BEFORE THE
MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of MICHIGAN ELECTRIC TRANSMISSION COMPANY, LLC for an Act 30 certificate of public convenience and necessity for the construction of a major transmission line between Oneida Substation in Eaton County and Nelson Road Substation in Gratiot County, Michigan.	**Case No. U-21471**
In the matter of the application of MICHIGAN ELECTRIC TRANSMISSION COMPANY, LLC for an Act 30 certificate of public convenience and necessity for the construction of a major transmission line between the Indiana/Michigan state border at Gilead Township in Branch County and the new Helix Substation in Calhoun County, Michigan.	**Case No. U-21472**

Rebuttal Testimony and Exhibit of

Brian C. Andrews

On behalf of

Nelson-Oneida Intervenors
&
Knaggs Intervenor Group

January 24, 2025

BRUBAKER & ASSOCIATES, INC.

Project 11721

BEFORE THE
MICHIGAN PUBLIC SERVICE COMMISSION

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STATE OF MISSOURI)
) SS
COUNTY OF ST. LOUIS)

Affidavit of Brian C. Andrews

Brian C. Andrews, being first duly sworn, on his oath states:

1. My name is Brian C. Andrews. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 16690 Swingley Ridge Road, Suite 140, Chesterfield, Missouri 63017. We have been retained by Nelson-Oneida Intervenors & Knaggs Intervenor Group in this proceeding on their behalf.

2. Attached hereto and made a part hereof for all purposes is my Rebuttal Testimony and Exhibit which were prepared in written form for introduction into evidence in the Michigan Public Service Commission Case Nos. U-21471 / U-21472.

3. I hereby swear and affirm that the testimony and exhibit are true and correct and that they show the matters and things that they purport to show.

Brian C. Andrews

Subscribed and sworn to before me this 24th day of January, 2025.

ADRIENNE JEAN NAVARRO
Notary Public - Notary Seal
STATE OF MISSOURI
Jefferson County
My Commission Expires: Mar. 22, 2025
Commission # 21989987

Adrienne S Navarro
Notary Public

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Rebuttal Testimony of Brian C. Andrews

I. INTRODUCTION AND SUMMARY

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A Brian C. Andrews. My business address is 16690 Swingley Ridge Road, Suite 140, Chesterfield, MO 63017.

Q ARE YOU THE SAME BRIAN C. ANDREWS WHO PRESENTED DIRECT TESTIMONY IN THIS PROCEEDING ON DECEMBER 4, 2024?

A Yes, I am.

Q WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A My rebuttal testimony addresses the Direct Testimonies of Naomi J. Simpson, Zachary C. Heidemann, and Karsten D. Szajner filed on behalf of the Michigan Public Service Commission ("Commission") Staff ("Staff").

My silence regarding any issue should not be taken as an endorsement of any position taken by any party in their Direct Testimonies in this proceeding.

II. REBUTTAL OF STAFF WITNESS NAOMI J. SIMPSON

Q HAS STAFF STATED THAT THE PROPOSED AND ALTERNATE ROUTES FOR THE NELSON TO ONEIDA LINE ARE REASONABLE AND FEASIBLE?

A Yes. Although the recommendation is not entirely clear. At page 12, line 5, Ms. Simpson states yes to the question of whether or not the Proposed and Alternate Routes are reasonable and feasible, however, on lines 6 and 7, she states, "Staff agrees that the proposed routes for both Helix to Hiple and Nelson to Oneida are reasonable." It is not clear as to whether or not the lower-case version of "proposed routes" is meant to include both the Proposed Route and the Alternate Route. Ms. Simpson also provides no explanation as to how Staff came to the conclusion that the routes are feasible. In order to help the Commission determine the route to approve in this proceeding, Staff should've concluded that either the Proposed Route or the Alternate Route were the <u>most</u> reasonable and feasible of the options.

Q DOES STAFF HAVE ANOTHER RECOMMENDATION AT ODDS WITH SELECTION OF THE PROPOSED ROUTE?

