 84138

IN REPLY REFER TO

25 January 1983

Donald L. Zimmerman
Cheif - Western Area Electric
Rural Electrification Administration
Washington, D. C. 20250

Dear Mr. Zimmerman:

We have reviewed your letter of 17 December 1982 concerning changes in Colorado-Ute Electric Associations' proposed 345 kV transmission line between Rifle, Colorado and the San Juan Generating plant in north west New Mexico. It appears that listed endangered and threatened species, may occur in the area of influence of this action.

To comply with Section 7(c) of the Endangered Species Act of 1973, as amended, Federal agencies or their designees are required to obtain from the Fish and Wildlife Service (FWS) information concerning any species, listed or proposed to be listed, which may be present in the area of a proposed construction project. Therefore, we are furnishing you the following list of species which may be present in the concerned area:

Uinta Basin hookless cactus	Sclerocactus glaucus
Mesa-Verde cactus	Sclerocactus mesae-verdae
spineless hedgehog cactus	Echinocereus triglochidiatus var. inermis
peregrine falcon	Falco peregrinus
bald eagle	Haliaeetus leucocephalus
Colorado squawfish	Ptychocheilus lucius
black-footed ferret	Mustela nigripes

Section 7(c) also requires the Federal agency proposing a major Federal action significantly affecting the quality of the human environment to conduct and submit to the FWS a biological assessment to determine the effects of the proposal on listed and proposed species. The biological assessment shall be completed within 180 days after the date on which initiated or a time mutually agreed upon between the agency and the FWS. Before physical modification/alternation of a major Federal action is begun the assessment must be completed. If the biological assessment is not begun within 90 days, this list should be verified with us prior to initiation of the assessment. We do not feel that we can adequately assess the affects of the proposed action on listed and proposed species or critical habitat and proposed critical habitat without a complete assessment. When conducting a biological assessment, the following shall be done at a minimum:

1. conduct a scientifically sound on-site inspection of the area affected by the action, which must, unless otherwise directed by the FWS, include a detailed survey of the area to determine if listed or proposed species are present or occur seasonally and whether suitable habitat exists within the area for either expanding the existing population or potential reintroduction of populations;

2. interview recognized experts on the species at issue, including those within the Fish and Wildlife Service, state conservation agencies, universities, and others who may have data not yet found in scientific literature;

3. review literature and other scientific data to determine the species' distribution, habitat needs, and other biological requirements;

4. review and analyze the affects of the action on the species, in terms of individuals and populations, including consideration of the cumulative effects of the action on the species and habitat;

5. analyze alternative actions that may provide conservation measures;

6. conduct any studies necessary to fulfill the requirements of (1) through (5) above;

7. review any other relevant information.

The FWS can enter into formal Section 7 consultation only with another Federal agency or its designee. State, county or any other governmental or private organizations can participate in the consultation process, help prepare information such as the biological assessment, participate in meetings, etc.

After the relevant Federal agency has reviewed the assessment, it is that agency's responsibility to determine if the proposed action "may affect" any of the listed species or critical habitats. The agency should also determine if the action is likely to jeopardize the continued existence of proposed species or result in the destruction or an adverse modification of any critical habitat proposed for such species. If the determination is "may affect" for listed species the agency must request in writing formal consultation from the Field Supervisor, Endangered Species Office, U.S. Fish and Wildlife Service at the address given above. In addition, if the agency determines that the proposed action is likely to jeopardize the continued existence of proposed species or result in the destruction or adverse modification of proposed critical habitat, it must confer with the FWS. At this time the agency should provide this office a copy of the biological assessment and any other relevant information that assisted it in reaching its conclusion.

Your attention is also directed to Section 7(d) of the Endangered Species Act, as amended, which underscores the requirement that the Federal agency or the applicant shall not make any irreversible or irretrievable commitment of resources during the consultation period which, in effect, would deny the formulation or implementation of reasonable and prudent alternatives regarding their actions on any endangered or threatened species.

We are prepared to assist you whenever you have questions which we may be able to answer. If we can be of further assistance, please advise us.

The FWS representative who will provide you with technical assistance is Larry England, (FTS) 588-4430, of this office.

