

LPSC DOCKET NO. U-

TESTIMONY

of

DR. DAVID LOOMIS

on behalf of

SOUTHERN SPIRIT TRANSMISSION LLC

APPLICATION OF SOUTHERN SPIRIT TRANSMISSION LLC

FOR TRANSMISSION CERTIFICATION

FEBRUARY 2023

1 Q1. PLEASE STATE YOUR NAME, TITLE AND BUSINESS ADDRESS.

2 A. My name is David G. Loomis. I am President of Strategic Economic Research, LLC, and
3 Professor of Economics at Illinois State University. My business address is 2705 Kolby
4 Court, Bloomington, IL 61704.

5
6 Q2. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS DOCKET?

7 A. I am testifying on behalf of Southern Spirit Transmission LLC (“SST”).
8

9 Q3. PLEASE BRIEFLY DESCRIBE YOUR PROFESSIONAL QUALIFICATIONS AND
10 EXPERIENCE.

11 A. I received a Bachelor of Arts degree in Honors Economics and Mathematics and a Doctor
12 of Philosophy degree in Economics from Temple University. I achieved the rank of Full
13 Professor at Illinois State University in 2010.

14 As part of my duties as Professor of Economics at Illinois State University, I teach
15 and oversee the course sequence in Electricity, Natural Gas and Telecommunications
16 Economics. I have been teaching classes that cover transmission markets, cost allocation,
17 and pricing history, including Economics of Regulation and Antitrust; Economics of
18 Energy; and Industry Studies in Electricity, Natural Gas and Telecommunications
19 Economics. I was part of the Illinois State University faculty team that created a unique
20 undergraduate degree in renewable energy at Illinois State University. I have authored or
21 co-authored 38 pieces in peer-reviewed publications such as Energy Policy, Energy
22 Economics, Electricity Journal and Applied Energy.

1 I have received numerous professional awards, including the 2011 Midwestern
2 Regional Wind Advocacy Award from the U.S. Department of Energy's Wind Powering
3 America, the 2009 Economics Department Scott M. Elliott Faculty Excellence Award, the
4 Illinois State University Million Dollar Club in 2009 (awarded to faculty who received
5 over \$1 million in grants) and the 2006 Outstanding State Wind Working Group Award.
6 My full curriculum vita is provided in Exhibit DL-1.

7
8 Q4. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?

9 A. No.

10

11 Q5. HAVE YOU PREVIOUSLY TESTIFIED BEFORE OTHER PUBLIC UTILITY
12 COMMISSIONS?

13 A. Yes, I have testified before Public Utility Commissions or their Siting Boards in Illinois,
14 Iowa, Kansas, Kentucky, Missouri, New Mexico, Ohio, West Virginia, and Wisconsin.

15

16 Q6. WAS YOUR TESTIMONY AND THE INFORMATION YOU HAVE BEEN
17 IDENTIFIED AS SPONSORING PREPARED BY YOU OR BY KNOWLEDGEABLE
18 PERSONS UNDER YOUR SUPERVISION AND UPON WHOSE EXPERTISE,
19 JUDGMENT AND OPINIONS YOU RELY IN PERFORMING YOUR DUTIES?

20 A. Yes.

21

22 Q7. IS THE INFORMATION CONTAINED IN YOUR TESTIMONY AND THAT YOU
23 ARE SPONSORING TRUE AND CORRECT TO THE BEST OF YOUR KNOWLEDGE

1 AND BELIEF AND ARE YOUR OPINIONS EXPRESSED TO A REASONABLE
2 SCIENTIFIC OR ECONOMIC CERTAINTY?

3 A. Yes.

4

5 **INTRODUCTION AND SUMMARY**

6 Q8. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

7 A. The purpose of my testimony is to quantify the economic impacts of the Southern Spirit
8 Transmission line (the "Project"). My firm, Strategic Economic Research, LLC, performed
9 a study to estimate the economic impact of the Project. The full report of the study that we
10 performed, titled *Economic Impact Analysis of the Southern Spirit Transmission Project*
11 *on the State of Louisiana* (the "Loomis Report"), is attached as Exhibit DL-2. Exhibit DL-
12 2 was prepared either by me or individuals under my direct supervision and I am personally
13 familiar with the contents.

14

15 Q9. PLEASE SUMMARIZE THE ECONOMIC AND FISCAL IMPACT FINDINGS BASED
16 ON YOUR ANALYSIS OF THE SOUTHERN SPIRIT TRANSMISSION PROJECT IN
17 LOUISIANA.

