

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF COLORADO

\* \* \*

IN THE MATTER OF THE APPLICATION OF )  
TRI-STATE GENERATION AND TRANSMISSION )  
ASSOCIATION, INC., (MAILING ADDRESS: )  
P.O. BOX 33695, DENVER, COLORADO )  
80233; OFFICE LOCATION: 12076 GRANT )  
ST., THORNTON, COLORADO 80241), AND )  
COLORADO-UTE ELECTRIC ASSOCIATION, )  
INC., P.O. BOX 1149, MONTROSE, COLO- )  
RADO 81401, FOR A CERTIFICATE OF )  
PUBLIC CONVENIENCE AND NECESSITY TO )  
CONSTRUCT A 345 KV TRANSMISSION LINE, )  
WHICH LINE WILL INITIALLY BE OPERATED )  
AT 230 KV, PROPOSED TO ORIGINATE AT )  
THE HAYDEN, COLORADO SUBSTATION OF )  
THE UNITED STATES OF AMERICA, AND )  
TERMINATE AT A POINT ON THE ELECTRIC )  
SYSTEM OF PUBLIC SERVICE COMPANY OF )  
COLORADO TO BE KNOWN AS THE BLUE )  
RIVER SUBSTATION NEAR DILLON, COLO- )  
RADO, TOGETHER WITH ASSOCIATED )  
EQUIPMENT, SUCH LINE AND EQUIPMENT )  
TO BE KNOWN AS THE HAYDEN-BLUE RIVER )  
PROJECT. )

APPLICATION NO. 33419

RECOMMENDED DECISION OF  
EXAMINER ROBERT E. TEMMER

GRANTING APPLICATION

- - - - -  
April 27, 1981  
- - - - -

Appearances: John J. Conway, Esq., Denver,  
Colorado, for Applicant Tri-State  
Generation and Transmission  
Association, Inc.;

John R. McNeill, Esq., Montrose,  
Colorado, for Applicant  
Colorado-Ute Electric Association,  
Inc.;

Dudley Spiller, Jr., Assistant Attorney  
General, Denver, Colorado, for the  
Staff of the Commission.

STATEMENT

On December 30, 1980, Tri-State Generation and Transmission Association, Inc., hereinafter referred to as "Tri-State," and Colorado-Ute Electric Association, Inc., hereinafter referred to as "Colorado-Ute" (collectively referred to as "Applicants"), filed an application with the Commission for a certificate of public convenience and necessity to construct an electric transmission line between the Hayden, Colorado, Substation of the United States of America, and the Blue River Substation of Public Service Company of Colorado, near Dillon, Colorado, together with associated equipment.

On January 7, 1981, the Commission assigned Application No. 33419 to the matter and gave due and proper notice of the filing of the application. No protest or motion to intervene was filed on behalf of any person, firm, or corporation.

The Commission issued a notice setting the matter for a hearing to be held on Wednesday, April 15, 1981, at 9 a.m., in the Auditorium, Commissioners' Office, 221 West Victory Way, Craig, Colorado. The hearing was held as scheduled before Examiner Robert E. Temmer. Testimony was heard from Mr. Jack P. Wolfe, Tri-State's Design & Construction Division Manager, from Mr. Frederick A. Kuhlemeier, Colorado-Ute's Vice-President of the System Planning Division, and from Mr. Bruce S. Mitchell, a Staff Public Utilities Engineering Analyst.

Fourteen exhibits were offered and admitted into evidence.

At the conclusion of the hearing, the Applicants were directed to file a proposed decision, and the subject matter was taken under advisement. The proposed decision was received on April 21, 1981.

Pursuant to the provisions of 40-6-109, CRS 1973, the Examiner hereby transmits to the Commission the record and exhibits of this proceeding along with this written recommended decision.

#### FINDINGS OF FACT AND CONCLUSIONS THEREON

Based upon all the evidence of record, the following facts are found and conclusions thereon drawn:

1. Applicant Tri-State is a public utility as defined in 40-1-103, CRS 1973, and is engaged in the generation, purchase, transmission, and transformation of electric power and energy for sale at wholesale to its 25 members within the states of Colorado, Nebraska, and Wyoming. Tri-State presently owns and operates generating facilities in the states of Colorado and Wyoming, and transmission and transformation facilities in the states of Colorado, Wyoming and Nebraska.

