

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

RECEIVED

IN THE MATTER OF:

APPLICATION OF KENTUCKY UTILITIES COMPANIES
FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND
NECESSITY FOR THE CONSTRUCTION OF TRANSMISSION
FACILITIES IN FRANKLIN, WOODFORD AND ANDERSON
COUNTIES, KENTUCKY

JUL 21 2005

PUBLIC SERVICE
COMMISSION

CASE NO. 2005-00154

DIRECT TESTIMONY OF OTTIS JONES

1. Q: Please state your name and address.

A: My name is Ottis Jones, and I live at 144 Nathan Forrest Drive, Hendersonville, Tennessee 37075.

2. Q: Please state the nature of your employment.

A: I have recently retired from R.W. Beck in Goodlettsville, Tennessee. I am now an independent consultant involved in the preparation of power supply evaluation, transmission planning, financing feasibility reports, contract negotiation, rate analyses, management studies and planning studies.

3. Q: Please describe your educational and professional background.

A: I am a graduate of Tennessee Technological University. I received my B.S. in Electrical Engineering in 1967. I have attached a summary of my professional experience with my testimony. (See Exhibit Number One.)

4. Q: Are you familiar with the present case pending before the Kentucky Public Service Commission, case number 2005-00154?

A: Yes. I am aware that Kentucky Utilities Company ("KU") filed its application for a certificate of public convenience and necessity for construction of transmission facilities in Franklin, Anderson and Woodford Counties, Kentucky, on May 11, 2005, with the Kentucky Public Service Commission.

5. Q: Are you sponsoring any exhibits?

A: Yes. A summary of my professional experience is attached as Exhibit Number One. A map of alternative routes is attached as Exhibit Number Two. And a cost analysis of alternatives is attached as Exhibit Number Three.

6. Q: What is the purpose of your testimony?

A: The purpose of my testimony is to advise the Public Service Commission that in the event there is a finding of immediate need for service, there are at least two alternative routes for providing electric service from Trimble County #2 to Tyrone that are more efficient and substantially cheaper in monetary and land use costs than the route proposed by KU. LG&E/KU states that under certain contingency conditions, when Trimble County # 2 is built: (1) The load on the West Frankfort to East Frankfort 138 kV transmission line exceeds the rating of the transmission line, and (2) the load on the East Frankfort to Tyrone 138 kV transmission line exceeds the rating of the transmission line. LG&E/KU proposed to construct a new 138 kV transmission line from the West Frankfort Substation to the Tyrone Substation. The two alternatives I am identifying do not impact the public and land use that LG&E/KU did not consider to the extent that they should have. Two cases, D-1 and D-2 are presented as more efficient and improved alternatives to the proposed LG&E plan.

7. Q: What have you reviewed in preparation for your testimony?

A: The Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company ("KU") for a Certificate of Public Convenience and Necessity for the Construction of Transmission Facilities in Franklin, Woodford, and Anderson Counties, Kentucky, Case No. 2005-00154; KU's Response to the Public Service Commission's First Data Request; the KU Response to the Concerned Citizens Data Request; and The Liberty Group consultant's report dated June 14, 2005. I have also observed the physical facilities located in Franklin County, Kentucky.

8. Q: Why is KU proposing to build this line?

A: LG&E/KU states that under certain contingency conditions, when Trimble County # 2 is built: (1) The load on the West Frankfort to East Frankfort 138 kV transmission line exceeds the rating of the transmission line, and (2) the load on the East Frankfort to Tyrone 138 kV transmission line exceeds the rating of the transmission line. LG&E/KU proposed to construct a new 138 kV transmission line from the West Frankfort Substation to the Tyrone Substation.

9. Q: Is there an immediate need for this line?

A: No. There is no immediate need for this line. The need is only discussed in association with approval and construction of what has been referred to as the Trimble County #2 generating facility ("TC2"). Presently, the date of operation of this facility is estimated to be 2010.

