#### BEFORE THE ENERGY FACILITY SITING COUNCIL

#### OF THE STATE OF OREGON

In the Matter of the Application )
by PACIFIC POWER & LIGHT COMPANY ) FINAL ORDER AND
for a Site Certificate. ) SITE CERTIFICATE

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# General Findings of Fact

## A. Procedural History and Record

- 1. This application was filed by Pacific Power & Light
  Company on October 31, 1981. Notice of the receipt of an application for a site certificate for a 500 kV transmission line was published in the December 1, 1981 Secretary of State's Bulletin and in the news media. By its order on October 8, 1981, EFSC appointed Frank Ostrander, Assistant Attorney General, and
  Dr. Peter Paquet of the Oregon Department of Energy Siting and Regulation staff as co-presiding officers to conduct the hearing required by ORS 469.370 and to take all other necessary actions consistent with EFSC's statutory authority to develop as full and complete a record as possible. On December 10, 1981, notice of the contested case hearing was distributed. (EFSC Exhibit No. 6)
- 2. EFSC appointed the County Commissions of Lane, Douglas, and Jackson Counties and the Mayor and City Council of the City of Eugene as the advisory board required by ORS 469.480. On December 14, 1981, the Presiding Officers sent copies of the application and the Siting Council's relevant standards to the Department of Transportation, the State Health Division, the Department of Land Conservation and Development, the Economic 1 FINAL ORDER AND SITE CERTIFICATE

Development Department, the Department of Environmental Quality, the State Forestry Department, the State Geologist, the Public Utility Commissioner, the City of Eugene, Jackson County, Douglas County, Lane County, the City of Medford, the State Parks Administrator, the Department of Water Resources, the Department of Fish and Wildlife, and the Water Policy Review Board. Responses from these various agencies and local governments were received and are incorporated in the record as appropriate. (EFSC Exhibit No. 7) No adverse comments relevant to any EFSC standard or statutory requirement were received from any of these agencies.

On December 22, 1981, the first prehearing conference was held at the Department of Justice offices at 520 S.W. Yamhill Street in Portland, Oregon. On January 20, 1982, a second prehearing conference was held at the same location. contested case hearing itself began on January 26, 1982 at the Lane County Community College. Following a full day of testimony the hearing was continued until March 3, 1982 in Medford, Oregon. Prior to the March 3, 1982 continuation of the contested case hearing, an informal prehearing conference was held at the Bonneville Power Administration Dittmar Facility for the purpose of providing a briefing to all parties on the operation of the transmission grid in the Northwest. On March 3, 1982, the contested case hearing continued with a second full day of testimony. Following the March 3 hearing, the record on several of the Council's standards was closed. The contested case 2 - FINAL ORDER AND SITE CERTIFICATE

hearing was continued until June of 1982 in order to allow completion and distribution of a Draft Environmental Impact Statement required under the National Environmental Policy Act (NEPA) for permits necessary to cross U.S. lands under the jurisdiction of the Bureau of Land Management. Additional prehearing conferences were held on April 7, 1982 and May 20, 1982 in Medford. On June 29, 1982 the contested case hearing resumed. Three full days of testimony were presented. The contested case hearing was closed at approximately 4 p.m. on July 1, 1982. proposed order was served on the parties by the Presiding Officers on July 16, 1982. Exceptions were received by August 6, 1982 from Charles Warren, et al., the City of Eugene, Jackson County, and PP&L. This final order reflects accommodation of all exeptions filed. Any exception not reflected in this final order is rejected by EFSC.

4. Opportunities for limited appearance statements as provided by OAR 345-15-021 were set by the Presiding Officers on several occasions. Limited appearance statements were received on January 26, 1982 in Lane County, on March 3, 1982 in Medford, on June 15, 1982 in Medford, on June 16, 1982 in Roseburg, on June 17, 1982 in Eugene, and finally on June 28, 1982 in Medford. Many persons took the opportunity to appear and make statements to the Council. Many persons also addressed written comments to the Council through the Presiding Officers. A verbatim transcript of limited appearance statements has been provided to the Council, as have copies of written limited appearance 3 - FINAL ORDER AND SITE CERTIFICATE

statements.

The record in this proceeding consists of EFSC's notices and orders, the transcripts of the prehearing conferences and contested case hearing proceedings, written motions by the parties and the Presiding Officers' orders relating thereto, and the exhibits presented at the contested case hearings which are identified on the first pages of each of the contested case transcripts. Appendix 1, attached hereto and made a part of this order, contains a listing of the exhibits and transcripts. were approximately 70 exhibits admitted into evidence at the hearing. Only three exhibits which were offered were excluded by the Presiding Officers. First, Intervenor Gilkey attempted at a prehearing conference to submit into evidence proposed alternate routings. (See Gilkey Exhibit No. 2) The Presiding Officers rejected this exhibit on the basis that it related to alternatives or a proposed alternative not incorporated in the Council's rule setting the alternatives to be studied as part of this proceeding. See OAR 345-80-052. Pacific Power & Light Company proposed Exhibit No. 38 was not allowed into evidence during the June 30 hearing in Medford on the basis that under cross-examination by the attorney for Intervenor Ginger Rogers, that the chief witness for Pacific Power & Light Company admitted he himself did not have the expert qualifications to testify as to many of the land use planning opinions set forth in the document. Finally, PP&L moved to introduce the complete record of a land use consistency hearing on the proposed line held by 4 - FINAL ORDER AND SITE CERTIFICATE

Jackson County. This document was not produced at the hearing or marked for identification. Other parties objected to introduction of the Jackson County hearing record. The Presiding Officers ruled that the material contained in the Jackson County record would be irrelevant to the EFSC proceeding and would unduly expand the EFSC evidentiary record and should be excluded pursuant to OAR 137-03-050(2). The document was also excluded on the basis that the many statements of those testifying before the Jackson County Commissioners at the Jackson County hearing were not taken under oath and were not subject to cross-examination. Moreover, while it could override the Jackson County land use determination pursuant to OAR 345-80-065(3), EFSC is not a reviewing forum for what occurred within the County's proceeding. A few documents were admitted into the record over the objection of one or more parties. The basis for admission of any document subject to an objection may be found in the transcripts.

- 6. Many persons intervened in this proceeding. In addition to the applicant, PP&L, the parties in this proceeding included:
- (1) Robert Havstad of Save Our Rogue Environment, c/o Jack Thomas of Eagle Point, Oregon. (Admitted January 8, 1982.)
- (2) Jackson County, represented by Mark A. Wehrly, Assistant County Counsel. (Admitted January 8, 1982.)
- (3) James Lake of Eagle Point, Oregon. (Admitted January 22, 1982.)
- (4) Robert Gilkey of Rogue River, Oregon. (Admitted March 1, 1982.)
- (5) Robert M. Storey of Rogue River, Oregon. (Admitted May 19, 1982.)

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- (6) The City of Medford, represented by William J. Scheiderich, Assistant City Attorney. (Admitted December 10, 1981.)
- (7) The Oregon Public Utility Commissioner, represented by Thomas E. Twist, Assistant Attorney General. (Admitted December 24, 1981.)
- (8) Chris Attneave of Eugene, Oregon. (Admitted January 22, 1982.)
- (9) Murphy Clark and Julene Clark, represented by E.R. Bashaw, Attorney at Law of Medford, Oregon. (Admitted April 23, 1982.)
- (10) James L. Scheffel, represented by E.R. Bashaw, Attorney at Law of Medford, Oregon. (Admitted March 30, 1982.)
- (11) Ginger Rogers, represented by John W. Eads, Jr., Attorney at Law of Medford, Oregon. (Admitted January 22, 1982.)
- (12) City of Eugene, represented by Johnson, Harrang & Swanson, City Attorneys. (Admitted June 22, 1982.)
- (13) Mr. and Mrs. Charles E. Warren, Herbert Robbins, Michael Strooband, Dan Holland, Mr. and Mrs. John Hirons, Dr. and Mrs. Charles Williams, Mr. and Mrs. Wayne Webber, Dr. and Mrs. James Murdock, Marvin Wines, Mr. and Mrs. John Horsefall, Dr. and Mrs. John M. Egge, Mr. and Mrs. Larry Ebert, and Mr. and Mrs. Gene Hand, individuals; Lane County Audubon Society, and the South Hills Neighborhoold Association, represented by Bruce H. Anderson of Hutchinson, Harrell, Cox, Teising and Anderson, P.C., Attorneys at Law of Eugene, Oregon. (Admitted June 22, 1982.)
- (14) Mrs. Ann Todd of White City, Oregon. (Admitted June 29, 1982.)
- (15) Mr. Roy Hugie (consolidated with SORE). (Admitted June 29, 1982.)
- B. <u>Description of the Proposed Facility and Related or</u> Supporting Facilities.
- 1. PP&L proposes to construct a 500 kV transmission line between Spencer Switching Station, near Eugene, and Meridian Substation, near Medford. The proposed PP&L facility would be approximately 135 miles long. For much of its length, the proposed PP&L facility would follow an existing 230 kV transmission 6 FINAL ORDER AND SITE CERTIFICATE

line corridor between Eugene and Medford. There are, however, several alternative design and routing options which were studied as part of this proceeding pursuant to the Council's alternatives rule, OAR 345-80-052. For a detailed description of the various alternatives see the Draft Environmental Impact Statement. (EFSC Exhibit No. 1, pages 1-4 through 1-34)

2. As set forth in EFSC Exhibit 1, the following is the original summary description of the proposed PP&L facility, the proposed BPA facility, and the alternatives and options studied for this proceeding:

"The preferred alternative would consist of 146.8 miles of 500 kV transmission line between Lane and Meridian Substations. The precise configuration of the proposed line, in terms of structure type, right-of-way requirements and other design factors, varies considerably along the route. Most of the line would be carried on single circuit steel lattice towers, although double circuit lattice towers would be used for some segments. Existing lower voltage lines would be replaced along 98.9 miles or two-thirds of the route, 7.5 miles would be parallel construction, and 40.4 miles of new corridor would be developed. Circuit breakers and other equipment would be added at the existing Lane, Dixonville and Meridian Substations, but no new substations would be needed to accommodate the proposed line.

