

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of
INTERNATIONAL TRANSMISSION COMPANY,
d/b/a ITC*TRANSMISSION* for a certificate of
public convenience and necessity for the construction
of a major transmission line running from and through
Sterling Heights, Troy, Clawson and Royal Oak, Michigan.

Case No. **U-14933**
(e-file/paperless)

MICHIGAN PUBLIC SERVICE COMMISSION STAFF'S
INITIAL BRIEF

PUBLIC

Michigan Public Service Commission Staff

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Dated: October 19, 2007

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I. Introduction

Staff files the following initial brief recommending that the Commission deny the International Transmission Company's d/b/a ITC *Transmission* (ITC's) application (Application) and request for a certificate of public convenience and necessity (Certificate) to construct a major transmission line. ITC's Application and supporting testimony and exhibits do not provide sufficient information for the Staff to make a recommendation to the Commission regarding a determination of necessity, that the quantifiable and nonquantifiable public benefits justify its construction or that the preferred route is feasible or reasonable. As background for Staff's recommendation, Staff will briefly describe the last time an attempt was made to construct a major transmission line in Michigan.

II. Background: The last attempt to build a 345 kV transmission line and the legislative reaction.

A. Case No. U-10059: A determination that taken as a whole, the proposed 345 kV transmission line will benefit the people of the State of Michigan.

The last attempt to build a 345 kV transmission line occurred in 1990, when the Consumers Power Company (Consumers) announced its plans to construct a 60-mile 345 kV transmission line in and through three southwest Michigan counties to connect at the Michigan/Indiana border to PSI Energy, Inc.¹ Consumers encountered significant public opposition to its plan and had difficulty obtaining access to properties along the proposed route. After exercising its statutory condemnation powers in Calhoun County Circuit Court, a class action suit was filed against Consumers to enjoin Consumers from exercising its condemnation

¹ *In the matter of the application of Consumers Power Company for (i) accounting and ratemaking treatment, including an electric rate increase, effective upon commercial operation, and (ii) a determination of public necessity for a proposed 345-kv transmission line and interconnection between Consumers Power Company and PSI Energy, Inc.*, MPSC Case No. U-10059; *In the matter of the application, complaint, and petition of Beverly Ann Shaffer et al, regarding the proposed 345-kv transmission line and interconnection between Consumers Power Company and PSI Energy, Inc.*, MPSC Case No. U-10061, January 28, 1993, pp 1-2.

powers. The Circuit Court Judge certified the class, consolidated the two cases and issued two orders referring the consolidated cases to the Commission to “determine whether the proposed PSI line was necessary”²:

The first order certified the consolidated cases as a class action. The second order referred to the Commission the question:

[W]hether the proposed 345 kV electric transmission line, which is the subject matter of these consolidated lawsuits, is necessary to transmit electricity for public use. Such determination, including proposed findings of fact and conclusions of law returnable to this court, is hereinafter referred to as “public necessity”. (Referral Order, p 2).

The Commission accepted jurisdiction of the consolidated cases from the Circuit Court³:

The scope of the consolidated proceedings will be limited to determining whether the proposed PSI line is necessary to transmit electricity for public use and issues closely related to that determination.

The Commission assigned the burden of proof regarding the need for the PSI line to Consumers.⁴

Consistent with the Circuit Court’s order, Consumers filed an application with the Commission requesting that the Commission determine, among other things, the necessity of the proposed 345 kV transmission line.⁵ In support of its claim that the PSI line was necessary, Consumers performed a four-step cost/benefit analysis⁶:

First, the utility estimated the cost of building the line. Second, noting that the PSI line would improve system reliability in the Batavia-Dowling area and thus eliminate the need to build other transmission facilities, Consumers subtracted the estimated cost of these avoided system improvements from the line’s cost. Third, Consumers performed numerous computer simulations to determine what level of quantifiable benefits could be expected under various scenarios. The projected level of quantifiable benefits for each scenario was computed by developing a

² U-10059/U-10061, January 28, 1993, p 2.

³ U-10059/U-10061, February 27, 1992, p 5.

⁴ U-10059/U-10061, January 23, 1993, p 4.

⁵ U-10059/U-10061, January 23, 1993, pp 3-4.

⁶ U-10059/U-10061, January 23, 1993, p 21.

base case, which reflected Consumers' expected cost of service without the line, and comparing that figure to the expected cost of service once the line had been built and placed in service. The difference between these figures was then also subtracted from the PSI line's estimated cost. Fourth, Consumers described numerous unquantifiable benefits that would arise from the line and must therefore be included in any consideration of the line's potential value.