2. Applicant Tri-State's Colorado members and the present location of such members are as follows:

Highline Electric Association - Holyoke, Colorado  
K.C. Electric Association, Inc. - Hugo, Colorado  
Morgan County Rural Electric Association - Fort  
Morgan, Colorado  
Mountain Parks Electric, Inc. - Granby, Colorado  
Mountain View Electric Association, Inc. - Limon,  
Colorado  
Poudre Valley Rural Electric Association, Inc. -  
Fort Collins, Colorado  
Union Rural Electric Association, Inc. - Brighton,  
Colorado  
Y-W Electric Association, Inc. - Akron, Colorado

3. Applicant Colorado-Ute is a public utility as defined in 40-1-103, CRS 1973, and is engaged in the generation, purchase, transmission and transformation of electric power and energy for sale at wholesale to its members, all of which are located within the State of Colorado. Colorado-Ute presently owns and operates generating, transmission and transformation facilities in the state of Colorado.

4. Applicant Colorado-Ute's members and the present location of such members are as follows:

Delta-Montrose Rural Power Lines Association - Delta,  
Colorado  
Empire Electric Association, Inc. - Cortez, Colorado  
Grand Valley Rural Power Lines, Inc. - Grand Junction,  
Colorado

Gunnison County Electric Association, Inc. - Gunnison, Colorado  
 Holy Cross Electric Association, Inc. - Glenwood Springs, Colorado  
 La Plata Electric Association, Inc. - Durango, Colorado  
 Sangre de Cristo Electric Association, Inc. - Buena Vista, Colorado  
 San Isabel Electric Services, Inc. - Pueblo, Colorado  
 San Luis Valley Rural Electric Cooperative, Inc. - Monte Vista, Colorado  
 San Miguel Power Association, Inc. - Nucla, Colorado  
 Southeast Colorado Power Association, Inc. - La Junta, Colorado  
 White River Electric Association, Inc. - Meeker, Colorado  
 Yampa Valley Electric Association, Inc. - Steamboat Springs, Colorado.

In addition, Intermountain Rural Electric Association, Sedalia, Colorado, recently applied for and was granted membership in Colorado-Ute, pending regulatory approvals that may be required. However, Colorado-Ute does not presently serve Intermountain and does not plan to do so until the summer of 1981.

5. Applicants have requested authority to construct the facilities described in the following paragraph, and the Commission has jurisdiction over Applicants and the subject matter of this proceeding by virtue of the provisions of 40-5-101, CRS:1973.

6. Applicants propose to construct, own, operate, and maintain, in conjunction with the Platte River Power Authority, the United States of America, and Public Service Company of Colorado, the following described electrical facilities if this application is granted:

A 345 kV transmission line, which line will initially be operated at 230 kV, proposed to originate at the Hayden, Colorado, Substation of the United States of America, and terminate at a point on the electric system of Public Service Company of Colorado to be known as the Blue River Substation near Dillon, Colorado, together with associated equipment, such line and equipment to be known as the Hayden-Blue River Project. Said line will be approximately 100 miles of 345 kV single circuit steel tower transmission line, with the phase conductors consisting of two 1272 MCM 45/7 ACSR conductor per phase shielded by a total of two 7 # 8 alumoweld shield wires.

7. The aforesaid five parties have negotiated a Participation Agreement (Exhibit No. 4) which, among other things, provides that the parties will have ownership interests, cost responsibilities and firm capacity entitlements as follows:

<u>Party</u>	<u>Ownership Interests</u>	<u>Cost Responsibilities</u>	<u>Firm Capacity Entitlements</u>
Tri-State	55 5/9%	50%	50%
Colorado-Ute	22 2/9%	20%	20%
Platte River	22 2/9%	20%	20%
United States	0 %	10%	10%
Public Service	0 %	0%	0%

In this Agreement Tri-State is designated as the Project Manager for the Project and as the Construction Manager for the Hayden-Blue River Transmission Line; the United States is designated as the Construction Manager for the Hayden Substation termination facilities; and Public Service Company is designated as the Construction Manager for the Blue River Substation termination facilities.