"BPA would construct 11.5 miles of line within or parallel to its existing corridor from Lane Substation to Spencer Switching Station in the Eugene area. Pacific's portion of the preferred alternative would consist primarily of replacing 94.9 miles of an existing 230 kV line from Spencer to Ramsey Canyon, interspersed with new corridor segments totalling 13.4 miles located near Canyonville, Green Mountain, and Evans Creek. The remaining 27 miles from Ramsey Canyon to Meridian Substation would be new corridor along the northern and eastern fringes of the Medford Basin.

\* \* \* \*

"Alternatives 2 and 3 involve different design 7 - FINAL ORDER AND SITE CERTIFICATE

configurations. Both alternatives would follow the same alignment as the preferred alternative from Lane Substation to Meridian Substation, and both would retain the same division of ownership and construction responsibility between Pacific and BPA. Alternative 2 would involve construction of a parallel 500 kV circuit for 94.9 miles along the east side of Pacific's existing corridor from Spencer Switching Station to Ramsey Canyon; the parallel mileage corresponds to the replacement portions of the preferred alternative, leaving these two alternatives identical in the realignment and new corridor segments. Along the parallel segments, the existing corridor would have to be widened by 125 feet in some areas and 137.5 feet in others.

"The distinguishing feature of Alternative 3 would be the use of double circuit steel lattice towers for the entire route from Lane to Meridian. These towers would be capable of supporting two 3-phase sets of conductors, and are larger and more costly than single circuit towers. Only one circuit would be strung initially, allowing for a second 500 kV line to be added in the future with no new right-of-way. The double circuit alternative would duplicate the preferred alternative in that it would be constructed primarily through replacement of an existing line. Consequently, the right-of-way and access road requirements would be identical, although Alternative 2 [sic "3"] would have a higher cost.

"Thirteen options, representing substitute designs and routings for portions of the Eugene-Medford alternatives, have also been identified and evaluated in this EIS. Options A, B, and C would involve different alignments and configurations for the northern portion of the line, and generally reflect means of reducing the effect on urban and suburban development near Eugene. These options range from 2 miles to 14.2 miles in length, and would have varying effects on total project length, cost, and right-of-way requirements. Option D would be a 5.1-mile reroute away from the visually sensitive North Umpqua Highway north of Dixonville, and is very similar in length and cost to the corresponding section of the preferred alternative.

"Eight of the remaining options would provide for use of portions of the existing corridor between Canyonville and Meridian Substation and would thereby avoid the increased environmental impacts associated with opening a new transmission corridor. Options E, F, and G would consist of existing corridor substitutes for the combined 13.4 miles of new alignment near Canyonville, Green Mountain, and Evans Creek. These options would be longer and more expensive than the corresponding portions of the preferred alternative, but would require less new right-of-way and access road construction.

"Options H and L, the Medford Basin west routes, would combine 10.9 miles of new corridor with 19.5 miles of existing corridor to provide an alternate path to Meridian Substation. Option H would involve building only one line at present while not acquiring easements for future transmission lines in this corridor. L would involve acquiring an easement for two lines from West Fork Evans Creek to the junction with the existing line near Lyman Mountain and constructing a double circuit line to maximize future use of the existing corridor through White City. Options I and M also provide an alternative to the preferred route through the Medford These options would follow existing corridors for their entire length and would pass through Sams Valley and White City. Option I would involve building only one line, while Option K would involve constructing a double circuit line and acquiring additional rightsof-way now to fully utilize corridors in the future. All four [sic "three"] of these options would require less new right-of-way than the preferred alternative, although Options L and M would be substantially more expensive. Option K also considers long-term transmission needs as it would involve the acquisition of additional right-of-way now along the east (agency preferred) route to accommodate a future 500 kV transmission line. Option J represents an underground crossing of the Roque River near Medford along either the proposed or the existing corridor. It would reduce the project's right-of-way and access road requirements somewhat, but would add several million dollars to total project cost." (EFSC Exhibit 1, pp 5-1 through 5-3)

II

# Findings of Fact and Conclusions of Law Relating to the BPA Portions of the Facility Findings of Fact

1. As described above in General Finding of Fact I, the Bonneville Power Administration (BPA) will construct a connecting transmission line from Spencer Switching Station to either Lane

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or Alvey Substations. (EFSC Exhibit 1, pp S-2-4; PP&L Exhibit 19, p 1) The BPA connection will be the source of the electric power for the PP&L transmission line to PP&L's Southwest Division service area. (PP&L Exhibit No. 1) Without the BPA connection, the PP&L facility would therefore be useless.

- 2. The preferred alternative from Spencer, Option A and Option B, would connect the PP&L facility to Lane Substation west of Eugene. Option C would connect the PP&L facility to Alvey Substation east of Spencer. For purposes of PP&L's facility, connection to either Lane or Alvey would suffice. reason for BPA preference for a connection to Lane would be to facilitate BPA's anticipated long range needs in the Eugene area. The need for the BPA portion of the "preferred alternative" or Option A or Option B has not been documented in that no substantial evidence has been submitted in the record of this proceeding pursuant to the forecasted demand aspects of EFSC's need standard, OAR 345-80-043(2)(a). (EFSC Exhibit 1, pp 1-4) is at present more than one 500 kV line serving the Eugene area. There is no evidence in the record relating to system losses in the Eugene area. OAR 345-80-043(2)(b),(c)
- 3. For the reasons set forth in Section IV of this order relating to economic prudence (OAR 345-80-043(3)), Options A or B (or the BPA portion of the "preferred alternative") would be considerably more expensive than Option C and would not meet EFSC's economic prudence standard. In addition, as set forth in Section IV of this order relating to land use (OAR 345-80-060), the BPA 10 FINAL ORDER AND SITE CERTIFICATE

portion of the preferred alternative and Option A would be inconsistent with the statewide planning goals as implemented by the City of Eugene's planning and zoning ordinances. Option C, however, would be consistent with the Lane County zoning ordinance and the statewide goals.

- 4. EFSC Exhibits 1 and 2 and the other evidence in the record relating to the public health and safety standard (OAR 345-80-055), environmental impact standard (OAR 345-80-060), socioeconomic impact standard (OAR 345-80-070), water rights standard (OAR 345-80-075) and organizational, managerial and technical expertise standard (OAR 345-80-080), either directly or by implication, provide sufficient evidence that EFSC's conclusions as to each of these standards would be the same for any of the BPA options.
- 5. BPA, through the authority granted it by the Federal Columbia River Transmission System Act, 16 USC 838 et seq. has the ability to raise sufficient funds to cover the estimated costs of its portion of the proposed facility.
- 6. BPA has not filed for a site certificate and has not formally participated in this proceeding, although twice invited to do so. BPA is an agency of the Federal Government.

### Conclusions of Law

1. Although BPA has not filed for a site certificate application, for the reasons set forth in Findings of Fact II-1 above, construction of a transmission line from Spencer to either Alvey or Lane is a "related or supporting facility" as defined in 11 - FINAL ORDER AND SITE CERTIFICATE

ORS 469.300(18):

"Related or supporting facilities means any structure adjacent to and associated with an energy facility, including associated transmission lines . . . proposed to be built in connection with the energy facility."

- 2. Although under current law EFSC may or may not have direct jurisdiction over BPA construction of a transmission line (See e.g., Columbia Basin Land Protection Association v. Schlesinger, 643 F2d 585 (9th Cir 1981)), construction of a related or supporting facility to the PP&L portion of the facility must be consistent with EFSC's standards. OAR 345-80-010; OAR 345-80-012.
- 3. Based on Findings of Fact II-2 and II-3 above, construction and operation of the BPA portion of the preferred alternative or Option A or Option B would not be consistent with EFSC's substantive standards as to economic prudence, need, or land use. Construction of Option C, however, would be consistent.

III

# Findings of Fact and Conclusions of Law Relating to Alternative Routings

- 1. The application by PP&L for a transmission line facility and its related or supporting facilities consists of a preferred alternative, two other alternatives, and Options A through M. (EFSC Exhibit 1, p 5-1 through 5-4; PP&L Exhibit 19)
- 2. The record in this proceeding contains no substantial evidence relating to the need (or direction from which it would come) for a future third 500 kV line (the "ultimate development")
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to serve the Medford area. (Tr 6/30/82, p 161; Tr 7/1/82, pp 52-55, 59-60, Higgins) Options K, L, and M addressed only the possibility of a third 500 kV line into the Medford area.

# Conclusions of Law

- 1. For the reasons stated in Section II of this order,
  Options A and B and the BPA portion of the preferred alternative
  from Spencer Switching Station west toward Lane Substation do not
  meet one or more EFSC standards.
- 2. For the reasons stated in Section IV of this order relating to economic prudence, Alternatives 2 and 3 and Options D, E, F, H, J, are not consistent with EFSC's standard, OAR 345-80-043(3).
- 3. For the reasons stated in Section IV of this order relating to land use, Option H and the preferred alternative in the Medford area from the West Fork of Evans Creek to Meridian Substation are not consistent with EFSC's standard, OAR 345-80-060.
- 4. For the reasons stated in Finding of Fact III-2 above, Options K, L, and M do not meet EFSC's need standard (OAR 345-80-043).
- 5. For the reasons stated in Parts II, IV, and V of this order a combination of Option C (from Alvey to Spencer), the preferred alternative (from Spencer to the West Fork of Evans Creek), a portion of Option G (consistent with the Pacific-Gilkey agreement, Gilkey Exhibit No. 4), and Option I (West Fork of Evans Creek to Meridian Substation) meet all of EFSC's standards 13 FINAL ORDER AND SITE CERTIFICATE

in OAR ch 345, div 80, and the requirements of ORS ch 469.

IV

# Findings of Fact and Conclusions of Law Relating to EFSC Standards

# A. The Applicable Standards

## Finding of Fact

1. PP&L proposes to build and operate a 500 kV transmission line with a capacity in excess of 230,000 volts through Lane, Douglas, and Jackson counties which are political subdivisions in Oregon. The proposed line will not be constructed entirely within 500 feet of an existing corridor occupied by a high voltage transmission line with a capacity in excess of 230,000 volts. (See Section II, above.)