Thus, the Commission examined the estimated cost of building the line, compared it to the cost of avoided system improvements, and the quantifiable and non-quantifiable benefits of the proposed PSI line.

1. Cost of building the PSI line.

In support of the cost of building the proposed line, Consumers offered the testimony and exhibits of an engineer in the utility's Wholesale Power Transactions and Planning Department.⁷ The witness described the facilities that the utility would build including an original estimated cost for those facilities and revised estimates based upon alternative in-service dates.⁸ The witness also explained changes in the estimated cost of construction due to changes in the 345 kV's line design and increased estimated cost of right-of-way acquisitions.⁹ The ALJ adopted the utility's cost estimate primarily on the witness' "assertion that the engineering work on the PSI line [was] essentially complete."¹⁰ The Commission adopted the ALJ's recommendation to use \$79 million as the estimated cost.

⁷ U-10059/U-10061, January 23, 1993, pp 6, 22-24.

⁸ U-10059/U-10061, January 23, 1993, p 22.

⁹ U-10059/U-10061, January 23, 1993, p 22.

¹⁰ U-10059/U-10061, January 23, 1993, p 23.

2. Value of PSI line.

In support of its claim that the PSI line was necessary “to improve its voltage levels and satisfy expected load growth,” the utility, through its witness, Mr. Johnson, “attempted to place a value on the system reliability benefits that would arise from building the line”¹¹:

Mr. Johnson’s first step was to develop the least cost alternative, from the standpoint of system reliability in the Batavia-Dowling area, to building the PSI line. He then compared the cost of implementing that plan to the cost of using the PSI line to improve system reliability. The difference in cost between these plans, when reduced to a levelized annual revenue requirement and based on a 1993 in-service date, was \$8.38 million.

According to the witness, the \$8.38 million represented the annual savings the utility would need to obtain from the use of the PSI line for the plan to be economically equivalent to the alternatives.¹² The witness then divided the annual revenue requirement of the proposed PSI line by a fixed charge rate to obtain a capital equivalent.¹³ Subtracting this figure from the PSI line construction cost, the witness concluded that 1/3 of the project’s costs would be economically justified by its effect on the area’s transmission system.¹⁴ The Commission found that the system upgrades were needed.¹⁵

¹¹ U-10059/U-10061, January 23, 1993, pp 24-25.

¹² U-10059/U-10061, January 23, 1993, p 24.

¹³ U-10059/U-10061, January 23, 1993, p 25.

¹⁴ U-10059/U-10061, January 23, 1993, p 25.

¹⁵ U-10059/U-10061, January 23, 1993, p 26. The Commission, however, did adjust downward the estimated system reliability benefit from \$32.6 million to \$25.9 million due to the utility’s witness applying different fixed charged rates to the various alternatives provided in the system reliability benefits analysis.

3. Quantifiable economic benefits of the PSI line.

The utility also provided an analysis regarding the direct economic benefits to ratepayers that would result from the new transmission line. The utility undertook a three-step process to quantify these benefits¹⁶:

First, it performed a long-term load forecast and developed a capital expansion plan sufficient to meet its system's future demand. Second, using its production cost program, Consumers identified the least cost plan for meeting its customers' electrical needs without using the PSI line. (5 Tr. 650-651.) This is referred to as the "base case." Third, it used the production cost program to determine the likely cost of service for numerous scenarios, all of which assumed that the PSI line had been built and placed in service. By comparing the cost of service for each scenario with the "base case", Consumers asserts, one can see the quantifiable economic benefit represented by the line.

The Commission did not agree. The Commission compared the cost alternative scenarios to the cost of the proposed major transmission line and found "that the line is less than a break-even proposition when only this limited range of benefits is assumed."¹⁷

4. Unquantifiable benefits of the PSI line.

In addition to the system reliability benefits arising from the proposed transmission line the utility also asserted unquantifiable benefits: improved system reliability to a larger region, savings beyond the period used in the computer simulations, and various competitive advantages. According to the utility, "the unquantifiable benefits would allow it to improve its quality of service while ensuring that its customers pay the lowest rates possible." The ALJ agreed with the utility. The Commission also found that unquantifiable benefits would arise from the proposed transmission line.¹⁸

The Commission considered the following ten unquantifiable benefits that would arise from the PSI line: additional system reliability benefits than the alternative plan to improve

¹⁶ U-10059/U-10061, January 23, 1993, pp 27-29 (footnote omitted).

