

AMENDMENT NUMBER 3

Eugene-Medford 500 kV Transmission Line  
Site Certification Agreement

between

The State of Oregon  
acting by and through Its  
Energy Facility Siting Council

and

PacifiCorp  
(dba Pacific Power & Light Company)

Recitals

1. The Eugene-Medford 500 kV Transmission Line Site Certification Agreement ("Agreement") was executed by Pacific Power & Light Company ("Pacific")<sup>1</sup> and the State of Oregon acting by and through its Energy Facility Siting Council ("EFSC") on December 21, 1982. The Agreement authorizes Pacific to build and operate a 500 kV transmission line and associated facilities between Eugene and Medford, Oregon. Amendment Number 1 to the Agreement, which amended Section III.A., concerning construction completion dates, was executed between Pacific and EFSC on July 15, 1988. Amendment Number 2, which amended Section II.A. and II.B.3., concerning the Line's route and a substation location, was executed on June 26, 1990.
2. New developments in transmission line engineering have led Pacific to determine that a different tower

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<sup>1</sup> Pacific Power & Light Company was merged into PacifiCorp, an Oregon corporation on January 9, 1989. By virtue of that merger, PacifiCorp succeeded to all of the rights and obligations of Pacific Power & Light Company.

configuration would be preferable to the tower design originally approved in the Agreement, and that different conductor specifications would be desirable. Redesign of the towers will also require additional time in an already tight construction schedule. Accordingly, Pacific has requested that EFSC amend the Agreement to authorize the following actions:

a. Use of triangular or "delta" configuration towers in all locations along the line route except where single pole self-supporting towers will be installed due to right of way constraints. Delta phase configuration towers are generally depicted on Exhibit A-1 attached hereto;

b. Minor modifications of the conductor and shield wire sizing; and

c. Extension of completion of construction to December 31, 1994.

#### Findings and Conclusions

1. Pacific's requested amendment, its application therefor, and comments received were reviewed and considered by EFSC at its public meeting on October 26, 1990.

2. Based on its review and consideration, EFSC finds that Pacific's requested amendment is reasonable, does not adversely affect the public health, safety, or welfare, and is consistent with all applicable standards, including applicable land use plans. EFSC agrees that the requested amendment to the Agreement is desirable and should be made pursuant to Section VII.F. of the Agreement.

In consideration of the foregoing, the following Amendment Number 3 to the Agreement is made and entered into by the State of Oregon, acting by and through its Energy Facility Siting Council, and PacifiCorp, an Oregon corporation doing business as Pacific Power & Light Company:

1. Section II.B.1. of the Agreement is deleted in its entirety and replaced with the following (new material is in bold and underlined; deleted material is in bold and bracketed):

1. The transmission line will be an overhead three-phase AC line with a nominal capacity of 500,000 Volts. Each phase will consist of a three-conductor bundle, making a total of nine conductors. Lightning protection will be provided where appropriate by two shield wires supported at the peaks of each tower. The conductors will be suspended from the towers by "V" string insulators (25 on each side) and will weigh approximately 600 pounds. Conductors will be approximately 1.4 [1.316] inches in diameter and composed of stranded aluminum with a [single] steel wire core and weighing approximately 1.7 [1.288] pounds per foot. The three conductors of each phase will be 18 inches apart and will be separated by spacers at intervals throughout each span. Spacing between phases will be 37.0 [30.5] feet. Two shield wires approximately 1/2 inch in diameter [of 3/8 inch EHS galvanized steel] will be installed at the peaks of each tower[.] for lightning protection, and may contain optical fibres for communication purposes.

2. Section II.B.2. of the Agreement is deleted in its entirety and replaced with the following (new material is in bold and underlined; deleted material is in bold and bracketed):

2. The proposed towers will be free-standing metal structures. Different towers design types will

be used according to structural requirements at a particular tower sites and the provisions of this Agreement[.]; however, "delta" configuration towers (as generally depicted in the Exhibit attached hereto) will be utilized at all locations permitted by right of way width constraints. The height of a typical single-circuit lattice-type tangent tower will be [120] 122 feet, and [100] 110 feet for angle and deadend towers. Such typical tangent towers will weight approximately [17,000] 25,000 pounds each. Tower base dimensions will vary with tower height; however, a typical tangent structure base will occupy 800 square feet, [measure 22 feet by 29 feet at the base,] and tower structures will normally be erected on cast-in-place concrete cylinder footings using auger excavation techniques, unless other techniques are approved by the project review officer(s). Tower height, location, and span length will be governed primarily by the terrain being traversed. Based on a 120-F temperature, t[T]he [minimum] clearance between conductors and the ground surface will be 38 feet, and clearance will be increased to 45 feet for crossing major highways, 42 feet for cultivated land, and 55 feet for railroads. The average span length will be approximately 1,200 feet, resulting in 4.3 structures per mile. The transmission line will be designed and constructed in compliance with the standards of the latest edition of the National Electrical Safety Code.