## Conclusion of Law

1. OAR ch 345, div 80 (standards for the siting of transmission lines), are the standards PP&L must meet in order to obtain a site certificate to construct and operate its proposed 500 kV transmission line and its related or supporting facilities. ORS 469.300(10)(c) defines an energy facility to include a line such as that proposed by PP&L. ORS 469.320(1) requires that PP&L obtain a site certificate to construct and operate the line and its related and supporting facilities. OAR ch 345, div 80, is applicable to such facilities. Therefore, EFSC finds that PP&L must obtain a site certificate, and in order to obtain a site certificate PP&L must comply with the requirements of OAR ch 345, div 80.

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# B. Need for Facility, OAR 345-80-043

- "(1) In order to issue a site certificate for a facility, the Council must find that the facility will be needed and that the facility is a prudent method of meeting such need.
- "(2) For purposes of this rule, a facility is deemed needed if:
- "(a) It will be required, within five years following its proposed in-service date, to enable the transmission system of which it is to be a part to carry peak demands which are reasonably expected to occur in the service area or areas to be served by the facility; or
- "(b) There is only one transmission line greater than 230,000 volts supplying energy to the subject service area or areas; or
- "(c) The facility will provide a reduction of losses in the system serving the subject area or areas, thereby promoting energy conservation.
- "(3) For purposes of this rule, a facility is deemed a prudent method of meeting need if its construction and operation will be economically reasonable, in comparison with the alternatives identified in the site certificate application or by the Council pursuant to OAR 345-080-051.
- "(4) For the purposes of this rule, peak demand in the service area or areas to be served by the proposed facility shall be presumed, subject to rebuttal to:
- "(a) Be twice the firm energy demand in the service area or areas to be served by the proposed facility; or
- "(b) Increase or decrease during the ten (10) year period following the date of application for a site certificate at the same rate that demand for energy in such service area or areas will increase or decrease.
- "(5) To this end applicants may provide evidence based on the Council's 'need for power' rule."

# Finding of Fact

- 1. The proposed inservice date of the facility is late
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(Exhibits: PP&L 13, p 4 (Higgins); PP&L 7; PP&L 16, p 2 (Higgins); Tr 1/26/82, pp 26-27) The service area which PP&L intends to serve with the proposed facility is Pacific Power's Southwest Division service area as shown in Exhibit PP&L 11; PP&L 16, pp 1-2; Tr 1/26/82, pp 25-26. There is only one transmission line greater than 230,000 volts supplying energy to the service area in question, the Malin-Meford 500 kV line. (Exhibits PP&L 14, p 3 (Boucher); PP&L 16, pp 2-3 (Higgins); Tr 1/26/82, p 27 (Higgins); Tr 1/26/82, p 165 (Harris); Tr 3/3/82, p 110 (Attneave)). The peak demand in the service area within 5 years following the proposed inservice date (1988) will be 1818 megawatts. (Exhibits PP&L 15, pp 6-7 (Hannigan); PP&L 21 p 4) The existing transmission system in the applicant's proposed service area has the capacity of 1482 megawatts. (Exhibit PP&L 14, p 3 (Boucher)) The projected demand will exceed the capacity of the existing transmission system according to both the forecasts provided by Pacific Power & Light Company and the Oregon Department of Energy. (Exhibits PP&L 28; PP&L 18a; PP&L 18b; Tr 3/3/82, pp 138-143 (Hannigan)) There is no substantial evidence in the record concerning the forecasted need for the BPA options, although obviously there must be an interconnection with the BPA transmission system and the PP&L facility. There are two existing transmission lines greater than 230 kV serving the City of Eugene area. (PP&L Exhibit 1, p 4-1).

Construction and operation of the preferred alternative
 (Spencer to Meridian) would cost \$57,250,000 (PP&L Exhibit 3;
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EFSC Exhibit 1, p. 1-9; PP&L Exhibit 14, pp 5-11 (Boucher))

Construction and operation of Alternative 2 would cost
\$62,705,000 (PP&L Exhibit 3; EFSC Exhibit 1, pp 1-9; PP&L Exhibit
14, pp 5-11 (Boucher)) Construction and operation of
Alternative 3 would cost \$109,689,000. Costs for the construction and operation of the 13 options are listed in Table 1

(which follows page 18 of this order). Table 1 also shows the costs of construction and operation of the corresponding sections of the preferred alternative. These costs were independently reviewed by a knowledgeable expert from the staff of the Public Utility Commissioner and are reasonable estimates for construction and operation of the facility. (Tr 1/26/82, p 167 (Harris))

- 3. Construction and operation of Option I in the Medford area, even with single-pole structures along a portion of Option I, would not be significantly economically more costly than the preferred alternative in the Medford area. Conflicting cost estimates were presented for the Ramsey Canyon-Meridian Routes in the Medford area. (PP&L Exhibit 3; Rogers Exhibit 2, pp 4-15) However, the cost estimates are not significantly different. (Stipulation of applicant: Letter from Richard D Bach, 7/14/82; Tr 7/1/82, pp 140-40 and 140-41)
- 4. There is no substantial evidence in the record concerning reduction of losses in the system.

### Conclusions of Law

The level of evidence required to meet this standard and
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each of the following standards is only that there be substantial evidence in the record to reasonably support each necessary conclusion. ORS 183.482(8)(c). Menges v. Board of Commissioners, 290 or 251 (1981).

- 2. EFSC finds that the proposed facility will be needed and that it will be required within five years following its proposed inservice date (1988) to carry the peak demands which are reasonably expected to be 1818 megawatts in the service area to be served by the facility.
- 4. EFSC finds that the preferred alternative with the inclusion of Option I and a portion of Option G is economically reasonable, in comparison with the other alternatives identified in the site certificate application and by the EFSC in OAR 345-080-052.
- 5. EFSC finds that for the BPA related and supporting facility, Option C will cost substantially less than Options A (with its BPA portion of the preferred alternative) and B in comparison with the other alternatives identified in the site certificate application or in OAR 345-080-052 and is therefore the only prudent option in the Eugene area. The EFSC also finds that options D, E, and F would cost more than the corresponding sections of the preferred alternative and therefore would not be economically reasonable in comparison to the preferred alternative. There would also be no significant environmental advantage in using these options. (EFSC Exhibit 1, p 1-46) The EFSC also finds that Option J (the underground crossing of the Rogue River) 18 FINAL ORDER AND SITE CERTIFICATE

TABLE 1

Cost Summary for Options 1/

	Corridor Length	New Right- of-way	New Access	Cost
	(Miles)	(Acres)	(Miles)	(Dollars)
Option A (Lane-115 kV) Corresponding Portion of	7.5	0.0	0.9	6,900,000
Preferred Alternative	7.5	113.6	1.6	7,300,000
Option B (Lane-Camas Swale) Corresponding Portion of	14.2	258.8	18.3	11,930,000
Preferred Alternative	16.3	136.6	3.0	13,924,000
Option C (Alvey-Spencer) Corresponding Portion of	2.0	30.3	0.6	3,010,000
Preferred Alternative	11.5	113.6	2.3	11,900.000
Option D (Umpqua Hwy Bypass) Corresponding Portion of	5.1	95.5	2.5	2,434,000
Preferred Alternative	5.1	0.0	0.6	1,970,000
Option E (Canyonville Existing) Corresponding Portion of	4.2	38.2	0.8	2,323,000
Preferred Alternative	2.7	57.3	8.1	1,402,000
Option F (Green Mtn Existing) Corresponding Portion of	7.9	71.8	1.5	3,579,000
Preferred Alternative	6.9	146.4	20.7	3,127,000
Option G (W.F. Evans Ck. Existing) Corresponding Portion of	4.5	40.9	0.7	2,158,000
Preferred Alternative	3.8	80.6	10.1	1,999,000
Medford Basin Options2/				
Option H (West Route) Option I (Existing Corridor) Option K (Preferred, Ultimate) Option L (West, Ultimate) Option M (Existing, Ultimate) Corresponding Portion of	30.4 28.5 31.3 30.4 28.5	502.6 376.4 1132.1 737.5 489.0	36.3 15.2 73.8 33.6 15.6	16,062,000 15,270,000 15,636,000 22,582,000 21,159,000
Preferred Alternative	31.3	657.8	73.8	14,906,000

 $<sup>\</sup>frac{1}{2}$  EFSC Exhibit 1, pp 5-4 and 1-9 - 1-12.

<sup>2/</sup> Originating at West Fork Evans Creek. Option J, Underwater Crossing, is not included in this comparison as its requirements are not readily comparable for the parameters in this table.

would cost \$4,865,000 to \$6,892,000 more than the other options in the Medford area and is therefore not economically reasonable in comparison with the alternatives identified in the site certificate application or in OAR 345-80-052. The EFSC also finds that construction of Option G as modified (Gilkey Exhibit 4) would be economically reasonable in comparison with the preferred alternative.

6. For all of the above reasons, EFSC finds that the proposed facility will be needed and that the proposed facility would be a prudent method of meeting that need if constructed along the options identified above, specifically the preferred alternative as modified by Option C, a portion of Option G, and Option I.

# C. Alternatives, OAR 345-80-051

- "(1) Not later than 60 days after receipt of a site certificate application or a voluntary notice of intent to file a site certificate application for a facility, the Council shall, by rule identify the reasonably available specific physical alternatives and/or specific programmatic alternatives to the facility taking into account those alternatives previously identified in the voluntary notice of intent and the scoping process for any environmental review required by federal law which the Council deems appropriate for consideration by the applicant.
- "(2) In order for the Council to issue a site certificate for a facility, the Council must find that the applicant has conducted a study of each of the alternatives identified in section (1) of this rule in which the current and planned land uses and environmental impacts of each alternative have been compared based on the standards set out in OAR 345-80-060 using known available information.
- "(3) The Council must also find after evaluating the applicant's comparison study that:

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- "(a) The applicant's initial proposal will not result in unreasonable environmental impacts in comparison with the other alternatives; or
- "(b) One of the alternatives or a combination of alternatives (which may include segments of the route intially proposed by the applicant) can meet the standards set out in OAR 345-80-060. At the request of or with the approval of the applicant, a site certificate may be issued for an alternative or combination of alternatives which may be different from the applicant's initial proposal.
- "(4) The Council shall waive the requirements of section (2) for those segments of the proposed facility which the applicant agrees to route within 500 feet of an existing utility corridor containing at least one transmission line with a voltage rating of 115 kiovolts or higher."