A Yes. Beginning at page 14, line 22 of her Direct Testimony, Ms. Simpson states, "Staff urges METC to seek solutions that fully utilize existing rights of way and to fully consider

existing line rebuilds to minimize the impacts to Michigan landowners and Michigan ratepayers." Given that Michigan Electric Transmission Company, LLC's ("METC") Alternate Route utilizes 7.89 miles, or 20%, of its total length of existing Consumers Energy Right-Of-Way ("ROW"),[1] Staff should've heeded its own recommendation, which is supported by the great weight of authority[2] and asked the Commission to approve the Alternate Route instead of the Proposed Route. The Proposed Route does not use any existing ROW which is one of the primary reasons why I have recommended the approval of the Alternate Route or the NROL Hybrid Route.[3]

III. REBUTTAL OF STAFF WITNESS ZACHARY C. HEIDEMANN

Q WHY DO YOU TAKE ISSUE WITH STAFF WITNESS HEIDEMANN'S TESTIMONY?

A I disagree with Staff's route analysis and I present a correction to a typographical error in his testimony.

Q PLEASE DISCUSS STAFF'S ROUTE ANALYSIS.

A Mr. Heidemann provides his analysis of all 1,304 route options identified in METC's Route Study for the Nelson to Oneida Road transmission line.[4] In this analysis, Mr. Heidemann has attempted to normalize the data for all 21 routing factors and 1,304 routes. He uses the following formula to normalize the data:

$$y = \frac{x - Min}{Max - Min}$$

[1]Direct Testimony of Brian C. Andrews at page 12, lines 1-5.
[2]See Exhibit NROL-6 (BCA-6) for various citations to authoritative bodies preferring the use of existing ROW.
[3]*Id.* at page 4, lines 8-14.
[4]Staff Exhibit S-4.10.

Where y is the normalized evaluation factor, x is the raw evaluation factor data, Min is the minimum of the evaluation factor for this data set, and Max is the maximum evaluation factor for this data set. Under this equation, the maximum of the normalized routing factor will always be one and the minimum will always be zero.[5] Mr. Heidemann uses this formula for each routing factor, then sums the 21 normalized factors to determine the total normalized score for each route. The lower the score, the better the route according to Mr. Heidemann.

Q IS STAFF'S ANALYSIS FLAWED?

A Yes, in three major ways. First, the normalization formula that Mr. Heidemann has chosen to use is almost meaningless when being used on a sample size of 1,304 routes. Second, he has assigned no weights to any of the factors. Third, as I have discussed at length in my Direct Testimony, METC's evaluation factors are significantly flawed as there is no parallelling data, nor cost estimates. Lastly, selection of the best route in a case is almost never primarily a mathematical exercise, but more of a judgment call, as there may be unique circumstances not readily captured in routing factors.

Q PLEASE ELABORATE ON THE FLAWS OF STAFF'S NORMALIZATION FORMULA?

A Staff's formula, which is known as a min-max normalization, is not a statistically fundamental procedure. All this procedure does is take the difference between a factor and the minimum value in that factor and divide it by the range (max – min) of the factor. This formula is highly skewed by extreme highs or lows in the data sets, and does not

[5]Direct Testimony of Zachary C. Heidemann at page 19, lines 5-17.

consider the mean (average) of the data, nor the variation of the data around the mean (standard deviation). A more valid procedure would be to use a Z-score normalization. A Z-score determines the mean (average) value of a data set and compares each individual factor to the mean, then divide by degree of difference between the data points and the mean is then calculated (standard deviation). The formula for such a procedure is as follows:

$$z = \frac{x-\mu}{\sigma}$$

Where:

- x = raw data point
- μ = mean of the dataset
- σ = standard deviation of the dataset

This transforms the data to have a mean of 0 and a standard deviation of 1. This procedure has been used in the past by METC.[6] By using this normalization procedure, the normalized data are not skewed by the outliers in the dataset.

Q WHAT IS YOUR CONCERN THAT STAFF ASSIGNED NO WEIGHTS TO THE NORMALIZED DATA?

A For some reason, Staff claims that in "order to maintain consistency with Burns & McDonnell's analysis, Staff also chose not to use weighting." This is a major flaw in both analyses. Certain routing factors are far more important than others. As I stated in my Direct Testimony, the three most important routing factors are impacts to residences, cost, and parallelling. By not assigning any weights, Staff's analysis assumes that a residence within 100' of the route should be given the same weight as

[6]Case No. U-17041, Direct Testimony of Stephen G. Thornhill, pages 11-13.

a wind turbine within 500'. Or that the amount of wetlands should be given the same weight as the amount of grassland/pasture in the ROW. If a mathematical procedure is to be used to determine the best route, it is imperative that weights be assigned to each factor.