18 A. In Louisiana specifically, the total development is expected to result in 12,278 job-years
19 during the construction and first 40 years of operation; 2,032 full-time equivalent jobs
20 during construction; and 256 local long-term jobs. These jobs are expected to result in
21 earnings of over \$537 million during the construction and first 40 years of operation for
22 the State of Louisiana; over \$170 million in earnings during construction for the State of
23 Louisiana; and over \$9.1 million in local long-term earnings for the State of Louisiana

1 annually. Finally, the Project is expected to result in over \$2.2 billion in economic output
2 during the construction and first 40 years of operation for the State of Louisiana; over \$307
3 million in new economic output during construction for the State of Louisiana; and over
4 \$47.6 million in new local long-term economic output for the State of Louisiana annually.
5 Economic output is the value of goods and services in an economy. Gross Domestic
6 Product (GDP) is the economic output for the United States as a whole. In addition, the
7 Project will strengthen the property tax base in the parishes that it traverses.
8

9 Q12. HOW DOES YOUR ANALYSIS RELATE TO THE PUBLIC PURPOSES SERVED BY
10 DEVELOPMENT OF THE SOUTHERN SPIRIT TRANSMISSION PROJECT?

11 A. The economic and fiscal impacts of the Project measure the economic benefits that will
12 come to the State of Louisiana through additional jobs, additional economic activity and
13 additional tax revenue flowing to governmental entities. Although it was not quantified in
14 my study, the Project will also bring enhancements to the wholesale electricity market by
15 enabling cost-effective energy exchanges between ERCOT and the Southeast.
16

17 **FOUNDATIONS OF REGIONAL ECONOMIC ANALYSIS**

18 Q13. PLEASE DESCRIBE THE ANALYTIC FOUNDATIONS FOR YOUR OPINIONS AND
19 THE SPECIFIC ANALYSIS YOU PERFORMED.

20 A. The economic impact of the construction and operation of the Project was estimated in the
21 study using the IMPLAN model. The study area inputs used for the report were the eight
22 parishes in Louisiana that the Project will traverse. The IMPLAN data is for each parish
23 and for Louisiana is 2021 data (the latest data available). The IMPLAN model is designed

1 to estimate the total impacts of an increase in spending on a particular industry. IMPLAN
2 is an on-line program that allows for customized construction of regional impact-output
3 models for areas ranging in size from a single zip code to the entire United States. The
4 model can account for both direct, indirect, and induced effects of increased economic
5 activity. Direct effects are those production changes associated with immediate effects of
6 final demand changes, such as spending on structures used to support a transmission line.
7 Indirect effects are production changes in backward-linked industries caused by the
8 changing input needs of the directly affected industry, such as steel purchases for use in
9 support structures. Finally, induced effects are changes in regional spending patterns
10 caused by changes in income generated from direct and indirect effects, such as household
11 spending on housing, groceries and entertainment that results from increased income.

12
13 **DESCRIPTION OF ECONOMIC IMPACTS**

14 Q14. ARE THERE OTHER ECONOMIC BENEFITS THAT SHOULD BE CONSIDERED IN
15 THE CONTEXT OF THE SOUTHERN SPIRIT PROJECT MORE GENERALLY?

16 A. The Southern Spirit Project will create new economic opportunities in the State of
17 Louisiana that will expand energy markets in both Louisiana and throughout the
18 southeastern United States and Texas. Because energy is an input into all other economic
19 production, all sectors of the economy will benefit from a robust transmission grid and
20 lower-cost resources provided by the Project. It is important to note that the economic
21 impacts measured during operations only includes the impacts caused by the direct impacts
22 of employment and spending. It does not include the impacts that come from the additional
23 electricity that may be delivered to Louisiana in the future, any wholesale cost savings, or

1 any commercial, industrial or residential cost savings that could result from the
2 transmission line. All of these impacts would be in addition to the impacts measured by
3 my study.

4
5 Q15. WHAT IS THE ROLE OF THE SOUTHERN SPIRIT PROJECT IN THE CONTEXT OF
6 STATEWIDE ECONOMIC DEVELOPMENT?

7 A. The Southern Spirit Project will provide new energy-related opportunities to economic
8 development activities in Louisiana. The additional grid capacity will provide an attractive
9 base for commercial and industrial customers to ensure low energy prices as inputs for their
10 economic expansion.