8. It is anticipated that construction of the foregoing line and equipment will begin in the summer of 1982 and that said line and equipment will be completed and placed in service in the winter of 1983-1984. The line and equipment will be located in the counties of Routt, Grand and Summit, State of Colorado.

9. It is anticipated that the cost of the foregoing line and equipment will be approximately \$38,400,000, that the cost of the Hayden Substation will be approximately \$410,000, and that the cost of the Blue River Substation will be approximately \$696,000. Tri-State and Colorado-Ute propose to finance their shares of the aforesaid line and equipment through debt financing under the guaranteed loan program of the Rural Electrification Administration of the United States.

10. Applicants have the financial and other abilities to carry out the construction, operation and maintenance of the aforesaid line and equipment.

11. The aforesaid line will be constructed generally in mountainous terrain, and will connect the Hayden Substation of the United States of America to the Blue River Substation of Public Service Company.

12. Applicants, together with Platte River Power Authority, the United States and Public Service Company, have given extensive consideration to environmental factors in connection with the location and design of the proposed line and equipment. Specifically, various analyses were undertaken and were the basis for a draft Environmental Analysis which was submitted to the Rural Electrification Administration, the lead federal agency involved. Said Analysis (Exhibit No. 7) sets forth the details of the purpose, project description, existing environment, environmental effects, alternatives to action, long term productivity, and resource commitment in connection with the proposed line and equipment.

13. The proposed facilities have been located and designed, and will be constructed and operated in such a manner as to substantially comply with all pertinent local, state, and federal environmental and land use standards, laws, and regulations.

14. No public utilities in whose certificated territories the proposed facilities are to be constructed, to wit, Mountains Parks Electric Association, Inc., and Yampa Valley Electric Association, Inc., have any objection to the granting of this application.

15. The parties have worked closely with local, county, state and federal governmental agencies, and with the public generally, in connection with the proposed line and equipment. Specifically, a public information meeting was held in November, 1978, attended by representatives of the Bureau of Land Management, the United States Forest Service, the Colorado Division of Wildlife, and the Soil Conservation Service, as well as representatives of the Counties of Routt, Grand, Summit and Jackson. In May, 1979, six corridor selection workshops were held, attended by representatives of the preceding organizations, plus private citizens, county planners and commissioners, and representatives of the Northwest Colorado Council of Governments. In November, 1979, two public meetings were held, one in Steamboat Springs, Colorado, and one in Kremmling, Colorado. In December, 1979, an interagency meeting was held. In September, 1980, and February, 1981, meetings were held with representatives of Routt County, and a meeting is tentatively scheduled to be held in April, 1981, with representatives of Summit County (Exhibit No. 8).

16. The Applicants considered a number of transmission line alternatives. Specifically, Tri-State considered six alternatives set



forth on Exhibit No. 9. The cost of these six alternatives ranged from a low of \$26,132,900 to a high of \$41,051,800. The alternatives selected by Tri-State, based upon its consideration of applicable factors, appears to be a reasonable one. Colorado-Ute specifically considered two other alternatives, but neither one of these alternatives appear to be as good as the one selected by Colorado-Ute here. The alternatives selected here will reduce transmission losses on the overall interconnected transmission system, will enhance system stability, will have better reliability and more capacity than most of the other alternatives studied, will afford the parties more opportunities for economy interchanges, and will provide additional bulk transfer capacity between the Hayden and Craig generating stations, and eastern load centers of certain owners of these facilities (which is now limited to one 345 kV line between Craig and Ault, Colorado).

17. There is a need for the aforesaid line and equipment. Said need arises out of the necessity to connect the Hayden Substation located near Hayden, Colorado, to the Public Service Company system near Dillon, Colorado, so as to enhance the ability of Tri-State, Colorado-Ute, Platte River, the United States, and Public Service Company to more effectively operate their interconnected electric systems and more effectively provide services for each other under various agreements among said parties. It appears that the present 138 kV transmission system in the area is presently heavily loaded. Said system is inadequate to deliver the output of the generating stations at Hayden and Craig, Colorado, when reserve requirements are taken into account. The summer peak loads of Mountain Parks Electric, Inc., Tri-State's member in the area, increased 33.1% between 1979 and 1980 (Exhibit No. 7, Table 2.5-1), and are expected to increase 46.7% between 1981 and 1982 and 24.1% between 1982 and 1983. The winter peak load of said member is also expected to increase. Much of the increase is expected to occur as a result of the construction of the Windy Gap Irrigation Project, plus some increase due to growth in commercial, residential and recreational usage. (Exhibit No. 7, Table 2.5-2). In addition, the summer peak of Mountain Parks Electric is projected to increase from 49,700 kW in 1983 to 61,100 kW in 1991, and the winter peak is projected to increase from 37,400 kW in 1983 to 64,900 kW in 1991.