Q IF STAFF USED THE Z-SCORE NORMALIZATION AND ASSIGNED WEIGHTS TO THE FACTORS, WOULD YOU STILL TAKE ISSUE WITH THE ANALYSIS?

A Yes, because METC's data does not include the cost estimates for each route option, nor any paralleling data. These are two of the three most important routing factors and have not been included in the data. Because this data is absent, Staff's analysis of METC's routing factors cannot be relied upon by the Commission.

Q IF THE COMMISSION DOES DECIDE TO RELY ON STAFF'S ANALYSIS, DOES IT SHOW THAT THE ALTERNATE ROUTE IS BETTER THAN THE PROPOSED ROUTE?

A Yes, should the Commission decide to rely on Staff's analysis in its selection of the route for the Nelson Road to Oneida transmission project, it should select the Alternate Route. Staff's analysis gives the Proposed Route a score of 7.422 for the Proposed Route and 7.0726 for the Alternate Route.[7] A lower score indicates a better route, therefore, Staff's analysis, while flawed, supports my conclusion that the Alternate Route should be approved, rather than the Proposed Route.

[7]Direct Testimony of Zachary C. Heidemann at page 37, lines 15-18.

Q YOU MENTIONED THAT YOU FOUND A TYPOGRAPHICAL ERROR IN MR. HEIDEMANN'S TESTIMONY, PLEASE EXPLAIN.

A Yes, on page 42, at lines 15 and 17, Staff states Route 266. Inspection of Exhibit S-4.10 shows that this should be Route 226, not 266. I would also point out, that Route 266 is quite similar to the NROL Hybrid Route. Route 226 is comprised of segments 1, 4, 6, 18, 28, 29, 34, 41, 48, 49, 60, 56, 62, 65, 68, 70, 76, 80, 82, and 83. The NROL Hybrid Route is roughly comprised of segments 1, 4, 6, 19, 20, 29, 34, 41, 48, 49, 60, 56, 62, 65, 68, 70, 76, 80, 82, and 83, as adjusted by the alignments of the Proposed and Alternate Routes that were filed. Route 226 uses segments 18 and 28 and the NROL Hybrid uses segments 19 and 29, all other segments are common between these two routes.

IV. REBUTTAL OF STAFF WITNESS KARSTEN D. SZAJNER

Q WHY DO YOU TAKE ISSUE WITH STAFF WITNESS SZAJNER'S TESTIMONY?

A Mr. Szajner has incorrectly claimed that differences between Route Study Routes 272 and 1304 are the differences between the Proposed and Alternate Routes. At page 7, lines 3-8, Mr. Szajner paraphrases METC's witness Samuelson's testimony which provides a brief discussion of the differences between Route Study Routes 272 and 1304. While these routes were the proposed and alternate routes used in the Construction Plan, they are not the Proposed and Alternate Routes that METC has filed with its Application in this proceeding. My Direct Testimony discusses the reasons why the NROL Hybrid or the Alternate Route are both better than the Proposed Route.

Q DO YOU HAVE MORE SUGGESTIONS RELATIVE TO STAFF WITNESS SZAJNER'S TESTIMONY?

A Yes. On pages 14-15 of his testimony, Mr. Szajner states,

> "Staff finds that the Commission should direct Staff to develop filing guidelines for Act 30 cases… Allowing Staff to develop filing guidelines will create more concise guidance on what information a company should supply in its application, give Staff better information to work with in its analysis of future cases, and bring greater transparency and accountability for how companies interact with the public."

I agree with this proposal, and if the Commission directs Staff to make these guidelines then Staff should investigate how transmission lines are approved in Texas. Significant weight is placed on the three most important routing factors, impact to residences, cost, and paralleling. In Texas, the utility files an entire noticed segment network, like METC shows on page 26 of Exhibit METC 23-A (KAS-2A), that would allow for numerous route options to be selected from. The utility will identify a route that it believes is best, but ultimately, the utility is indifferent to the exact route as long as the approved route is forward progressing and meets the identified need of the project. The utility will also file several route options, all with unique cost estimates and other routing factors, allowing for useful comparative analyses to be conducted. Intervenors in these proceedings are free to create their own route recommendations from the noticed segments and the Commission can approve a route that it determines is best for the project. In my experience, the process used in Texas for determining the route for a proposed transmission line is outstanding and fair to all parties.