11

12 **REGIONAL ELECTRIC GRID BENEFITS**

13 Q16. PLEASE DESCRIBE THE RELATIONSHIP BETWEEN THE LOUISIANA-BASED
14 FACILITIES AND THE COMPREHENSIVE SOUTHERN SPIRIT PROJECT
15 FACILITIES.

16 A. The Southern Spirit Project will include two large converter stations – one located in
17 DeSoto Parish, Louisiana near the Texas border and the other located in Choctaw County,
18 Mississippi towards the eastern side of the state – and an approximately 323 mile high-
19 voltage direct current (HVDC) transmission line connecting the two converter stations with
20 its routing including eight parishes in Louisiana and eight counties in Mississippi. Capital
21 investment is expected to total \$2.68 billion in Louisiana and Mississippi. Of the \$2.68
22 billion, it is conservatively estimated that \$337 million will be spent directly in Louisiana.
23 (An explanation of the difference between the total Project investment expenditures and

1 those spent directly in Louisiana can be found in the Loomis Report at p. 14, Section 4.2.
2 Exhibit DL-2. As one example, the materials for the converter station in DeSoto Parish
3 are estimated to cost \$579 million. However, because these materials are likely to be
4 purchased out of the country, those costs were not included in the spending estimates for
5 Louisiana).

6
7 Q17. HOW DO THE ECONOMIC AND FISCAL IMPACTS ASSOCIATED WITH THE
8 SOUTHERN SPIRIT PROJECT MESH WITH THE BROADER ENERGY
9 DEVELOPMENT GOALS IN LOUISIANA?

10 A. The Southern Spirit Project is a new entrant into the Louisiana energy infrastructure built
11 by private capital investment outside of the regulated utility cost recovery guarantees.
12 Louisiana's incumbent electric utility providers may obtain energy supplies and services
13 from the additional resources provided by the Project. Residential, commercial, and
14 industrial customers should benefit from lower wholesale electricity prices expected in
15 Louisiana. Diversification of energy supply, increased capacity, increased reliability,
16 renewable resource alternatives and competitive resource additions can serve the state's
17 energy market and provide opportunities for further economic development.

SUMMARY OF SPECIFIC ECONOMIC AND FISCAL IMPACTS

Q18. PLEASE SUMMARIZE YOUR FINDINGS WITH RESPECT TO THE ECONOMIC AND FISCAL IMPACTS ASSOCIATED WITH THE SOUTHERN SPIRIT TRANSMISSION PROJECT IN LOUISIANA.

A. Using these cost estimates supplied by SST and the assumptions in Tables 4.1 and 4.2 of the study, the modeled economic impact of the Project is represented in Tables 5.1 to 5.6 of the study. These tables report the employment, earnings, and output results at the parish level during both construction and operations. Note, these results only account for the effect of Project spending within the parish and do not add-up to the entire statewide total economic impact. As noted below, the job figures are reported using a full-time equivalent (“FTE”) basis.

The construction job figures are significant, totaling 206 for Bienville Parish, 681 for DeSoto Parish, 117 for East Carroll Parish, 34 for Franklin Parish, 131 for Jackson Parish, 156 for Ouachita Parish, 107 for Red River Parish, 200 for Richland Parish, and 401 for other parishes in Louisiana. The statewide construction job figure for Louisiana is estimated at 2,032. In addition to the jobs during construction, the Project will also support permanent positions. The long-term jobs supported are estimated to be 2.6 for Bienville Parish, 163.1 for DeSoto Parish, 15 for East Carroll Parish, 5.6 for Franklin Parish, 3.8 for Jackson Parish, 6.9 for Ouachita Parish, 9.1 for Red River Parish, 11.5 for Richland Parish, and 12.9 for other parishes in Louisiana. The total long-term Project related job figure for Louisiana is 256. All jobs in the analysis are reported on a full-time equivalent or FTE basis. Full-time equivalents are assumed to work 2,080 hours per year.

1 Q19. PLEASE PROVIDE SOME GREATER DETAIL AS TO YOUR FINDINGS WITH
2 RESPECT TO THE ECONOMIC AND FISCAL IMPACTS ASSOCIATED WITH THE
3 SOUTHERN SPIRIT PROJECT.