10. Q: Is the line dependant on the approval of TC2?

A: Yes, it is. Based on my review of the information previously identified, there is no need for construction of the proposed line by KU if TC2 is not operational.

11. Q: What does "contingency overload" mean?

A: This term is used to describe loads in excess of rating on a transmission line or substation when some other transmission is not in normal service. It is not tested, but is associated with the rating of the transmission line or substation.

12. Q: Is KU currently operating any other lines in Franklin County and Anderson County?

A: Yes. KU operates several. However, approximately 10-20 years ago, LG&E/KU constructed the existing 138 kV transmission line between the West Frankfort substation and the East Frankfort substation as a double circuit 138 kV transmission line. LG&E/KU currently operates one circuit at 138 kV and one circuit at 69 kV.

Operating the transmission line as a double circuit 138 kV line will solve the contingency capacity problem between the West Frankfort substation and the East Frankfort substation *in the event* TC2 becomes operational. Since LG&E/KU has planned for a double circuit 138 kV transmission line between West Frankfort and East Frankfort when the load reached the capacity of one of the 138 kV circuits, now is the time to implement what LG&E has planned for many years.

13. Q: Have you identified any alternative option which would be preferable to the route chosen by KU?

A: Based on information available, I developed two alternatives which are preferable to the proposed line referring to these options as Alternative Case D-1 and D-2. The two alternatives identified solve the capacity problem between West and East Frankfort substations as described above and solving the East Frankfort to Tyrone capacity problem.

The following is an explanation of **Alternative Case D-1 – Operate the double circuit, 7.54-mile West Frankfort to East Frankfort transmission at 138 kV and upgrade the capacity of the existing 10.62-mile East Frankfort to Tyrone 138 kV transmission line.**

For Case D-1, LG&E indicated (Michael G. Toll answer to question 3, CASE NO. 2005-00154, Response to Concerned Citizens' Data Request Dated: June 30, 2005) that the following improvements would be required:

See Exhibit Number Three for cost analysis.

The cases proposed by LG&E uses approximately 181 acres of land that is not needed or used in Case D (10 miles x 5,280 ft./mile x 150 feet/ 43,560 sq. ft/Acre).

The total estimated cost of this alternative is approximately \$6,000,000, which is less than any alternative considered by LG&E, and this alternative does not require additional land use.

The following is an explanation of Alternative Case D-2:

Alternative Case D-2 – Operate the double circuit, 7.54-mile West Frankfort to East Frankfort transmission at 138 kV and convert approximately 8-miles of the existing 69 kV transmission line to 138 kV from East Frankfort to the 138 kV line extending east from the Tyrone 138 kV substation.

For Case D-2, LG&E indicated (Michael G. Toll answer to question 3, CASE NO. 2005-00154, Response to Concerned Citizens' Data Request Dated: June 30, 2005) that the following improvements would be required: (Changes for D-1 underlined)

See Exhibit Number Three for cost analysis.

The total estimated cost of this alternative is approximately \$8,050,000 and this alternative requires less additional land use than the LG&E proposal, even if it requires additional widening of the right-of-way.

14. Q: Do any of these options meet KU's needs?

A: Both of the alternatives I developed relieve the contingency loading issues identified by KU, that would exist if TC2 is operational.

15. Q: Would rebuilding either 138 kilovolt line make the City of Frankfort or residents of Franklin County vulnerable to an outage on either one of the remaining lines?

A: No. In the two alternatives I developed, four (D-1) or five (D02) 138 kV transmission lines serve the East Frankfort Substation. Currently, and in the KU proposal, only three 138 kV serve the East Frankfort Substation. The additional 138 kV transmission lines should improve the reliability for the East Frankfort substation.

There is the possibility that a transformer would need to be added for 69 kV capacity at the East Frankfort substation. This additional transformer, if needed, would cost approximately \$500,000. However, installation of this additional transformer could reduce or diminish the additional transformer capacity needed at the West Frankfort substation.