V. CONCLUSION

Q PLEASE SUMMARIZE YOUR REBUTTAL TESTIMONY CONCLUSIONS.

A My Rebuttal Testimony conclusions are as follows:

1. Staff has not provided a clear recommendation for which of the Proposed or Alternate Routes should be approved for the Nelson Road to Oneida transmission line.

2. Staff urges METC to seek a solution that fully utilizes existing ROW. This recommendation points to approval of the Alternate Route.

3. Staff's analysis of the routing factor data is significantly flawed and should not be relied upon by the Commission.

4. Even Staff's flawed analysis shows that the Alternate Route is a better route than the Proposed Route.

5. If the Commission directs Staff to create guidelines for Act 30 cases, those guidelines should consider a process very similar to the process used in Texas.

6. Nothing in Staff's Direct Testimony changes the conclusions that I presented in my Direct Testimony. I recommend that the Commission approve either the NROL Hybrid Route or the Alternate Route.

Q CAN THE ALTERNATE ROUTE AND THE NROL HYBRID ROUTE BE FURTHER MODIFIED TO ADDRESS OTHER CONCERNS OF THE NELSON-ONEIDA INTERVENORS?

A Yes. Avery Sanborn identifies the Nelson-Oneida Intervenor's Route Refinement in Lebanon Township that would locate the route through the Maple River State Game Area. Mr. Sanborn quantifies the benefits of this route refinement stating, "When utilized in conjunction with METC's Alternate Route, implementation of the Nelson-Oneida Intervenor's Route Refinement in Lebanon Township would reduce Total Length by 2.1 miles, Road Crossings by 5, Wetland Within Right of Way by 8.5 acres, River/Stream /Waterways Crossed by 1, Woodland within ROW by 8.5 acres, Grassland/ Pasture within ROW by 12.8 acres, Cropland Within ROW by 28.5 acres, New ROW Required by 49.9 acres, Landowners/ Parcels Crossed by 13, Residences

within 100 ft of centerline by 1, Residences within 101 to 300 ft by 3, and Residences within 301 to 500 ft by 3."[8]. This route refinement is very similar to the alignment of Route 309, which I discuss in my Direct Testimony at pages 27-29. The use of the Nelson-Oneida Intervenor's Route Refinement would improve both the Alternate Route and the NROL Hybrid Route by reducing impacts and reducing the cost of the project.

Q DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A Yes, it does.

[8]Direct Testimony of Avery Sanborn at page 8, lines 15-21.

Exhibit VWB-14

Prioritizing Existing Transmission Routes

Valerie Wohlscheid-Brennan

January 15, 2025

Reference: MISO. (2022). *MTEP21 REPORT ADDENDUM: LONG RANGE TRANSMISSION PLANNING TRANCHE 1 EXECUTIVE SUMMARY*.

https://cdn.misoenergy.org/MTEP21%20Addendum-LRTP%20Tranche%201%20Report%20with%20Executive%20Summary625790.pdf

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Further, reflecting the portfolio's urgency, the LRTP Tranche 1 portfolio makes use of existing routes, where possible, to reduce the need to acquire additional greenfield right-of-way, which lowers costs and allows a shorter time to implementation. Construction of new transmission

Page 72 and Page 73:

The LRTP Tranche 1 Portfolio makes use of existing routes, where possible, to reduce the need to acquire additional greenfield right-of-way which lowers costs and allows a shorter time to implementation. Construction of new transmission routes across navigable waterways, protected areas and high value property faces extensive cost and regulatory risks that impede progress in meeting future reliability needs. Co-locating new facilities with existing transmission assets

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enables more efficient development of transmission projects and minimizes the environment and societal impacts of infrastructure investment needed to achieve the needs identified in MISO's Future 1.

The LRTP Tranche 1 Portfolio gives more flexibility to better support diverse policy needs. The proactive long-range approach to planning of regional transmission provides regulators greater confidence in achieving their policy goals by reducing uncertainty around the future resource expansion plans. Elimination of much of the high transmission cost barriers allows resource planners to assume less risk in making resource investment decisions.