4 A. The earnings impacts are shown in Tables 5.3 and 5.4 of the study. The total earnings for
5 the State of Louisiana are over \$170 million during construction and over \$9.1 million
6 annually during the life of the Project. Earnings include wages, salary, and benefits
7 associated with the jobs reported above. Tables 5.5 and 5.6 of the study show the economic
8 output impacts of the Project during both construction and operation. The total output for
9 the State of Louisiana is over \$307 million during construction and over \$47.6 annually
10 during the life of the Project. These figures are broken-down on both a parish and statewide
11 basis.

12
13 Q20. HAVE YOU ESTIMATED THE PROPERTY TAX IMPACTS ASSOCIATED WITH
14 THE SOUTHERN SPIRIT PROJECT IN LOUISIANA? IF SO, PLEASE EXPLAIN
15 YOUR FINDINGS.

16 A. Tables 6.1 and 6.2 show the property tax impacts from the Project. Total property taxes
17 are estimated at over \$14.1 million in the first year and vary from year-to-year based on
18 assessed value, depreciation, and millage rates. The total property taxes over the first 40
19 years of the Project are over \$349 million for an annual average of \$8.7 million.

REGIONAL ECONOMIC ANALYSIS

Q21. DID YOU PREPARE A REGIONAL ECONOMIC ANALYSIS IN CONJUNCTION
WITH YOUR INVESTIGATIONS IN THIS MATTER?

A. Yes, I prepared an overview of the economic and demographic data for the eight parishes
involved in the project and the State of Louisiana. The detailed analysis is in Section III
of my report which is submitted as Exhibit DL-2 to my direct testimony.

Q22. ARE THE OPINIONS IN THE REPORT BASED ON FACTS OR DATA THAT ARE
THE PRODUCT OF RELIABLE PRINCIPLES AND METHODS?

A. Yes. I have used the principles and methods of applied economics and my education and
training to apply the facts given to me by SST. The facts and data in the Report are the
type relied upon by experts in my field.

Q23. PLEASE PROVIDE A SHORT SUMMARY OF THE ECONOMIC AND
DEMOGRAPHIC PROFILES YOU DEVELOPED FOR THE LOUISIANA STUDY
AREA.

A. Table 3.2 of my report is reproduced here to show the demographic diversity of the parishes
involved. The population density varies from Bienville Parish with 16 persons per square
mile (12,981 total) to Ouachita Parish with 250 persons per square mile (160,368 total).
Median household income also varies from \$22,346 in East Carroll Parish to \$46,006 in
DeSoto Parish.

Table 3.2 -- Demographic Statistics for Parish Locations of the Southern Spirit Transmission Line

Parish	Total Area (square miles)	2020 Census Population	2019 Census housing units	Population Density	Median Household Income
Bienville Parish	822	12,981	7,945	16	\$30,272
DeSoto Parish	895	26,812	13,400	30	\$46,006
East Carroll Parish	442	7,459	2,896	18	\$22,346
Franklin Parish	635	19,774	9,403	33	\$35,282
Jackson Parish	580	15,031	7,957	28	\$39,139
Ouachita Parish	632	160,368	69,471	250	\$41,121
Red River Parish	402	7,620	4,247	60	\$33,816
Richland Parish	576	20,043	9,068	36	\$34,029

Q24. PLEASE DESCRIBE THE ECONOMIC PROFILE OF THE LOUISIANA STUDY AREA IN SOME GREATER DETAIL, PARTICULARLY AS RELATES TO THE POTENTIAL ECONOMIC AND FISCAL BENEFITS OF THE PROJECT.

A. Most of the parishes have experienced an increase in their unemployment rate since 2018. From 2013 to 2018, most parishes experienced a steady decline in their unemployment rate. The recent uptick in the unemployment rate indicates that there is available labor for both construction and operations of the Project. All parishes except for DeSoto Parish have seen a steady decline in population from 2010 to 2020. The economic development opportunities associated with this Project could help slow or reverse this population decline by fostering increased economic opportunities in these parishes.

Q25. PLEASE DESCRIBE THE DIRECT EMPLOYMENT IMPACTS OF THE SOUTHERN SPIRIT TRANSMISSION PROJECT OVER THE FORTY (OR MORE) YEARS IT IS ANTICIPATED TO BE OPERATIONAL IN LOUISIANA.