¹⁷ U-10059/U-10061, January 23, 2007. p 29.

¹⁸ U-10059/U-10061, January 23, 2007, p 40.

system reliability¹⁹, system reliability benefits that would extend beyond the immediate area²⁰, excess line capacity for the transmission of additional power²¹, flexibility for future development²², benefits arising after the first 20 years of line operation as presented in the computer simulations²³, increased competitive advantages in obtaining capacity which would lower rates for its customers²⁴, improved ability for the utility to sell excess power and peaking capacity²⁵, increased transmission access²⁶, decreased transmission rates²⁷, Staff's support of numerous unquantifiable benefits²⁸, and finally unexpected actual savings as experienced in from other 345 kV transmission lines.²⁹ Based upon these factors, the Commission attributed "substantial" unquantifiable benefits to the proposed transmission lines.³⁰

¹⁹ U-10059/U-10061, January 23, 2007, p 40.

²⁰ U-10059/U-10061, January 23, 2007, p 41.

²¹ U-10059/U-10061, January 23, 2007, p 42.

²² U-10059/U-10061, January 23, 2007, p 42.

²³ U-10059/U-10061, January 23, 2007, p 43.

²⁴ U-10059/U-10061, January 23, 2007, p 43.

²⁵ U-10059/U-10061, January 23, 2007, p 43.

²⁶ U-10059/U-10061, January 23, 2007, p 44.

²⁷ U-10059/U-10061, January 23, 2007, p 44.

²⁸ U-10059/U-10061, January 23, 2007, p 45.

²⁹ U-10059/U-10061, January 23, 2007, p 46.

³⁰ U-10059/U-10061, January 23, 2007. p 40.

5. Determination that the proposed 345 kV PSI transmission line would "benefit the people of the State of Michigan."

Although the Commission found that the utility did not meet its burden of proof regarding need using a quantifiable cost benefit analysis, the Commission nonetheless, found that when "taken as a whole, the proposed line will benefit the people of the State of Michigan."³¹ One Commissioner, however, did not agree with this determination.

6. Unquantifiable benefits were given too much weight and that the PSI line was not needed.

In a separate opinion, the dissenting Commissioner opined that the majority opinion inflated the importance of the unquantifiable³² benefits. The Commissioner summarized his assessment of the majority's opinion by pointing out that the Commission's traditional role in defending the public interest usually focused on tangible economic tests³³:

Finally, in placing such heavy reliance upon nebulous, unquantifiable benefits, the majority is venturing far afield from the Commission's usual jurisdictional focus on tangible economic tests for preserving and defending the public interest.

For these reasons, I dissent from the Commission's finding regarding unquantifiable benefits. Although the PSI line may produce some unquantifiable benefits, the record does not support finding that these benefits will be "substantial."

In conclusion, the Commissioner suggested that the Legislature "reconsider the advisability of state transmission siting legislation"³⁴:

Let me conclude with a comment that this was one of the most difficult cases that this Commission has had to deal with—and we have had many complex and controversial ones. The difficulty stems from the lack of legislative direction

³¹ U-10059/U-10061, January 23, 2007, p 51. However, that opinion was not unanimous. The Commission's Opinion and Order, separate opinion concurring in part and dissenting in part and separate concurring opinion was returned to the Calhoun County Circuit Court. The Circuit Court found that the transmission line was not necessary because the majority had not made a finding of necessity but only a finding of public benefit.

³² U-10059/U-10061, January 23, 2007, Separate Opinion, p 6.

³³ U-10059/U-10061, January 23, 2007, Separate Opinion, p 9.

³⁴ U-10059/U-10061, Separate opinion, p 13.

on how these decisions should be made and the extent to which this Commission should be involved in them. As competition unfolds in the electric industry, cases like this are likely to become more common. Now would be a good time for the Michigan Legislature to reconsider the advisability of state transmission siting legislation.

The Michigan Legislature responded to the Commissioner's comment in 1995 and enacted the Electric Transmission Line Certification Act (Public Act 30 or Act).³⁵ The Legislature appears to have used the PSI line case as a guideline for drafting Public Act 30 because most of the information that the Commission considered in the PSI line case to determine whether the PSI line was necessary must be filed in an application for a certificate of public convenience and necessity under Public Act 30. The information in the Application form the basis of the Commission's determination of whether to grant or deny an application under the Act.