Reference: *United States Code. Title 16: CONSERVATION. SUBCHAPTER II: REGULATION OF ELECTRIC UTILITY COMPANIES ENGAGED IN INTERSTATE COMMERCE.*16 U.S.C. 824p.Siting of interstate electric transmission facilities (a)(4)(G)(i) "maximizes existing rights-of-way." https://www.govinfo.gov/content/pkg/USCODE-2023-title16/pdf/USCODE-2023-title16-chap12-subchapII-sec824p.pdf

§ 824p. Siting of interstate electric transmission facilities

(a) Designation of national interest electric transmission corridors

(1) Not later than 1 year after August 8, 2005, and every 3 years thereafter, the Secretary of Energy (referred to in this section as the "Secretary"), in consultation with affected States and Indian Tribes, shall conduct a study of electric transmission capacity constraints and congestion.

(2) Not less frequently than once every 3 years, the Secretary, after considering alternatives and recommendations from interested parties (including an opportunity for comment from affected States and Indian Tribes), shall issue a report, based on the study under paragraph (1) or other information relating to electric transmission capacity constraints and congestion, which may designate as a national interest electric transmission corridor any geographic area that—

(i)[1] is experiencing electric energy transmission capacity constraints or congestion that adversely affects consumers; or

(ii)[2] is expected to experience such energy transmission capacity constraints or congestion.

(3) Not less frequently than once every 3 years, the Secretary, in conducting the study under paragraph (1) and issuing the report under paragraph (2), shall consult with any appropriate regional entity referred to in section 824*o* of this title.

(4) In determining whether to designate a national interest electric transmission corridor under paragraph (2), the Secretary may consider whether—

(A) the economic vitality and development of the corridor, or the end markets served by the corridor, may be constrained by lack of adequate or reasonably priced electricity;

(B)(i) economic growth in the corridor, or the end markets served by the corridor, may be jeopardized by reliance on limited sources of energy; and

(ii) a diversification of supply is warranted;

(C) the energy independence or energy security of the United States would be served by the designation;

(D) the designation would be in the interest of national energy policy;

(E) the designation would enhance national defense and homeland security;

(F) the designation would enhance the ability of facilities that generate or transmit firm or intermittent energy to connect to the electric grid;

(G) the designation—

(i) maximizes existing rights-of-way; and

(ii) avoids and minimizes, to the maximum extent practicable, and offsets to the extent appropriate and practicable, sensitive environmental areas and cultural heritage sites; and

(H) the designation would result in a reduction in the cost to purchase electric energy for consumers.

[1] So in original. Probably should be "(A)".
[2] So in original. Probably should be "(B)".

(b) Construction permit

Except as provided in subsection (i), the Commission may, after notice and an opportunity for hearing, issue one or more permits for the construction or modification of electric transmission facilities in a national interest electric transmission corridor designated by the Secretary under subsection (a) if the Commission finds that—

(1)(A) a State in which the transmission facilities are to be constructed or modified does not have authority to—

(i) approve the siting of the facilities; or

(ii) consider the interstate benefits or interregional benefits expected to be achieved by the proposed construction or modification of transmission facilities in the State;

(B) the applicant for a permit is a transmitting utility under this chapter but does not qualify to apply for a permit or siting approval for the proposed project in a State because the applicant does not serve end-use customers in the State; or

(C) a State commission or other entity that has authority to approve the siting of the facilities—

(i) has not made a determination on an application seeking approval pursuant to applicable law by the date that is 1 year after the later of—

(I) the date on which the application was filed; and

(II) the date on which the relevant national interest electric transmission corridor was designated by the Secretary under subsection (a);

(ii) has conditioned its approval in such a manner that the proposed construction or modification will not significantly reduce transmission capacity constraints or congestion in interstate commerce or is not economically feasible; or

(iii) has denied an application seeking approval pursuant to applicable law;

(2) the facilities to be authorized by the permit will be used for the transmission of electric energy in interstate commerce;

(3) the proposed construction or modification is consistent with the public interest;

(4) the proposed construction or modification will significantly reduce transmission congestion in interstate commerce and protects or benefits consumers;

(5) the proposed construction or modification is consistent with sound national energy policy and will enhance energy independence; and

(6) the proposed modification will maximize, to the extent reasonable and economical, the transmission capabilities of existing towers or structures.