# Findings of Fact

- 1. The environmental impacts of the proposed facility are as set forth in Section IV-F of this order, infra.
- 2. The environmental impacts of alternatives two and three are moderately more significant than those of the preferred alternative. (EFSC Exhibit 1, pp 1-44 through 1-47) The combination of the preferred alternative, a portion of Option G, and Option I has the least environmental impact. (EFSC Exhibit 1, p 1-47) As described in Section IV-F of this order, this combination of alternatives can meet the environmental standards in OAR 345-80-060.
- 3. In comparison with the BPA preferred alternative and Options A and B in the Eugene area, Option C would have less environmental impact and, as described in Section IV-F of this order, can meet the standards in OAR 345-80-060. (EFSC Exhibit 1, pp 1-42 through 1-47)
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- 4. Pacific Power & Light Company has agreed to accept any combination of routing alternatives selected by EFSC (Tr 7/1/82, pp 114-115 (Bach)).
- 5. EFSC Exhibits 1, 2 and 5, and PP&L Exhibits 1 and 33 consist of a study of the alternatives identified in OAR 345-80-052. The use of an alternate corridor from the south side of Eugene north to Lane substation, OAR 345-80-052(3) was early on found to be inappropriate and environmentally unsound and was not studied further. (PP&L Exhibit 47, pp 5) Additional options were identified during the study and are incorporated in the application filed by PP&L. EFSC Exhibits 1 and 2, which were funded by the applicant (see EFSC Exhibits 3, page 3; EFSC Exhibit 1, Appendix D), consist of studies of the current and planned land uses and environmental impacts of each alternative and option based on known available information.
- 6. With the exception of three minor deviations, the PP&L preferred alternative transmission line, if routed with Option I, would be within 500 feet of an existing utility corridor containing at least one transmission line with a voltage rating of 115 kV or higher (EFSC Exhibit 1; PP&L Exhibit 47, p 203 Higgins).
- 7. As described in section IV-F of this order, <u>infra</u>, the environmental impacts of the preferred alternative in the Medford area in comparison to a combination routing of the preferred alternative Option I and a portion of Option G would have moderately greater environmental impacts (<u>See e.g.</u>, EFSC Exhibit 1, pp 21 FINAL ORDER AND SITE CERTIFICATE

1-37 through 1-47; Rogers 1, pp 15-20).

## Conclusion of Law

- 1. As noted above, in order to meet the requirements of this standard there must be substantial evidence to reasonably conclude that the alternatives selected will not result in unreasonable environmental impacts in comparison with the other alternatives. Environmental impacts for a facility such as is proposed by the applicant are measured against the standards in OAR 345-80-060. Through the site certificate conditions in Appendix 2, EFSC will require that PP&L actually designs, builds, and operates the facility so as to preclude unreasonable environmental impacts.
- 2. As noted in Finding of Fact 6 above, the bulk of the transmission line is within 500 feet of an existing utility corridor and the Council is required by OAR 345-80-051, therefore, to waive the requirements of OAR 345-80-051(2) for those portions of the line. Nonetheless, EFSC finds that the applicant has conducted a study of each of the alternatives identified as required by the rule.
- 3. After evaluating the applicant's comparison study and the record in this proceeding, EFSC finds that although sections of the applicant's initial proposal (or "preferred alternative") may result in moderately unreasonable environmental impacts in comparison with the other alternatives, the combination of alternatives identified in Findings of Fact 2 above and BPA Option C can meet the standards set out in OAR 345-80-060 and that a site 22 FINAL ORDER AND SITE CERTIFICATE

certificate issued for such a combination of alternatives would be satisfactory to the applicant.

# D. Alternatives to 500 kV Transmission Line from Eugene

# to Medford, 345-80-052

"Consistent with OAR 345-80-070, in order for the Council to issue a site certificate for a facility, from Eugene to Medford for which a voluntary Notice of Intent has been filed before April 24, 1981, the Council must find that the applicant has conducted a study of each of the following alternatives:

- "(1) The use of the existing corridor north of Dixonville to the Alvey substation;
- "(2) The use of an alternate corridor from the south side of Eugene north to the Lane substation;
- "(3) Construction of a new substation at an existing switching station west of Alvey substation and modification of the existing corridor as necessary to reach this new substation;
- "(4) The use of the existing corridor, from Ramsey Canyon to Meridian substation;
- "(5) The use of the existing corridor south of Dixonville to Ramsey Canyon;
- "(6) The use of a new corridor from Ramsey Canyon to the east of the authorized area near the White City and Sam's Valley area;
- "(7) The use of alternate tower designs in areas near residences;
- "(8) Undergrounding of the transmission line where it crosses the Rogue River;
- "(9) Construction of a second Malin-Meridian 500 kV line;
- "(10) Construction of a double circuit 500 kV line between Eugene and Medford."

## Finding of Fact

- 1. PP&L has conducted a study of each of the alternatives
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identified in OAR 345-80-052. (EFSC Exhibit 3, p 8; EFSC Exhibit 1, pp 1-4 through 1-35; PP&L Exhibit 1; PP&L Exhibit 47)

## Conclusion of Law

- 1. EFSC finds that the applicant has conducted a study as required by OAR 345-80-052.
- E. Standards Relating to Public Health and Safety, 345-80-055
  - "In order to issue a site certificate for a facility the Council must find that:
  - "(1) The facility can be designed to meet the Noise Standards of the Oregon Department of Environmental Quality set forth in Oregon Administrative Rules, ch 340, div 35.
  - "(2) The facility can be designed so that alternating current electrical fields shall not exceed 9 kv per meter at one meter above the ground surface in areas accesible to the public.
  - "(3) The facility can be designed so that induced currents resulting from the transmission line and related facilities will be as low as reasonably achievable and the applicant agrees to a program which will provide reasonable assurance that all fences, gates, cattleguards, trailers, or other objects or structures of a permanent nature that could become inadvertently charged with electricity will be grounded through the life of the line.
  - "(4) The transmission line can be designed, constructed, and operated in a manner consistent with the 1977 edition of National Electrical Safety Code (American National Standards Institute, Section C2, 1977 edition).
  - "(5) The applicant agrees to restore the reception of radio and television at residences and commercial establishments in the primary reception area to the level present prior to operation of the proposed facility, at no cost to residents experiencing interference resulting from the proposed facility.
  - "(6) The applicant shall demonstrate to the Council the alternate methods and costs of reducing radio and television interference in the primary reception area

likely to be caused by the facility near interstate, U.S. and state highways."

# Findings of Fact

- 1. The applicant has designed, built, and operated other transmission lines to meet the noise standards of the Oregon Department of Environmental Quality as set forth in Oregon Administrative Rules, ch 340, div 35. PP&L will measure ambient noise levels along the line prior to construction and will use accepted construction techniques to minimize noise and to insure that the standards are met. (PP&L Exhibit 30)
- 2. The facility can be designed and constructed so that alternating current electrical fields will not exceed a calculated maximum of 7.7 kv per meter at one meter above the ground surface in any areas accessible to the public. PP&L has constructed similar 500 kV lines with similar results. (PP&L Exhibit 31, p 1-3; Tr 3/3/82, p 230, Fishback)
- 3. The facility can be designed and constructed by means of nationally-accepted practices so that induced currents resulting from the transmission line and related facilities will be as low as reasonably achievable. (In any event, per Finding of Fact 4 below, this value may not exceed the 5 milliamphere limit in the National Electrical Safety Code.) (PP&L Exhibit 31, p 4) Pacific Power & Light Company has agreed to a program which will provide reasonable assurance that all fences, gates, cattleguards, trailers or other objects or structures of a permanent nature that could become inadvertently charged with electricity will be 25 FINAL ORDER AND SITE CERTIFICATE

grounded through the life of the line. (PP&L Exhibit 31, pp 4-5; Tr 3/3/82, pp 229-235)

- 4. The transmission line can be designed, constructed, and operated in a manner consistent with the 1977 edition of the National Electrical Safety Code. PP&L has constructed other transmission lines consistent with the code requirements. (PP&L Exhibit 31, pp 5-7)
- 5. Pacific Power & Light Company has agreed to restore the reception of radio and television at residences and commercial establishments in the primary reception area to the level present prior to operations of the proposed facility, at no cost to residents experiencing interference resulting from the proposed facility. (PP&L Exhibit 32, pp 2-3; Tr 3/3/80, pp 224-29, 235-36, Fishback)
- 6. The applicant has provided a demonstration to the Council of the alternate methods and costs of reducing radio and television interference in the primary reception area likely to be caused by the facility near interstate, U.S. and state highways. (PP&L Exhibit 32)

# Conclusions of Law

1. Requirements in this standard relating to primary reception area of tion areas of radio and TV refer to the primary reception area of a particular TV station or radio station. The primary reception area does not refer to an individual who may, by quirk or luck, receive a far-off TV or radio signal. As noted above, it is only necessary to provide substantial evidence from which EFSC can 26 - FINAL ORDER AND SITE CERTIFICATE

conclude that the standards can be met. The site certificate conditions in Appendix 2 will require that the actual design, construction, and operation of the facility will comply with the representations made by the applicant and the limits in this standard for protection of public health and safety.

2. EFSC finds that if the design and engineering measures identified in the exhibits and testimony relating to Findings of Fact 1 through 6 above are implemented, the proposed transmission line facility will be in accordance with all of the requirements of OAR 345-80-055.