18. The present loading on the transmission system in the area does not justify the initial operation of the foregoing facilities at more than 230 kV, although it is anticipated that the facilities will eventually be operated at 345 kV. However, the United States Forest Service has indicated that since the proposed line may be the last one permitted in the area, it should be constructed at the larger voltage, 345 kV. Further, the difference in constructing the line at 345 kV rather than at 230 kV is relatively small, in the magnitude of \$10,000 to \$20,000 per mile, or about 3.5% to 7% of the total cost. In addition, studies conducted by the parties indicate that there will periodically be a problem with surge impedance loading limitations if the line is not constructed at 345 kV. Also, construction of the line at only 230 kV could preclude Tri-State and others from transferring electric power and energy from western Colorado to eastern Colorado, if and when additional generation is constructed in western Colorado, a matter which is presently under consideration by the parties. Finally, it appears that the higher voltage as proposed here will enhance long-range planning and will afford transfer capacity to the parties. For these reasons, it appears that construction of the proposed line at 345 kV, with initial operation to be at 230 kV, is in the public interest.

19. In Decision No. C79-111 dated July 27, 1979, entered in Case No. 5693, the so-called Generic Rate Case, the Commission stated that "transmission facilities should be sized and built, not only to serve a particular utility, but also to promote interconnection and coordinated operations among all utilities of the region." The facilities here involved appear to meet said criteria.

20. The Boards of Directors of both Tri-State and Colorado-Ute have authorized the execution of the Participation Agreement, thereby evidencing their approval of the Applicants participating in this Project upon the terms and conditions set forth in said Agreement. (Exhibit Nos. 10 and 14).

21. The public convenience and necessity requires that the application be granted and a certificate of public convenience and necessity be issued as set out herein.

22. Pursuant to 40-6-109, CRS 1973, it is recommended by the Examiner that the following Order be entered.

### O R D E R

#### THE COMMISSION ORDERS THAT:

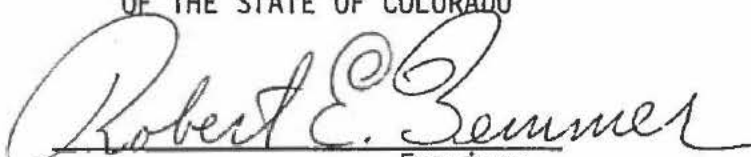
1. Application No. 33419 entitled in the Matter of the Application of Tri-State Generation and Transmission Association, Inc., and Colorado-Ute Electric Association, Inc., for a certificate of public convenience and necessity to construct a 345 kV transmission line, which line will initially be operated at 230 kV, proposed to originate at the Hayden, Colorado, Substation of the United States of America, and terminate at a point on the electric system of Public Service Company of Colorado to be known as the Blue River Substation near Dillon, Colorado, together with associated equipment, such line and equipment to be known as the Hayden-Blue River Project, be, and hereby is, granted, and this shall be a Certificate of Public Convenience and Necessity therefor.

2. This Commission shall retain jurisdiction of this matter to the end that it may make such further order or orders as it may deem to be proper or desirable.

3. This Recommended Decision shall be effective on the day it becomes the Decision of the Commission, if such be the case, and is entered as of the date hereinabove set out.

4. As provided by 40-6-109, CRS 1973, copies of this Recommended Decision shall be served upon the parties, who may file exceptions thereto; but if no exceptions are filed within twenty (20) days after service upon the parties or within such extended period of time as the Commission may authorize in writing (copies of any such extension to be served upon the parties), or unless such Decision is stayed within such time by the Commission upon its own motion, such Recommended Decision shall become the Decision of the Commission and subject to the provisions of 40-6-114, CRS 1973.

THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF COLORADO

  
Examiner

VC