(c) Permit applications

(1) Permit applications under subsection (b) shall be made in writing to the Commission.

(2) The Commission shall issue rules specifying—

(A) the form of the application;

(B) the information to be contained in the application; and

Reference: U.S. Department of Energy. (2023, October). *National Transmission Needs Study*. https://www.energy.gov/sites/default/files/2023-12/National%20Transmission%20Needs%20Study%20-%20Final_2023.12.1.pdf

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Co-location of transmission corridors is possible in some cases

Several studies (FERC 2020; Xu et al. 2021; Blaug and Nichols 2023; NGI Consulting et al. 2022) suggest co-locating transmission in transportation corridors could help mitigate some siting and land acquisition issues. Use of existing rights-of-way can limit the amount of greenfield development, keeping new development in areas that have already been disturbed (Blaug and Nichols 2023). Co-location of transmission along highways specifically has the added benefit of enabling electric vehicle charging stations, which will be necessary in high electrification scenarios (NGI Consulting et al. 2023). Several states have moved forward with co-location strategies for transmission lines (FERC 2020; NGI Consulting et al. 2022).

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Lastly, NEMA advocates strongly for siting authorities on the federal, state, and local levels to encourage the use of existing rights-of-ways along railroads, highways, brownfields, and other corridors for transmission development.

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that the focus should be on a rapid transition away from all fossil fuel resources and suggest that degraded landscapes like Superfund sites, brownfields, landfills, abandoned mine areas, and contaminated or abandoned agricultural lands are more suitable for large-scale renewable energy projects. The Center concludes that additional renewable energy and necessary transmission should be built with appropriate community input on degraded lands or lands with existing rights-of-way like highway or railway corridors, which would streamline the review process and minimize conflicts, delays, and adverse impacts on the environment.

Reference: U.S. Department of the Interior. (2010, January). *Energy Transport Corridor Siting for Tribal Planners Guidance Manual*. Bureau of Indian Affairs. https://www.bia.gov/sites/default/files/dup/assets/as-ia/ieed/ieed/pdf/idc1-021629.pdf

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2.3.4 Availability of Existing ROWs

The development of a preliminary energy corridor should identify the presence of existing utility and transportation ROWs (such as existing transmission lines, highways, and rail lines) in the vicinity of the unrestricted corridor. Existing ROWs should be examined for possible use in locating the energy transport corridor. Consideration of existing ROWs can expedite the siting and designation of energy transport projects, because for many of these ROWs, project-specific impact analyses may have already been completed (especially on non-tribal lands). Where possible and allowable, the location of an unrestricted energy transport route or network paths should be adjusted to align with existing ROWs (Figure 2.6). By collocating new energy transport facilities with existing infrastructure, the development of "greenfield" (undeveloped) locations may be avoided or minimized, thereby reducing the potential level of project-related impacts to valued natural and cultural resources.

Reference: Wisconsin State Legislature. (2003, December 17). *2003 Wisconsin act 89*. Wisconsin Legislative Documents. https://docs.legis.wisconsin.gov/2003/related/acts/89

State of Wisconsin

2003 Senate Bill 300

Date of enactment: **December 3, 2003**
Date of publication*: **December 17, 2003**

2003 WISCONSIN ACT 89

AN ACT *to repeal* 196.491 (3) (g) 1m.; *to renumber* 85.02 and 196.491 (3) (h); *to renumber and amend* 30.025 (1), 196.491 (3) (g) 1. and 196.491 (4) (c); *to amend* 15.795 (1), 16.969 (4), 30.02 (1), 30.02 (2), 30.025 (title), 30.025 (2), 30.025 (3) (intro.), 30.025 (4), 66.0119 (1) (a), 79.04 (7) (c) 1m., 91.75 (4), 196.025 (2) (intro.), 196.491 (3) (a) 1., 196.491 (3) (a) 3. a., 196.491 (3) (b), 196.491 (3) (d) (intro.), 196.491 (3) (e), 196.491 (3) (gm) and 196.491 (3) (j); and *to create* 1.12 (6), 23.09 (22m), 30.025 (1b), 30.025 (1e), 30.025 (1m), 30.025 (1s) (title), 30.025 (1s) (b), 30.025 (2g), 30.025 (2s), 30.025 (3m), 30.206 (1m), 32.03 (5) (c), 79.04 (6) (c) 3., 79.04 (7) (d), 85.02 (2), 196.02 (5m), 196.025 (1m), 196.025 (2m), 196.20 (7), 196.49 (4), 196.491 (3) (d) 8., 196.491 (3b), 196.491 (4) (c) 2., 196.491 (4) (c) 3. and 196.491 (6) (title) of the statutes; **relating to:** construction of certain public utility facilities, utility aid payments, utility condemnations, and granting rule−making authority.