A. Although the Southern Spirit Transmission Project is expected to last much longer, we can combine the construction impacts with the ongoing operations impact over a 40-year

timeframe by adding the construction impacts and the annual impacts multiplied by 40. Table 5.7 shows the employment, total earnings and total output for Louisiana. The combined result shows 12,278 job-years resulting in almost \$537 million in total earnings and over \$2.2 billion in total output for the State of Louisiana. Policymakers may want to use a discount factor to weight future benefits over the next 40 years of operations with near-term benefits during construction. For simplicity, no such discount factor was used here.

Table 5.7 Combined Impact from the Southern Spirit Transmission Line during Construction and 40-year Operation for the State of Louisiana

	Employment	Total Earnings	Total Output
Direct	7,855	\$321,432,097	\$1,181,268,861
Indirect	2,344	\$132,210,766	\$746,923,154
Induced	2,078	\$84,092,629	\$283,403,211
Total	12,278	\$537,735,492	\$2,211,595,226

Q26. PLEASE DESCRIBE THE TOTAL PROJECT COSTS FOR DEVELOPMENT OF THE SOUTHERN SPIRIT TRANSMISSION PROJECT.

A. The total Project costs provided by SST are contained in Table 4.1 of my report. The total Project construction costs modeled were \$2.68 billion. All construction spending was assumed to be spread evenly over the two-year construction period from 2025 to 2026. Of these total Project construction costs, \$337 million is expected to be spent in the State of Louisiana as shown in Table 4.2. Annual operations spending in Louisiana is over \$19.4 million as detailed in Table 4.3.

ECONOMIC MULTIPLIER ANALYSIS

Q27. YOU MENTIONED THAT THE DIRECT ECONOMIC IMPACTS WILL PRODUCE INDIRECT AND INDUCED ECONOMIC IMPACTS. PLEASE EXPLAIN THIS ECONOMIC IMPACT FURTHER.

A. Total impacts are calculated as the sum of direct, indirect, and induced effects. Direct effects are production changes associated with the immediate effects of final demand changes, such as an increase in spending for the manufacture of new structures that will be used to support a new transmission line. Indirect effects are production changes in backward-linked industries caused by the changing input needs of the directly affected industry, e.g., additional purchases to produce additional output such as the steel used in the construction of the new transmission structures. Induced effects are the changes in regional household spending patterns caused by changes in household income generated from the direct and indirect effects. An example of the latter is the increased spending of incomes earned by newly hired steelworkers.

Q28. WHAT IS THE APPROPRIATE METHODOLOGY FOR MEASURING THE ECONOMIC IMPACT OF THE SOUTHERN SPIRIT TRANSMISSION PROJECT'S DEVELOPMENT AND OPERATIONS?

A. The appropriate methodology for measuring the economic impacts is "Analysis By Parts" (ABP). Under this method, direct jobs, earnings and output are calculated outside of IMPLAN. Direct labor income and household spending (by income level within the state) are input into IMPLAN to show the induced impacts that would result from these expenditures. Inputs at the parish level were allocated according to the line mileage in that

1 parish. Converter stations and substations were allocated to the specific parish in which
2 they will be located. Converter stations are assumed to be purchased from overseas but the
3 labor to install them is assumed to be sourced locally.

4
5 Q29. PLEASE SUMMARIZE THE ECONOMIC IMPACTS OF THE SOUTHERN SPIRIT
6 TRANSMISSION PROJECT.

7 A. The economic impact analysis shows a significant impact on the employment, total
8 earnings, and total output for Louisiana. The combined result shows 12,278 job-years
9 resulting in over \$537 million in total earnings and over \$2.2 billion in total output for the
10 State of Louisiana.

11
12 Q30. DOES THIS CONCLUDE YOUR TESTIMONY?

13 A. Yes.

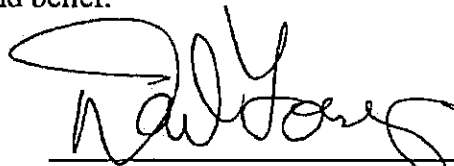
AFFIDAVIT OF WITNESS

STATE OF Illinois
COUNTY OF McLean

NOW BEFORE ME, the undersigned authority, personally came and appeared:

DR. DAVID LOOMIS

who, after being duly sworn by me, did depose and state that the above and foregoing is his sworn testimony in this proceeding, that he knows the contents thereof, and that the same are true and correct to the best of his knowledge, information and belief.



Dr. David Loomis

Subscribed and sworn before me
this 9th day of February, 2023.



NOTARY PUBLIC

Printed Name: Beth Beauford

My commission expires: NOV. 16, 2024