# F. Standards Relating to Environmental Impact, OAR 345-80-060

"In order to issue a site certificate for a facility, the Council must find that:

- "(1) Except as otherwise permitted by law, the proposed facility is not located in or is not likely to produce significant adverse environmental impacts to the natural resource areas listed below:
  - "(a) National Parks, National Monuments and National Wildlife Refuges;
- "(b) State of Oregon Parks, Waysides, Wildlife Refuges and Natural Area Preserves;
- "(c) Wilderness areas as established under the Federal Wilderness Act (16 USC 1131 et seq.) and areas recommended for designation as wilderness areas pursuant to Section 603 of the Federal Land Policy and Management Act of 1976 (Public Law 94-579);
- "(d) Scenic Waterways designated pursuant to ORS 390.825;
- "(e) Federally-designated Wild and Scenic Rivers established pursuant to Public Law 90-452;
- "(f) Experimental areas established by the Rangeland Resources Program, School of Agriculture, Oregon State University;

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- "(g) Areas having unique or significant wildlife, geologic, historic, botanical, wildlife, research or recreational values as lawfully designated by the state agency having jurisdiction over such values.
- "(2) The facility is not likely to jeopardize in a material way the continued existence of anadromous fish.
- "(3) The proposed facility is not likely to jeopardize in a material way the continued use of deer, elk and antelope wintering ranges or migration routes.
- "(4) The above ground portions of the proposed facility shall not be located on antelope fawning areas, sage grouse strutting and nesting areas or water fowl nesting and rearing areas which are necessary to sustain the existing local or migratory populations of such species.
- "(5) The bird species within the area affected by the proposed facility have been identified and the facility is not likely to jeopardize in a material way the continued existence of local or migratory populations of such bird species.
- "(6) Construction and operation of the proposed facility is not likely to jeopardize in a material way the continued existence of any of the following species, or destroy habitat critical to continued existence of these species:

## "(a) Wildlife:

- "(A) Deer, Columbia white-tailed (Ococoileus virginanus luecurus);
  - "(B) Wolf, Gray (Canus lupus);
  - "(C) Eagle, Bald (Haliaeetus Leucocephalus);
- "(D) Falcon, American peregrin (Falco Peregrinus anatum);
- "(E) Falcon, Arctic peregrin (Falco peregrinus tundrius);
- "(F) Goose, Aleutian canada (Branta canadensis leucopareia);
  - "(G) Pelican, bron (Pelecanus occidentalis);

- "(H) Butterfly, Oregon silverspot (Speyeria zerene hippolyta);
- "(b) Plants: Any of the fifty-one specifies proposed by the Fish and Wildlife Service as endangered in Oregon by publication in the <u>Federal Register</u> (41 FR 24524 (June 16, 1976).

"NOTE: The species identified in section (6) consist of endangered and threatened wildlife and plants listed as of October 1, 1978, in 50 CFR Part 17 with a range which includes Oregon, and species in Oregon proposed by the Fish and Wildlife Service for addition to the list in 50 CFR Part 17 as published in the Federal Register.

"(7) The proposed facility is not likely to cause significant adverse impacts within historic sites or upon archaeological resources."

# Findings of Fact

- 1. The proposed facility is not located in or is not likely to produce significant environmental impacts in any National Parks, National Monuments or National Wildlife Refuges. (EFSC Exhibit 3, p 4; PP&L Exhibit 33, pp 1-2)
- 2. The proposed facility is not located in, or is not likely to produce significant environmental impacts in, any State of Oregon Parks, Waysides, Wildlife Regufes, and Natural Area Preserves. (EFSC Exhibit 3, pp 4-5; PP&L Exhibit 33, pp 1-2; Tr 6/29/82, pp 20-21 (Fairbanks)) The facility will go near the border of, or cross through, the Denman Wildlife Management area. (EFSC Exhibit 1; PP&L Exhibit 33, p 1; Tr 6/29/82, p 80 (Higgins)) This area is not a Wildlife Refuge; however, and in any event, impacts from the facility would not be environmentally significant. (EFSC Exhibit 1; Tr 6/29/82, pp 20-21 (Fairbanks); 6/29/82, p 80 (Higgins))
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- 3. The proposed facility would not be located in or would not be likely to produce significant adverse environmental impacts to any wilderness areas as established under the Federal Wilderness Act or areas recommended for designation as wilderness areas pursuant to Section 603 of the Federal Land Policy and Management Act of 1976. (EFSC Exhibit 1, pp 3-33; EFSC Exhibit 3, p 5; PP&L Exhibit 33, pp 1-2)
- 4. The facility is not located in or is likely to produce significant adverse environmental impacts to any Scenic Waterways designated pursuant to ORS 390.825. (EFSC Exhibit 1, pp 2-11; EFSC Exhibit 3, p 5; PP&L Exhibit 33, pp 1-2)
- 5. The facility is not located in or is not likely to produce significant adverse environmental impacts on any Federally-designated Wild and Scenic Rivers. (EFSC Exhibit 1, pp 3-33; EFSC Exhibit 3, p 5; PP&L Exhibit 33, pp 1-2)
- 6. There are no experimental areas established by the Rangeland Resources Program, School of Agriculture, Oregon State University, within the area of any of the proposed alternatives. (EFSC Exhibit 3, p 5; PP&L Exhibit 33, pp 1-2)
- 7. There are no areas having unique or significant wildlife, geologic, historic, botanical, wildlife, research or recreational values as lawfully designated by the state agency having jursidiction over such values in which the line will be located. The combination of the preferred alternative, a portion of Option G and Option I, will cross near the state-owned portion of the Denman Wildlife Management Area over land leased to the 30 FINAL ORDER AND SITE CERTIFICATE

State from the Federal Government. This area has not, however, been designated by any state agency as an area having unique or significant wildlife, geologic, historic, botanical, research or recreational values. In any event, the proposed facility is not likely to produce significant adverse environmental impacts within the wildlife management area. (EFSC Exhibit 3, pp 5-6; PP&L Exhibit 33, pp 1-2; Tr 6/29/82, p 20-21 (Fairbanks))

- 8. Construction of the facility and operation of it may cause negative impacts on anadromous fish through siltation of breeding areas. The mitigation measures proposed by the applicant and set forth in the Environmental Impact Statement, and as site certificate conditions in Appendix 2 attached hereto, would prevent significant amounts of siltation. (EFSC Exhibit 7, Letter from Oregon Dept. of Fish and Wildlife) In any event, the proposed facility would not jeopardize in a material way the continued existence of any anadromous fish population. (EFSC Exhibit 1, pp 1-44 through 1-48, 3-9 through 3-14, 3-24, and 3-27 through 3-31; PP&L Exhibit 33, pp 2-3; Tr 6/29/82, p 36)
- 8. For any one of the options or alternatives, the proposed facility will be located near wintering ranges and migration routes for the Black-tailed deer. (EFSC Exhibit 1, pp 2-7, 3-24 through 3-25; PP&L Exhibit 33, pp 3-4; Rogers Exhibit 1, p 19) Nonetheless, construction of the proposed facility will not bar use by deer of identified wintering ranges or migration routes. (EFSC Exhibit 1, pp 3-24 through 3-25; EFSC Exhibit 7, Letter from Oregon Department of Fish and Wildlife) Although elk occur 31 FINAL ORDER AND SITE CERTIFICATE

along the proposed route, they are not common and are not expected to be significantly impacted. (PP&L Exhibit 33, p 1; EFSC Exhibit 2, p 4-4) There are no antelope wintering ranges or migration routes in the area of the proposed facility. (PP&L Exhibit 33, p 3)

- 9. The above-ground portions of the transmission line will not be located on antelope fawning areas or sage grouse strutting and nesting areas. Some portions of the line, particularly the portion near the Denman Wildlife Management area, will be located on waterfowl nesting and rearing areas. These areas, however, are not necessary to sustain the existing local or migratory populations of such species. (EFSC Exhibit 1, pp 1-44, 1-46, 1-47, 2-8, and 3-22 through 3-31; PP&L Exhibit 33, p 4) The exception is that Alternative 1, as originally proposed (the "preferred alternative" or "east route"), along its eastern portion in the Medford area would be located near a nesting area of a local population of herons. (Tr 6/29/82, pp 18-20, Fairbanks)
- 10. The bird species within the area have been identified and are set forth in EFSC Exhibit 2, Appendix C-2. The proposed facility is not likely to jeopardize in a material way the continued existence of local migratory populations of such bird species. EFSC Exhibit 1, pp 2-7, 2-8, and 3-22 through 3-23; PP&L Exhibit 33, pp 4-5; Tr 6/29/82, p 19 (Fairbanks))
- 11. The only wildlife found in the vicinity of the proposed facility that are among the endangered species identified in OAR 345-80-060(a) are the Columbia white-tailed deer and the Bald 32 FINAL ORDER AND SITE CERTIFICATE

Eagle. Construction and operation of the combination of the preferred alternative, as modified by a portion of Option G, Option C, and Option I, would not jeopardize the continued existence of either species or destroy habitat critical to the continued existence of these species. (EFSC Exhibit 1, pp 1-44, 1-46, 1-47, 2-2, 2-7, and 3-26 through 3-31; EFSC Exhibit 7, Letter from Oregon Dept. of Fish and Wildlife; PP&L Exhibit 33, pp 5-6; Rogers Exhibit 1, pp 16-18; Tr 6/29/82, pp 129-33, Nelson; p 154, Nelson; p 166-67, Nelson; Tr 6/30/82, p 23, Werschkul) Construction and operation of any of the options or alternatives would not jeopardize in a material way the continued existence of Bald Eagles or destroy habitat critical to their continued existence. (EFSC Exhibit 1, p 3-27; PP&L Exhibit 33, pp 5-6; Tr 6/29/82, pp 129-33)

- 12. Construction and operation of any one of the alternatives or options would not jeopardize in a material way the continued existence of any of the 51 species of plants identified in OAR 345-80-060(6)(b), nor would it destroy habitat critical to the continued existence of any of those species. (EFSC Exhibit 1, pp 1-44, 1-46, 2-2, 2-3, 2-7, and 3-16 through 3-20; EFSC Exhibit 2, pp 5-1 through 5-24; EFSC Exhibit 3, p 7; PP&L Exhibit 33, p 6)
- 13. The archaeological resources and historical sites along any of those alternatives or options have been identified. (See EFSC Exhibit 1, pp 2-8, 2-9, and 3-31 through 3-32.) The construction practices and program committed to by PP&L in 33 FINAL ORDER AND SITE CERTIFICATE

Appendix C2 of EFSC Exhibit 1 would prevent any significant adverse impacts within historic sites or upon archaeological resources. (EFSC Exhibit 1, pp 3-31 through 3-32; PP&L Exhibit 33, pp 6-7)

# Conclusions of Law

1. Based on Findings of Fact 1 through 13 above, EFSC finds that the facility will not be located in, or that there will be no significant adverse impacts on any of the natural areas, wildlife, or historic or archaeological sites or other resources identified in OAR 345-80-060. This conclusion is dependent upon implementation of the site certificate conditions contained in Appendix 2. This conclusion is further dependent upon selection and utilization by PP&L of the combination of alternatives identified in Finding IV-C-2 above. Therefore, EFSC finds that the facility would be consistent with the requirements of OAR 345-80-060.