3. Section III.A. of the Agreement is deleted in its entirety and replaced with the following (new material is in bold and underlined, deleted material is in bold and bracketed):

A. Completion of Construction

Pacific warrants that erection of towers and stringing of conductors will not begin before January 1, 1991 and construction of the transmission line and associated facilities will be completed by December 31, 1994 [1993].

IN WITNESS WHEREOF, this Amendment Number 3 to the Eugene-Medford 500 kV Transmission Line Site Certification

Agreement has been executed by the Chairman of the Energy Facility Siting Council of the State of Oregon, and by PacifiCorp, as below subscribed this 26<sup>th</sup> day of October, 1990.

STATE OF OREGON  
ENERGY FACILITY SITING COUNCIL

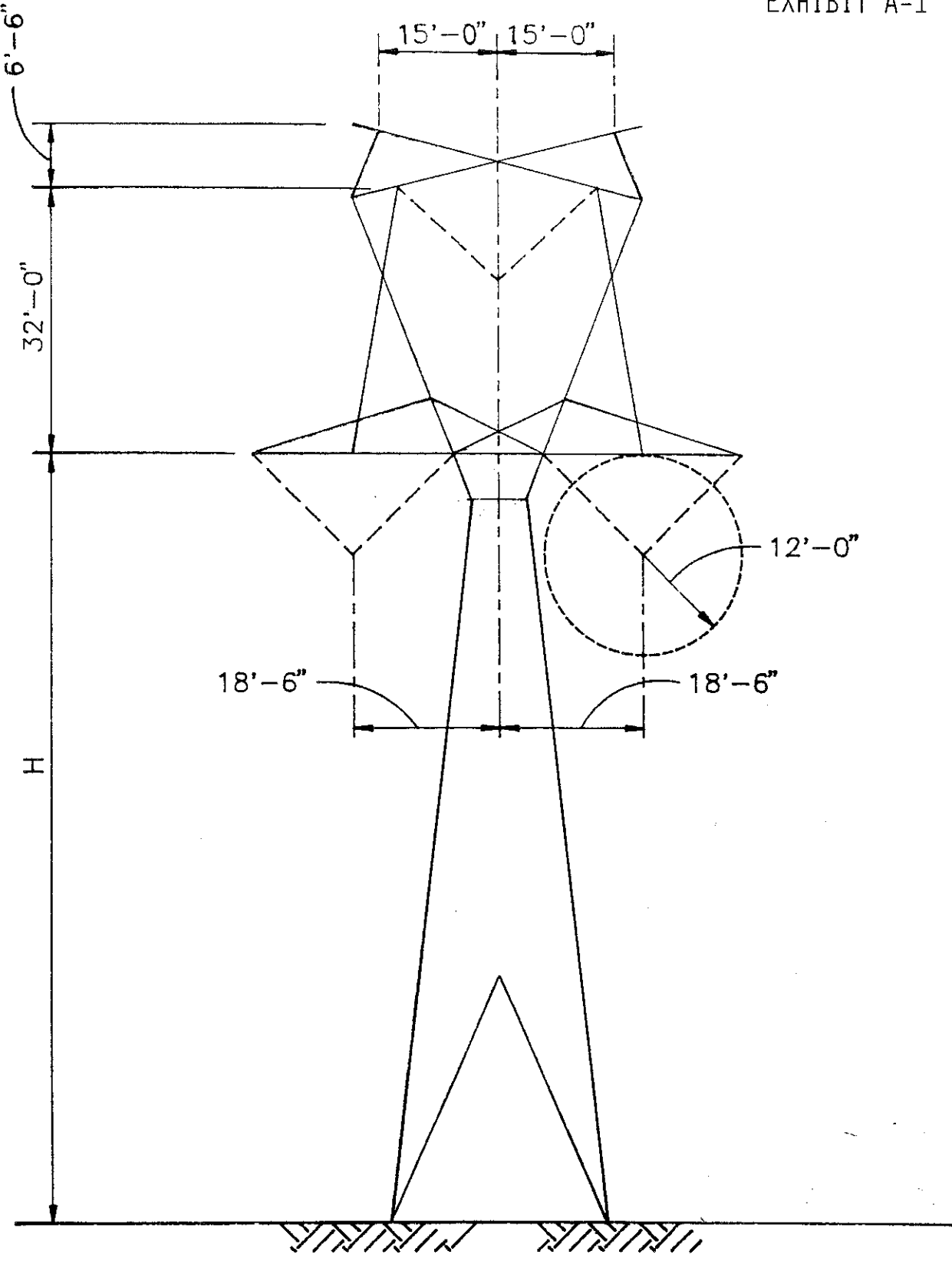
By: Marlene Bayless Mitchell  
Chairman

Attest: Wanda Stewart-Smith  
Secretary

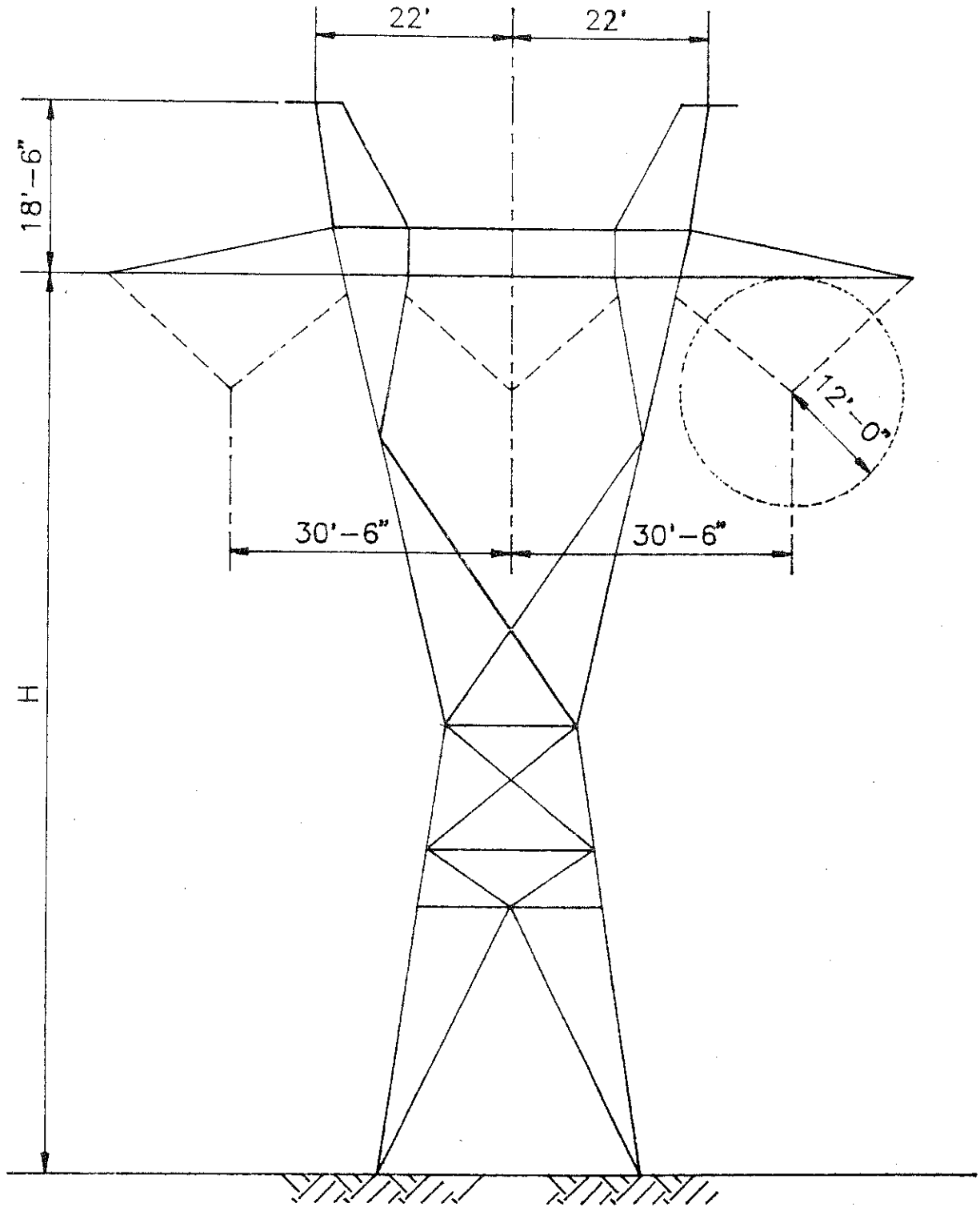
PACIFICORP

By: James A. Bellamy

Attest: Sam F. Howbell  
Assistant Secretary



DELTA PHASE CONFIGURATION



FLAT PHASE CONFIGURATION