The people of the state of Wisconsin, represented in senate and assembly, do enact as follows:

SECTION 1. 1.12 (6) of the statutes is created to read:

1.12 **(6)** SITING OF ELECTRIC TRANSMISSION FACILITIES. In the siting of new electric transmission facilities, including high−voltage transmission lines, as defined in s. 196.491 (1) (f), it is the policy of this state that, to the greatest extent feasible that is consistent with economic and engineering considerations, reliability of the electric system, and protection of the environment, the following corridors should be utilized in the following order of priority:

(a) Existing utility corridors.

(b) Highway and railroad corridors.

(c) Recreational trails, to the extent that the facilities may be constructed below ground and that the facilities do not significantly impact environmentally sensitive areas.

(d) New corridors.

SECTION 2. 15.795 (1) of the statutes is amended to read:

15.795 **(1)** OFFICE OF THE COMMISSIONER OF RAILROADS. There is created an office of the commissioner of railroads which is attached to the public service commission under s. 15.03, provided that s. 85.02 (1) does not apply to the office of the commissioner of railroads. The commissioner of railroads shall have expertise in railroad issues and may not have a financial interest in a railroad, as defined in s. 195.02 (1). The commissioner may not serve on or under any committee of a political party. The commissioner shall hold office until a successor is appointed and qualified.

SECTION 3. 16.969 (4) of the statutes is amended to read:

16.969 **(4)** A county, town, village, or city that receives a distribution under sub. (3) (b) may use the distribution only for park, conservancy, wetland or other similar environmental programs, unless the commission approves a different use under this subsection. A county,

* Section 991.11, WISCONSIN STATUTES 2001−02 : Effective date of acts. "Every act and every portion of an act enacted by the legislature over the governor's partial veto which does not expressly prescribe the time when it takes effect shall take effect on the day after its date of publication as designated" by the secretary of state [the date of publication may not be more than 10 working days after the date of enactment].

Reference: State of Minnesota. (2024, September 25). *Sf 4942*. Minnesota Legislature. https://www.revisor.mn.gov/bills/text.php?number=SF4942&version=latest&session=ls93&session_year=2024&session_number=0

(e) When applicable, the commission must make a specific finding that the commission considered locating a route for a high-voltage transmission line on an existing high-voltage transmission route and using parallel existing highway right-of-way. To the extent an existing high-voltage transmission route or parallel existing right-of-way is not used for the route, the commission must state the reasons.

Reference: State of Colorado. (2021). *SENATE BILL 21-072 Colorado Electric Transmission Authority Act.* https://leg.colorado.gov/sites/default/files/2021a_072_signed.pdf

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(t) MAKE DETERMINATIONS ABOUT THE EFFICIENT USE OF EXISTING RIGHTS-OF-WAY ON PROJECTS IT PROPOSES TO DEVELOP AS A PRECONDITION TO PIONEERING NEW RIGHTS-OF-WAY FOR SUCH PROJECTS;

Reference: Kentucky Legislative Research Commission. (2007, November 8). *Siting of Electric Transmission Lines*. State of Kentucky.gov.

https://apps.legislature.ky.gov/lrc/publications/ResearchReports/RR348.pdf

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In 1952, the Kentucky Court of Appeals—at that time the highest court in Kentucky—set out the elements required to grant a CPCN to construct electric transmission lines in *Kentucky Utilities Company v. Public Service Commission* (252 S.W. 2d 885, Ky. 1952).

The first element required is "need" for the new lines. Need involves the following considerations:

- a showing of substantial inadequacy of existing service, and
- a consumer market sufficiently large to make it economically feasible for the new line(s) to be constructed and operated.