Sincerely,

Fred L. Bolwahnn
Field Supervisor

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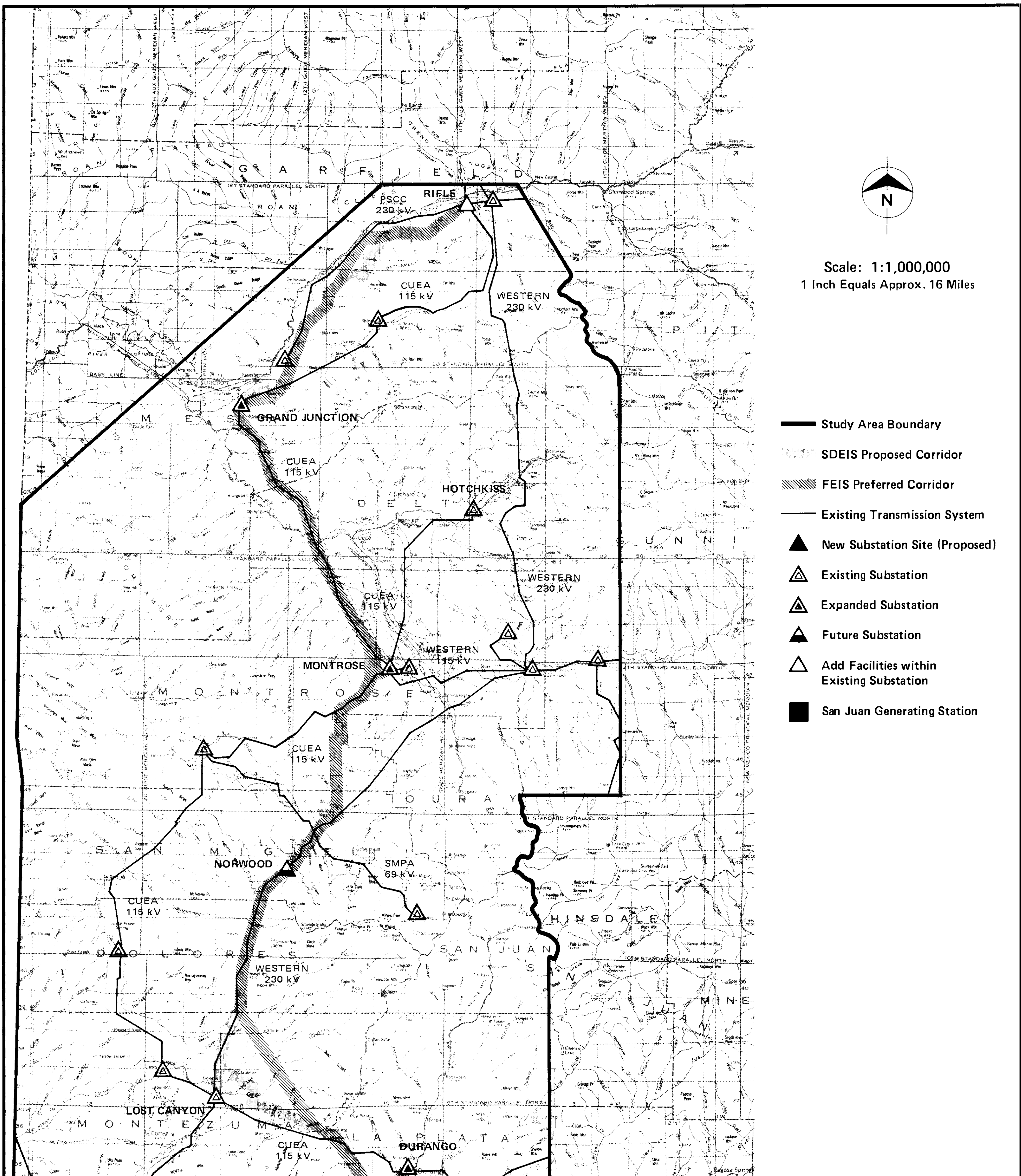

Burns & McDonnell
ENGINEERS - ARCHITECTS - CONSULTANTS

Figure 1-1
PROPOSED PROJECT
AND EXISTING FACILITIES