## G. Land Use, OAR 345-80-065

"In order to issue a site certificate for a transmission line the Council must find that:

- "(1) The Land Conservation and Development Commission has acknowledged, pursuant to ORS 197.251 (1979 replacement part), the comprehensive land use plan(s) and implementing measures of the general purpose local government(s) having land use planning jurisdiction over the site of the facility; and that the facility has been determined by the local government(s) to be consistent with the plan(s) and measures; or
- "(2) If the plan and implementing measures have not been acknowledged by the Land Conservation and Development Commission, the applicant has demonstrated to the Council that after providing notice and opportunity for public and other government agency review and comment,

the statewide planning goals (OAR Chapter 660, Division 15) have been considered and applied by the local government(s) during a land use review of the facility and such facility has been determined by the local government(s) to be consistent with applicable statewide planning goals and local land use plan(s) and measures; or

- "(3) If the local government(s) having land use planning jurisdiction over the site of the facility has not completed a land use review of the facility prior to approval of a site certificate as required by sections (1) and (2) of this rule, or if such local government has denied that that the facility is consistent with applicable statewide planning goals and land use plans and measures the Council has determined that the application is consistent with the statewide planning goals. Provided, however, that a site certificate authorizing the construction within the boundaries of an incorporated city shall be conditioned on compliance with city ordinances in effect on the date of the application of the site certificate as required by ORS 469.400(6)."
- The proposed facility will cross and is within the 1. jurisdiction of Lane County, Douglas County, and Jackson County. A portion of the preferred alternative and Option A would be within the jurisdiction of the City of Eugene. Each of these local governments has jurisdiction over a portion of the site of the facility for land use planning purposes. Jackson County has, after providing notice and opportunity for public and other governmental agency review and comment, considered the statewide planning goals during a land use review of the facility. (Jackson County Exhibits 1-4; Tr 6/30/82, pp 56-62 (Lay)) Jackson County has determined that the use of the existing transmission line corridor and Option I, with a portion of Option G, would be consistent with its local land use plans and the statewide planning goals. (Jackson County Exhibit 3) Jackson 35 - FINAL ORDER AND SITE CERTIFICATE

County has also determined that the preferred Alternative 1 or Option H through Jackson County would not be consistent with statewide planning goals 4, 5, and 7 or its local ordinances. (Jackson County Exhibit 3) The independent study by the Rogue Valley Council of Governments staff, commissioned by the EFSC, reaches the same conclusions as Jackson County. (EFSC Exhibit 5) Neither Lane nor Douglas County have made a land use determination concerning the proposed facility.

- The City of Eugene's comprehensive plan and implementing ordinances have been acknowledged by the Land Conservation and Development Commission as being consistent with the statewide planning goals. (Eugene Exhibit 1, Attachment 4) For the reasons stated in its Exhibit 1, the City of Eugene has determined that construction by Bonneville Power Administration (BPA) of the preferred alternative west of Spencer and Option A would be inconsistent with the planning and implementing ordinances of the City of Eugene and therefore also the statewide planning Option C was determined to be consistent. (Eugene Exhibit 1, pp 1-12, 15-16, Attachment 3) However, the City of Eugene has no land use jurisdiction over Option C which is within Lane County's jurisdiction. There is no credible substantial evidence in the record that BPA Option B complies with the statewide planning goals.
- 2b. Recent region-wide forecasts for the Pacific Northwest area are contrary to the growth rates assumed in the DEIS at pages 1-3 (EFSC Exhibit 1) relating to the need for the BPA 36 FINAL ORDER AND SITE CERTIFICATE

connection between the PP&L transmission line and the Lane Substation. (Tr 6/30/82, pp 166-71) The BPA connecting facility, other that Option C, would therefore not be consistent with the requirements of Statewide Land Use Goal No. 11 relating to timely, orderly, and efficient arrangement of public facilities. (See also the discussion above in Part IV A of this order relating to EFSC's need standard, OAR 345-80-043.)

- 3. With the exception of Goals 3, 4, and 5 which will be discussed separately below and the preferred BPA alternative and BPA Option A and BPA Option B as noted above in Findings 2a and 2b, all options and alternatives of the proposed transmission line would be consistent with all applicable statewide planning goals in Lane, Jackson, and Douglas counties. (PP&L Exhibit 37; EFSC Exhibit 1, p 1-55; Exhibit 5; Tr 6/30/82, pp 175-95)
- 4. Construction and operation of the transmission line will require permanent removal of extremely minor amounts of agricultural soils from production for the placing of towers. Even in the worst case this would total approximately 10 acres in the roughly 135 miles of the facility. (EFSC Exhibit 1, pp 5-1, 3-54) Of the 10 acres only slightly more than 1 acre of prime farm land would be prime agricultural land. Moreover, careful placement of towers would result in less than six towers actually on prime agricultural soils along any alternative routing. (EFSC Exhibit 1, pp 3-55, 56) Along significant portions of the route, negative impacts of placing new towers would be mitigated by removal of existing towers. (EFSC Exhibit 1, p 3-52) The pre-37 FINAL ORDER AND SITE CERTIFICATE

ferred alternative and Option H in the Medford area would remove more acreage from production than would Option I. (EFSC Exhibit 1, pp 3-56) Construction and operation of the facility through agricultural areas would not materially jeopardize continued utilization of adjacent agricultural lands or even lands beneath the line for agricultural uses. (PP&L Exhibit 37, pp 82-84; EFSC Exhibit 7, Letter from State Dept. of Agriculture) In any event, utility corridors, such as a transmission line, are permitted uses in exclusive farm use zones pursuant to ORS 215.213(1)(d).

5. Construction and operation of the transmission line would require a change in forest uses on portions of the propsed (EFSC Exhibit 1, Table 3-7) Utilization of other facility. options, particularly Option H or the preferred alternative in the Medford area, would require conversion of commercial forest (EFSC Exhibit 1, pp 3-59; EFSC Exhibit 5) Even after conversion, however, the areas underneath the transmission line will be available for many forest uses such as open space, livestock grazing, Christmas tree farms, etc. (Tr 6/29/82, pp 177-79, Hough) Forest uses adjacent to the transmission line corridor right-of-way would not be significantly affected. 6/29/82, Hough; PP&L Exhibit 37, p 62-63, 67) In any event, the amount of forest uses converted would be miniscule when compared to the amount of forest lands available in Lane, Douglas, and Jackson Counties. Some land would be converted from any forest uses to sites for transmission towers. (EFSC Exhibit 1, pp 3-56 through 3-59) Any alternative routing from Eugene to Medford 38 - FINAL ORDER AND SITE CERTIFICATE

will require some conversion of forest land. (EFSC Exhibit 1, pp 3-56 through 3-59) The effects of the preferred alternative from Spencer to the West Fork of Evans Creek on forest land would be mitigated by reconversion of existing transmission line rights-of-way along Options E and F and a portion of G. (EFSC Exhibit 1, p 3-57) Much of the affected forest land along the various alternatives is, in any case, low grade timber or already converted to other uses. (EFSC Exhibit 1, pp 3-56 through 3-57) Jackson, Douglas, and Lane County land use ordinances permit transmission lines as conditional uses in forest zones. (PP&L Exhibit 37, pp 64-65; Douglas County Land Use and Development Ordinance Section 3.2.100(2); Lane County Zoning Code 5510.102-20(4), 5510.103-20(3), and 5510.104-20(7); Jackson County Zoning Ordinance ch 264)

6. As described in detail on pages 21-43 of PP&L Exhibit 37, other evidence in the record, notably EFSC Exhibits 1, 2, and 5, provide the inventories of the catagories of resources identified in Goal 5. Many of the values protected by the requirements of the goal are protected by EFSC's environmental standard, OAR 345-80-060. See e.g. Historic Sites, OAR 345-80-060(1). One of the only two credible inconsistencies with Goal 5 identified in the record is a possible impact on the Medford Sports Park. (See e.g. EFSC Exhibit 5.) Further investigation, however, revealed that there would be no goal violation. (Tr 6/29/82, pp 16-17, Blair) A second possible inconsistency identified is that negative impacts on visual resources, particularly in residential 39 - FINAL ORDER AND SITE CERTIFICATE

and recreation areas, caused by the transmission line are possible. (See e.g. EFSC Exhibit 5, p 10; EFSC Exhibit 1, pp 3-49 through 3-50.) However, use of tubular steel towers and non reflective towers in sensitive locations such as through White City, in the vicinity of Table Rock, and through the Medford Sports Park along Option I would greatly reduce any negative impacts, as would the use of Option I itself. (EFSC Exhibit 1, pp 3-44; EFSC Exhibit 5, p 12).

7. A transmission line is a permitted or conditional use in the planning and land use ordinances of Jackson County, Douglas County (see e.g. Douglas County Land Use and Development Ordinance 3.10.100 (rural residential district) which includes public uses such as utility uses as a conditional use), and Lane County (see e.g. Lane Code ch 10 (Forest Management District) Section 10.102-15, sub (4)) and would be consistent with each county's comprehensive plan (PP&L Exhibits 39 and 40; EFSC Exhibit 5; Jackson County Exhibit 3)

### Conclusions of Law

- 1. Based on Findings of Fact 1 through 7 above, EFSC finds that a proposed transmission line and its related or supporting facilities consisting of Option C, the preferred alternative from Spencer to the West Fork of Evans Creek (with a portion of Option G consistent with the Pacific-Gilkey agreement), and Option I to Meridian Substation would be consistent with all applicable statewide planning goals and local ordinances.
- 2. Based on Findings of Fact 1, 2, 3, 4, 5 and 6 above, EFSC 40 - FINAL ORDER AND SITE CERTIFICATE

finds that BPA Option A and BPA Option B and the BPA preferred alternative from Spencer west to Lane Substation, the PP&L preferred alternative (from the West Fork of Evans Creek to Meridian Substation), and Option H would not be consistent with all applicable statewide planning goals and local ordinances.