16. Q: Does “the topography of the transmission system in the area limit the construction alternatives to the proposed Tyrone to West Frankfort 138 kilovolt line”?

A: No. I am proposing upgrading or rebuilding existing transmission lines on existing right of ways. This is generally the method of having the least impact on the community and environment.

17. Q: Will this line proposed by KU result in any unnecessary duplication of facilities?

A: Yes. Absolutely. Underutilized lines already exist that could serve KU's needs in the event TC2 becomes operational in 2010. KU constructed the East Frankfort to West Frankfort 138 kV double circuit and began operating it at 138 kV and 69 kV until it was needed to serve the public. Now the need has been stated by KU. There does not seem to be an argument to reserve the capacity until some future need arises.

18. Q: Is the route chosen by KU serving the interests of public convenience and necessity?

A: No. The transmission line as proposed by KU will use approximately 181 acres which will not be necessary under the least cost alternative I developed. It is more convenient for the public for KU to utilize existing rights of way and existing transmission lines.

19. Q: Do you have a recommendation for this Commission?

A: Case D-1 in my Summary is preferred over the proposal by KU. It is more economical and causes less impact on public convenience.

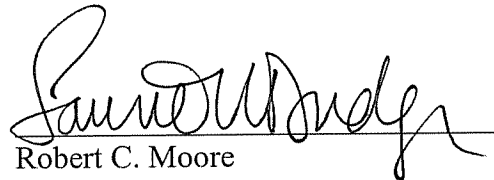
20. Q: Does this conclude your testimony?

A: Yes.

Robert M. Watt, III
Lindsey W. Ingram, III
STOLL, KEENON & PARK, LLP
300 West Vine Street, Suite 2100
Lexington, Kentucky 40507
(859) 231-3000

Elizabeth L Cocanougher
Senior Regulatory Counsel
LOUISVILLE GAS AND ELECTRIC COMPANY
220 West Main Street
Post Office Box 32010
Louisville, Kentucky 40232
(502) 627-4850

All on this the 21st day of July, 2005.



Robert C. Moore
Laurie K. Dudgeon

EXHIBIT 1

Ottis Jones is a Consultant. Mr. Jones' experience encompasses utility engineering, operating and management. Mr. Jones has extensive consulting experience. He is presently involved in the preparation of power supply evaluation, transmission planning, financing feasibility reports, contract negotiation, rate analyses, management studies, and planning studies.

Tennessee Technological University, B.S. Electrical Engineering

Volunteer State Community College: A.S. Business and Commerce

EXPERIENCE

Consultant, Hendersonville, Tennessee 2003 to present.

Consultant to various utilities relative to utility system power supply, transmission planning and construction, and

R. W. Beck, Inc., Goodlettsville, Tennessee, 1989 to 2003, Principal.

Principal in a National Engineering Firm providing engineering services principally in the Southeast relative to the design operation and maintenance of Electric Utilities.

R. W. Beck, Inc., Nashville, Tennessee, 1986 to 1989,

Executive Engineer.

Provided consulting services to Electric Utilities in the TVA area relative to the design, operation, and maintenance of Electric Utilities.

Allen & Hoshall, Nashville, Tennessee, 1983 to 1986,

Engineer and Manager of Nashville Office.

Provided consulting services relative to the design, operation, and maintenance of Electric, Water, Wastewater, and Gas Utilities.

R. W. Beck, Inc., Denver, Colorado, 1979 to 1983,

Principal Engineer.

Provided consulting services relative to the design, operation, and maintenance of Electric Facilities for Utilities and Industries.

Tri-County Electric Membership Corporation, Lafayette, Tennessee, 1976 to 1979,

General Manager.

Managed overall operations of Electric Cooperative.

Tri-County Electric Membership Corporation, Lafayette, Tennessee, 1973 to 1976,

Superintendent of Engineering and Operations.

Supervised the engineering and operations of Electric Cooperative relative to design, construction, operations, and maintenance.