The second element required is the "absence of wasteful duplication" resulting from the construction of the new transmission lines. Duplication involves the following considerations:

- an excess of capacity over need;
- an excessive investment in relation to productivity or efficiency; and
- an unnecessary multiplicity of physical properties, such as rights-of-way, poles and wires.
    - An unnecessary multiplicity involves "inconvenience to the public generally, and economic loss through interference with normal uses of the land, that may result from multiple sets of rights-of-way and a cluttering of the land with poles and wires."

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Clarifying the Wasteful Duplication Element for Granting a CPCN

Transmission line siting cases that came before PSC following the 2004 amendment to KRS 278.020 saw a gradual refinement in the meaning of the element of absence of wasteful duplication. In general, the need element was clearly understood. In initial cases, PSC denied some lines because the applicants had failed to demonstrate that the proposed lines did not involve a wasteful duplication of existing facilities. Gradually, PSC and the utilities worked out a process for demonstrating this element.

To demonstrate an absence of wasteful duplication, an applicant for a transmission line CPCN must establish two factors:

- it has conducted a thorough review of all reasonable alternatives, and
- its choice of the proposed route was reasonable (PSC Case No. 2005-00207, Oct. 31, 2005).

To do this, the applicant must show that it comprehensively considered the use of existing utility corridors and other rights-of-way (PSC Case No. 2005-00089, Aug. 19, 2005).

Reference: North Dakota Legislative Branch. (2022, January 1). *69-06-08-02 Transmission Facility Corridor and Route Criteria*. https://ndlegis.gov/prod/acdata/pdf/69-06-08.pdf

4. **Policy criteria.** The commission may give preference to an applicant that will maximize benefits that result from the adoption of the following policies and practices, and in a proper case may require the adoption of such policies and practices. The commission may also give preference to an applicant that will maximize interstate benefits. The benefits to be considered include:

   a. Location and design.

   b. Training and utilization of available labor in this state for the general and specialized skills required.

   c. Economies of construction and operation.

   d. Use of citizen coordinating committees.

   e. A commitment of a portion of the transmitted product for use in this state.

   f. Labor relations.

   g. The coordination of facilities.

   h. Monitoring of impacts.

   i. Utilization of existing and proposed rights of way and corridors.

   j. Other existing or proposed transmission facilities.

Reference: Public Utility Commission of Texas. (2022, December 20). *CHAPTER 25. SUBSTANTIVE RULES APPLICABLE TO ELECTRIC SERVICE PROVIDERS.* https://ftp.puc.texas.gov/public/puct-info/agency/rulesnlaws/subrules/electric/25.101/25.101.pdf

(B) **Routing**: An application for a new transmission line must address the criteria in PURA §37.056(c) and considering those criteria, engineering constraints, and costs, the line must be routed to the extent reasonable to moderate the impact on the affected community and landowners unless grid reliability and security dictate otherwise. The following factors must be considered in the selection of the utility's alternative routes unless a route is agreed to by the utility, the landowners whose property is crossed by the proposed line, and owners of land that contains a habitable structure within 300 feet of the centerline of a transmission project of 230 kV or less, or within 500 feet of the centerline of a transmission project greater than 230 kV, and otherwise conforms to the criteria in PURA §37.056(c):

(i) whether the routes parallel or utilize existing compatible rights-of-way for electric facilities, including the use of vacant positions on existing multiple-circuit transmission lines;

(ii) whether the routes parallel or utilize other existing compatible rights-of-way, including roads, highways, railroads, or telephone utility rights-of-way;

(iii) whether the routes parallel property lines or other natural or cultural features; and

(iv) whether the routes conform with the policy of prudent avoidance.

Reference: Georgia General Assembly. (n.d.). *House Bill 1148*. https://www.legis.ga.gov/api/legislation/document/20132014/143504

~~(a)~~(b)(1) On and after July 1, 2004, but prior to the effective date of this Code section, before exercising the right of eminent domain for purposes of constructing or expanding an electric transmission line described in subsection (a) of Code Section 22-3-160.1, the utility shall select a practical and feasible route for the location of the electric transmission line. In selecting the route for the location of the electric transmission line, the utility shall consider existing land uses in the geographic area where the line is to be located, existing corridors, existing environmental conditions in the area, engineering practices related to the construction and operation of the line, and costs related to the construction, operation, and maintenance of the line.