3. In addition to Conclusion of Law 1 above, based on Findings of Fact 4 and 5, and the Land Conservation and Development Commission rule relating to exceptions, OAR ch 660, div 4, EFSC finds that an exception to Goals 3 or 4 would not be required. In any event the necessary need, consequences, alternative location, and compatability findings required by Goal 2 for an exception to Goals 3 or 4 are contained in Findings of Fact 4 and 5 above, and in sections IV B, C, D, and E of this order. EFSC therefore finds that an exception to Goal 3 or Goal 4, if required, would be appropriate.

# H. Socioeconomic Impacts, OAR 345-80-070

"In order to issue a site certificate for a facility the Council must find:

- "(1) The applicant has identified the major and reasonably foreseeable socio-economic impacts on persons and communities located in the vicinity of the facility resulting from construction and operation, including, but not limited to, anticipated need for increased governmental services or capital expenditures; and
- "(2) The applicant and the affected local government can provide adequate resources to mitigate the impacts identified pursuant to section (1); and
- "(3) The applicant has an adequate process for periodically undating, during construction and operation, its assessment of anticipated impacts of the facility."

### Findings of Fact

- 1. The socioeconomic impacts resulting from construction and operation of the facility, such as anticipated need for increased governmental services or capital expenditures, will be extremely minor. The applicant and affected local governments have the resources to mitigate any impacts identified. (PP&L Exhibit 46; EFSC Exhibit 1, pp 3-64 through 3-85)
- 2. The applicant and affected local governments have an adequate process for periodically updating during construction operation their assessment of anticipated impacts of the facility. (PP&L Exhibit 46, pp 3-4)

# Conclusions of Law

1. It is important to note that this standard is not an aesthetics standard, and issues relating to visual resources or similar subjective internal individualized impacts are incapable of definitive measurement although such issues may bear on other standards such as land use. See Section IV-I above. Based upon Findings of Fact 1 through 2 above, EFSC finds that the applicant has identified the major and reasonably foreseeable socioeconomic impacts on individuals and communities located in the vicinity of the proposed facility resulting from the construction and operation of the facility, that the local governments and the applicant can provide adequate resources to meet the impacts, and they have an adequate process for periodically updating during construction and operation their assessment of anticipated impacts of the facility. Therefore, EFSC finds that PP&L has 42 - FINAL ORDER AND SITE CERTIFICATE

complied with OAR 345-80-070.

# I. Standard Relating to Water Rights, OAR 345-80-075

"In order for the Council to issue a site certificate for a facility the Council must find that the requirements for water used in construction and operation of the facility can be met without infringing upon the existing water rights of other persons."

# Findings of Fact

- 1. Water requirements during the construction of the project will be minimal. Once operational, the facility will not require significant amounts of water. (PP&L Exhibit 28; EFSC Exhibit 7, Letter from Water Resources Department)
- 2. The consumption of water by the proposed facility will not infringe upon existing water rights of other persons. (PP&L Exhibit 28)

#### Conclusions of Law

- 1. Based upon Findings of Fact 1 and 2 above, EFSC finds that the construction and operation of the proposed facility can occur without infringing upon the existing water rights of other persons in accordance with OAR 345-80-075. It is important to note that this standard does not address issues of water quality which may be necessary to other standards and/or site certificate conditions. See e.g. Finding of Fact IV-F-8 above (Siltation Effects on Fish).
- J. Organization, Managerial, and Technical Expertise,

#### OAR 345-80-080

"In order for the Council to issue a site certificate for a facility the Council must find that the applicant has the organization, managerial, and technical

expertise to construct, operate, and retire the facility. To this end, the applicant may present evidence relating to:

- "(1) The applicant's previous experience, if any, in constructing, operating, and retiring similar facilities;
- "(2) The qualifications of the applicant's personnel who will be responsible for constructing, operating and retiring the facility; and
- "(3) If applicable the qualifications of any architect-engineer, major component vendor, or prime contractor upon who the applicant will rely in constructing, operating, and retiring the facility."

### Findings of Fact

- 1. Design and construction of the proposed facility will require expertise and experience in planning, organizing, directing, and controlling an approximately \$70 million construction project. Design will include engineering as to towers, their location and type, stringing of line, clearing of sites, etc. Construction of the project will require supervision and inspection of all construction activities and execution of a variety of forms, details, and reports. (PP&L Exhibit 29)
- 2. Pacific Power & Light Company and its management and supervisory employes have a great deal of experience in designing, constructing and operating, and retiring transmission lines. (PP&L Exhibit 29)

#### Conclusion of Law

1. Based on Findings of Fact 1 and 2 above, EFSC finds that Pacific Power & Light Company at this time has the necessary personnel and organization, managerial, and technical expertise to 44 - FINAL ORDER AND SITE CERTIFICATE

design, build, and operate the proposed facility. Therefore, EFSC finds that PP&L has the organization, managerial, and technical expertise required by OAR 345-80-080.

# K. Financial Assurance, 345-80-085

"In order to issue a site certificate for a facility the Council must find that the applicant, together with all co-owners, possesses or has reasonable assurance of obtaining the funds necessary to cover estimated construction costs, operating costs for the design lifetime of the facility, and the estimated costs of retiring the facility."

### Findings of Fact

1. The total project cost, including design and construction of the proposed facility, is approximately \$70 million.

(PP&L Exhibit 25) The cost of operating the proposed facility over its lifetime is estimated to be \$1,218,000 per year, which is only .45% of PP&L's estimated 1982 operating budget. (PP&L Exhibit 28) Pacific Power & Light Company, by means of its internal financing, its ability to borrow capital funds and/or its ability to fund its operation through rates, possesses or has reasonable assurance of obtaining the funds necessary to cover these identified costs. (PP&L Exhibit 28; Tr 1/26/82, pp 165-66, Harris)

#### Conclusion of Law

Based on Finding of Fact 1 above, EFSC finds that PP&L has the funds necessary to construct, operate, and retire this facility in accordance with OAR 345-80-085.

#### L. Applications, OAR 345-80-090

"The applicant shall submit an application which 45 - FINAL ORDER AND SITE CERTIFICATE

includes but is not limited to:

- "(1) A description of the facility;
- "(2) One or more maps, containing the following information for the general area between the terminal points of the proposed transmission line:
- "(a) Topography, including contour lines, and lakes, streams and rivers;
- "(b) Natural resource areas listed in OAR 345-80-060;
- "(c) Transmission lines, improved roads, railroads and pipelines;
- "(d) Landownership by class federal, state, local government, and private;
- "(e) Current and planned land uses including but not limited to forests, agriculture, range lands, population centers and airports.
- "(f) Known habitats of threatened and endangered species as defined in 50 CFR Part 17 as the effective date of these rules;
- "(3) A description of the construction and operation of the facility to the extent practicable.
- "(4) Description of proposed techniques for monitoring impacts.
- "(5) A list of approvals required from governmental agencies."

# Findings of Fact

1. The applicant has submitted an application and supporting evidence sufficient to provide the information required by the standard. (PP&L Exhibit 19)

#### Conclusion of Law

1. EFSC finds that PP&L has complied with OAR 345-80-090.

### Additional Conclusions of Law

# A. Compliance with ORS 469.310

"469.310 Policy. In the interests of the public health and the welfare of the people of this state, it is the declared public policy of this state that the siting, construction and operation of energy facilities shall be accomplished in a manner consistent with protection of the public health and safety and in compliance with the energy policy and air, water, solid waste, land use and other environmental protection policies of this state. It is, therefore, the purpose of ORS 469.300 to 469.570, 469.590 to 469.621, 469.930 and 469.992 to exercise the jurisdiction of the State of Oregon to the maximum extent permitted by the United States Constitution and to establish in cooperation with the Federal Government a comprehensive system for the siting, monitoring and regulating of the location, construction and operation of all energy facilities in this state."

#### Conclusion of Law

Based on the Findings of Fact and site certificate conditions contained in Parts I through IV of this Order and Appendix 2 which show that the facility can meet EFSC's land use, public health and safety, and environmental standards, EFSC finds that the application by PP&L for siting, construction, and operation of a 500 kV transmission line and its relating and supporting facilities (including, as to BPA, Option C only) is consistent with the protection of the public health and safety, and is in compliance with the energy policy and air, water, solid waste, land use, and other environmental protection policies of this state.

# B. Compliance with the Energy Policy of Oregon, ORS 469.010

"469.010 Legislative findings. The Legislative

Assembly finds and declares that:

- "(1) Continued growth in demand for nonrenewable energy forms poses a serious and immediate, as well as future, problem. It is essential that future generations not be left a legacy of vanished or depleted resources, resulting in massive environmental, social and financial impact.
- "(2) It is the goal of Oregon to promote the efficient use of energy resources and to develop permanently sustainable energy resources. The need exists for comprehensive state leadership in energy production, distribution and utilization. It is, therefore, the policy of Oregon:
- "(a) That development and use of a diverse array of permanently sustainable energy resources be encouraged utilizing to the highest degree possible the private sector of our free enterprise system.
- "(b) That through state government example and other effective communications, energy conservation and elimination of wasteful and uneconomical uses of energy and materials be promoted. This conservation must include, but not be limited to, resource recovery and materials recycling.
- "(c) That the basic human needs of every citizen, present and future, shall be given priority in the allocation of energy resources, commensurate with perpetuation of a free and productive economy with special attention to the preservation and enhancement of environmental quality.
- "(d) That state government assist every citizen and industry in adjusting to a diminished availability of energy.
- "(e) That energy-efficient modes of transportation for people and goods shall be encouraged, while energy-inefficient modes of transportation shall be discouraged.
- "(f) That cost-effectiveness be considered in state agency decision-making relating to energy sources, facilities or conservation, and that cost-effectiveness be considered in all agency decision-making relating to energy facilities.
  - "(g) That state government shall provide a source

of impartial and objective information in order that this energy policy may be enhanced."

#### Conclusion of Law

Based on the Findings in Sections I through V of this Order, EFSC finds that the transmission line and related and supporting facilities (including, as to BPA, proposed Option C only) proposed by PP&L would ensure the reliable distribution of electrical energy needed for a productive economy and basic human needs to a significant region of Oregon, while at the same time preserving and enhancing the environmental quality of Oregon.