Tri-County Electric Membership Corporation, Lafayette, Tennessee, 1969 to 1973,

Chief Engineer.

Supervised and performed engineering, planning, and design of all distribution facilities.

Florida Power and Light Company, Cocoa, Florida, 1967 to 1969, Field Engineer.

Performed engineering design for underground and overhead electrical facilities.

His utility experience spans more than 30 years, which includes 12 years in utility engineering, operations, and management; two years with a large investor-owned utility; and 10 years with a large distribution cooperative.

He has extensive consulting experience in preparing financing feasibility reports, contract negotiations, rate analyses, management studies and planning studies.

In addition, his consulting experience includes energy resource planning, energy supplies, rate, and contract negotiations, and providing expert testimony. He prepared planning, modeling and analysis of electric, water, and gas distribution systems, and prepared, directed, and negotiated development and revision of retail rates for electric, water, wastewater, gas and CATV systems.

He directed and participated in multi-utility management, financial, energy, and operational studies and reviews for various combinations of electric, gas, water, wastewater, CATV, and transportation utilities. He also performed studies of mergers and acquisitions, and assisted in the development of new entities to meet competitive market pressures.

He managed and participated in appraisals and valuations of utility assets. In one engagement, he served as a project manager for electric utility transmission and distribution system valuation that included a conversion of a field inventory to a complete asset unit valuation. He also played a key role in valuations, which involved the potential sale of electric generation and distribution property and for estimating stranded costs in a deregulated environment.