### C. Waiver of Time Requirements of ORS 469.390

"Except as provided in section 4, chapter 609, Oregon Laws 1971, and ORS 469.410, no site certificate shall be issued under ORS 469.300 to 469.570 and 469.992 until the entire review time prescribed by ORS 469.370 has been utilized, except that the council may waive the time requirement if, pursuant to ORS 469.470, area studies of the entire state for that type of energy facility have been completed or have been determined to be unnecessary."

#### Conclusion of Law

1. This facility is of a type for which it has not been determined by EFSC, pursuant to ORS 469.470, necessary to be limited to suitable or unsuitable areas. Therefore, EFSC finds that a waiver of the time limits of ORS 469.390 is appropriate and in the public interest.

# E. Compliance with ORS 469.400(3) and (4)

\* \* \* \*

"(3) The site certificate shall contain conditions for the protection of the public health and safety and shall require both parties to abide by state law and

rules of the council in effect on the date the site certificate is executed, except that upon a clear showing that there is danger to the public health and safety that requires stricter laws or rules, the state may, subject to ORS 469.500, require compliance with such stricter laws or rules.

"(4) The site certificate shall contain the applicant's warranties as to its abilities required under subsection (3) of ORS 469.470, its provisions as to protection of the public health and safety and as to time of completion of construction."

### Findings of Fact

- 1. The site certificate attached hereto as Appendix 2 contains conditions for the protection of the public health and safety which are necessary for the protection of the public health and safety, and to ensure compliance with EFSC standards in effect at the time this order is issued. The site certificate in Appendix 2 also requires both parties to abide by state law and the rules of the Council in effect on the date the site certificate is executed.
- 2. The site certificate in Appendix 2 contains the applicant's warranties as to its abilities required under subsection (3) of ORS 469.470, protection of the public health and safety, and completion of the project.

#### Conclusion of Law

1. EFSC finds that the site certificate contained in Appendix 2 complies with the requirements of ORS 469.400(3) and (4). Any other conditions proposed by the parties to this proceeding not incorporated in Appendix 2 either are not supported by the record or are not required for the purposes of ORS 50 - FINAL ORDER AND SITE CERTIFICATE

VI

# <u>Ul</u>timate Findings and Order

Based on the Findings of Fact and the Conclusions of Law contained in Parts I through V of this order, EFSC finds that a site certificate consistent with the language and conditions in Appendix 2 of this order should be issued to the Pacific Power & Light Company for the construction of a 500 kV transmission line between Eugene and Medford, Oregon, as described and subject to the conditions in the site certificate. The site certificate shall be effective upon execution by both parties. The time period required by ORS 469.390 shall be waived.

IT IS SO ORDERED.

Allen R. Nistad, Chairman

Energy Facility Siting Council

DATED this 20 day of

\_\_, 1982.

NOTE: Appeal of this order may be made to the Oregon Supreme Court in the manner provided by ORS 469.400(1).

# APPENDIX I

# Exhibits

Party	No.	Description	Date Admitted	Transcript Page
PP&L	1	Routing Study Report	1/26/82	28
PP&L	2	Map of NW Transmission System	1/26/82	28
PP&L	3	Cost Summary	1/26/82	28
PP&L	4	Spencer-Dixonville Existing	1/26/82	28 28
		Transmission Line Corridor		26
PP&L	5	Spencer-Dixonville Proposed Transmission Line Corridor	1/26/82	28
PP&L	6	Corridor Deviations	1/26/82	28
PP&L	7	Graph of Eugene-Medford 500 kV	1/26/82	28
	•	Transmission Project Schedule	1/20/02	2.0
PP&L	8	Forecasted Economic and Demo-	1/26/82	28
FIME	C)	graphic Variables 1981-1983	1/20/02	20
PP&L	9		1/26/02	20
РРαц	9	Forecasted Sales of Electricity by SectorMegawatt Hours, 1981-1983	1/26/82	28
PP&L	10	Forecast System Firm Loads	1/26/82	28
PP&L	11	Map of PP&L SW Division	1/26/82	28
PP&L	12	1/20/82 Letter from BPA to PP&L	1/26/82	33-34
PP&L	13			
		Summary Description of Project	1/26/82	28
PP&L	14	Testimony of Rodney Boucher re Need for Facility	1/26/82	28
PP&L	15	Testimony of Scott Hannigan re Need for Facility	1/26/82	28
PP&L	16	Supplemental Testimony of Paul Higgins re Need for Facility	1/26/82	36
PP&L	17	Supplemental Testimony of Rodney Boucher re Need for Facility	1/26/82	36
PP&L	18	Supplemental Testimony of Scott Hannigan re Need for Facility	1/26/82	36
PP&L	19	PP&L Site Certificate Application	1/26/82	37
PP&L	20	12/22/81 Letter from PUC to PP&L	1/26/82	39
PP&L	21			
		1/8/82 Letter from PP&L to PUC	1/26/82	39
PP&L	22	Testimony of Andrea Walters re Financial Assurance	1/26/82	176
PP&L	23	PP&L's Responses to Inter- rogatories Submitted by Chris Attneave	3/3/82	21
PP&L	24	Oregon DOE 6th Annual Report	3/3/82	46
PP&L	25	2/8/82 Letter from Bach to	3/3/82	156
		Ostrander with Attachments		
PP&L	26	2/3/82 Letter from Bach to Attneave with Attachments	3/3/82	197
PP&L	27	2/26/82 Letter from Bach to Ostrander with Attachments	3/3/82	. 198

Party	No.	Description	Date Admitted	Transcript Page
PP&L	28	Testimony of Paul Higgins re Water Rights	3/3/82	201
PP&L	29	Testimony of Paul Higgins re Organizational, Managerial & Technical Expertise	3/3/82	211
PP&L	30	Testimony of Joseph Bell re Noise	3/3/82	221
PP&L	31	Testimony of Carl Fishback re Electrical Fields and NESC	3/3/82	221
PP&L	32	Testimony of Ron Garand re Radio and TV Interference	3/3/82	221
PP&L	33	Testimony of Paul Higgins re Environmental Impact	6/29/82	77
PP&L	34	Biographical Sketch of Morlan W. Nelson	6/29/82	114
PP&L	35	Suggested Practices for Raptor Protection on Power Lines	6/29/82	171
PP&L	36	Testimony of Paul Higgins re Land Use	6/30/82	144
PP&L	37	Statewide Land Use Planning Goals Consistency Evaluation	6/30/82	129
PP&L	38	Jackson County Comprehensive Plan Compatibility Evaluation	Not Adm:	itted
PP&L	39	Douglas County Comprehensive Plan Compatibility Evaluation	6/30/82	144
PP&L	40	Lane County Comprehensive Plan Compatibility Evaluation	6/30/82	144
PP&L	41	Testimony of Richard Soderberg re Land Use	6/30/82	234
PP&L	42	Ultimate Development Impacts	6/30/82	234
PP&L	43	Testimony of Eldon Swank re Land Use	7/1/82	4
PP&L	44	5/21/82 Letter from Jackson Co. Counsel to PP&L	7/1/82	39
PP&L	45	5/25/82 Letter from PP&L to Jackson Co. Counsel	7/1/82	39
PP&L	46	Testimony of Paul Higgins re Socioeconomic Impacts	7/1/82	71
PP&L	47	Testimony of Paul Higgins re Alternatives	7/1/82	101
Attneave	1	Proposed Site Certificate Con- ditions	7/1/82	87
EFSC	1	Draft Environmental Impact Statement	6/29/82	10
EFSC	2	Technical Investigations	6/29/82	10
EFSC	3	Testimony of Environmental Impact Statement Contractors	6/29/82	10
EFSC	4	Slides	6/29/82	11
EFSC	5	Consistency Review	6/29/82	174
EFSC	6	Notices	7/1/82	141

<u>Party</u>	No.	Description	Date Admitted	Transcript Page
EFSC	7	4/29/82 Letter from Ostrander to All Parties with Attachments	7/1/82	145
Rogers	1	Testimony of Stone and Werschkul	6/29/82 6/30/82	85 37
Rogers	2	Jackson County Consistency Statement	6/30/82	192
Gilkey	1	Photographs	3/3/82	209
Gilkey	2	Letter from Gilkey to Sage with with Attachments	6/29/82	105
Gilkey	3	Testimony of Robert Gilkey and Robert Storey	6/29/82	105
Gilkey	4	Storey and Gilkey Agreement with PP&L	6/29/82	105
SORE	1	Testimony of SORE	6/29/82	107
Warren	1	Testimony of James Saul re Environmental Impact, Land Use and Socioeconomic Impact	6/29/82	110
Warren	2	Metro Plan Update: Vegetation/ Wildlife/Wildlife Habitats	6/30/82	40
Warren	3	Plan Diagram	6/30/82	97
Warren	4	BPA Forecasts of Electricity Consumption	6/30/82	179
Warren	5	PNUCC 5/10/82 Memo re PNUCC N.W. Regional Forecast	6/30/82	179
Warren	6	4/30/82 Letter from BPA to Interested Parties	6/30/82	227
Warren	7	Testimony of Charles E. Warren	6/30/82	230
Clark	1	Photographs	6/30/82	4
Clark	2	A Workshop of Raptors and Energy Developments	6/29/82	171
Clark	3	Qualification of David Werschkul, Ph.D.	6/30/82	21
Jackson County	1	Certified True Copy of Newspaper Publication	6/30/82	57
Jackson County	2	Certified True Copy of Notice of Public Hearing to Property Owners	6/30/82	57
Jackson County	3	6/28/82 Letter from Jackson Co. Counsel to Ostrander with Attachments	6/30/82	57
Jackson County	4	Certified True Copy of Sign-Up Sheets for Public Hearing	6/30/82	62
Jackson County	5	Ordinance Amending Jackson Co. Zoning Ordinance to Provide Transmission Facility Siting Permit	6/30/82	62
Eugene	1	Testimony of City of Eugene	6/30/82	109
Eugene	2	Metro Area Central Plan	6/30/82	109
Eugene	3	South Hills Study	6/30/82	109