EXHIBIT 2

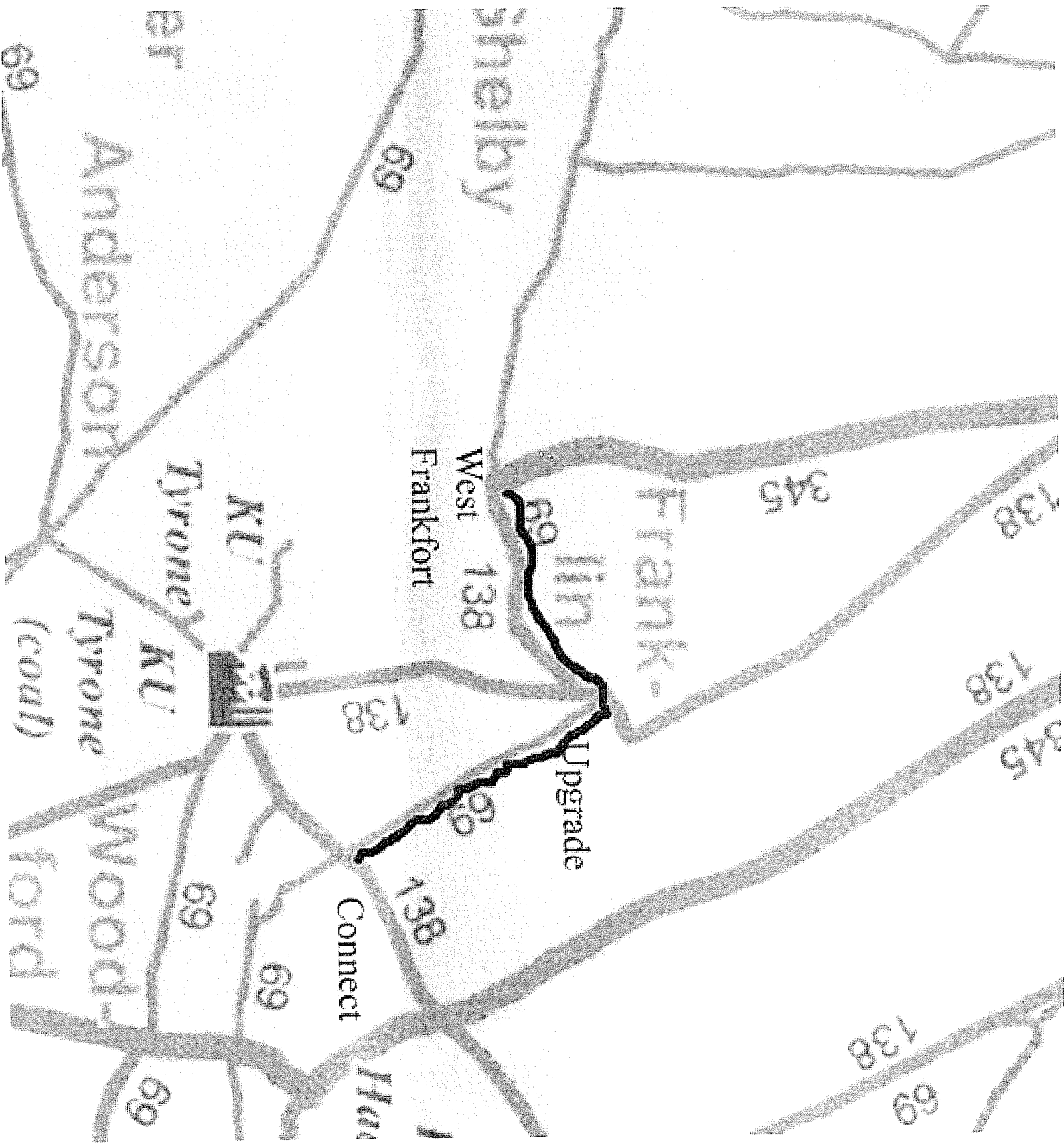


EXHIBIT 3

Kentucky Public Service Commission
 KU Transmission Line Proposal
 West Frankfort to Tyrone
 2003 cost Estimates

	Cost per Mile	Including R/V Miles	
As Developed by KU			
West Frankfort 138 kV Terminal Facilities			\$ 783,156 Cost - Delivery Facilities Report, Page 7
Tyrone 138 kV Terminal Facilities			\$ 442,790 Cost - Delivery Facilities Report, Page 7
W. Frankfort to Tyrone	\$ 504,980	12.4	\$ 6,261,750 Miles - Page 2, Line 19, Mark S. Johnson
Total			\$ 7,487,696

Estimated alternative costs based KU cost per mile and terminals

Cost to upgrade 138 kV 50% \$ 252,490
 Cost to convert 69 kV 80% \$ 403,984

East Frankfort to Tyrone 138 kV upgrade \$ 252,490 10.62 \$ 2,681,443
 East Frankfort to 138 kV connection \$ 403,984 8 \$ 3,231,871 Miles estimated from PSC Transmission Map

Alternative D-1

West Frankfort to East Frankfort conversion to Double Circuit \$ 500,000 \$ 500,000
 West Frankfort 138 kV Terminal Facilities \$ 783,156 \$ 800,000
 East Frankfort 138 kV Terminal Facilities \$ 783,156 \$ 800,000
 East Frankfort to Tyrone 138 kV upgrade \$ 2,681,443 \$ 2,700,000
 Install 93 MVA 138-69 kV transformer (W. Frankfort) \$ 750,000 \$ 750,000
 Tyrone 138 kV Terminal Facilities \$ 442,790 \$ 450,000
\$ 5,940,545 \$ 6,000,000

Alternative D-2

West Frankfort to East Frankfort conversion to Double Circuit \$ 300,000 \$ 300,000
 West Frankfort 138 kV Terminal Facilities \$ 783,156 \$ 800,000
 East Frankfort 138 kV Terminal Facilities \$ 885,580 \$ 900,000
 East Frankfort to 138 kV connection 2 \$ 3,231,871 \$ 3,300,000
 Install 93 MVA 138-69 kV transformer (W. Frankfort) \$ 750,000 \$ 750,000
 Substation - 138-69 kV \$ 2,000,000 \$ 2,000,000
\$ 7,950,607 \$ 8,050,000