B. The Electric Transmission Line Certification Act; 1995 PA 30.

The Electric Transmission Line Certification Act was enacted in 1995. Prior to 1995, the State's role in regulating high voltage transmission lines was limited to issuing or denying "environmental permits, and ruling on the utility's request to recover its costs through rates charged to customers."³⁶ Public Act 30 centralized, under the Michigan Public Service Commission,³⁷ the process of deciding whether the quantifiable and unquantifiable public benefits justify the construction of the major transmission line, deciding whether the proposed route is reasonable and feasible and determining whether the proposed transmission line presents

³⁵ 1995 PA 30, MCL 460.561 *et seq.*

³⁶ Senate Fiscal Agency Analysis, SB 408, March 28, 1995.

³⁷ Senate Fiscal Agency Analysis, SB 408, March 28, 1995.

an unreasonable threat to public health or safety.³⁸ The Act thus regulates the location and construction of major transmission lines.³⁹

Under the Act, an independent transmission company must seek from the Commission a certificate of public convenience and necessity to construct a transmission line of five miles or more in length “through which electricity is transferred at system bulk supply voltage of 345 kilovolts (kV) or more.”⁴⁰ Before applying for a certificate, the independent transmission company must (1) submit a construction plan to the Commission and to “each municipality in which construction of the planned major transmission line is intended”;⁴¹ (2) “schedule and hold a public meeting in each municipality through which a portion of the major transmission” would pass⁴², and (3) “offer in writing to meet with the chief elected official of each affected municipality” to discuss the proposed major transmission line and to explore routes to be considered.⁴³

Public Act 30 requires that the applicant include the following data in its application in support of its request for a certificate of public convenience and necessity⁴⁴:

- (a) The planned date for beginning construction.
- (b) A detailed description of the proposed major transmission line, its route, and its expected configuration and use.
- (c) A description and evaluation of 1 or more alternative major transmission line routes and a statement of why the proposed route was selected.

³⁸ MCL 460.568(5)(a)-(c).

³⁹ Senate Fiscal Agency Analysis, SB 408, March 28, 1995.

⁴⁰ MCL 460.562(g), MCL 460.567(1).

⁴¹ MCL 460.564(2).

⁴² MCL 460.566(1).

⁴³ MCL 460.566(2).

⁴⁴ MCL 460.567(2)(a)-(l).

- (d) If a zoning ordinance prohibits or regulates the location or development of any portion of a proposed route, a description of the location and manner in which that zoning ordinance prohibits or regulated the location or construction of the proposed route.
- (e) The estimated overall cost of the proposed major transmission line.
- (f) Information supporting the need for the proposed major transmission line, including identification of known future wholesale users of the proposed major transmission line.
- (g) Estimated quantifiable and nonquantifiable public benefits of the proposed major transmission line.
- (h) Estimated private benefits of the proposed major transmission line on any legal entity that is affiliated with the applicant.
- (i) Information addressing potential effects of the proposed major transmission line on public health and safety.
- (j) A summary of all comments received at each public meeting and the applicant's response to those comments.
- (k) Information indicating that the proposed major transmission line will comply with all applicable state and federal environmental standards, laws, and rules.
- (l) Other information reasonably required by the commission pursuant to rule.

Upon applying for a certificate, the applicant shall publish a notice regarding the proposed transmission line in a newspaper of general circulation in the area to be affected and shall send a notice to each "affected municipality and each affected landowner on whose property a portion of the proposed major transmission line will be constructed."⁴⁵ Upon receipt of an application for a certificate of public convenience and necessity, the Commission shall commence a contested case proceeding.⁴⁶

⁴⁵ MCL 460.568(1).

⁴⁶ MCL 460.568(2).

The Commission shall grant an application for a certificate if the Commission determines all of the following⁴⁷:

- (a) The quantifiable and nonquantifiable public benefits of the proposed major transmission line justify its construction.
- (b) The proposed or alternative route is feasible and reasonable.
- (c) The proposed major transmission line does not present an unreasonable threat to public health or safety.
- (d) The applicant has accepted the conditions contained in a conditional grant.

“The Commission may condition its approval upon the applicant taking additional action to assure the public convenience, health, and safety and reliability of the proposed transmission line.”⁴⁸ The certificate shall also “identify the major transmission line’s route and shall contain an estimated cost of the transmission line.”⁴⁹ The Commission has one year after the applicant’s filing date to grant or deny the application for a certificate.⁵⁰

With this background Staff reviewed ITC’s Application and supporting testimony and exhibits. ITC did not describe the scope of the project and justification necessary to present a credible date for beginning construction. ITC did not provide a credible estimated cost because the engineering on the proposed underground portion and overhead portion of the proposed major transmission line are not essentially complete. ITC presented a reliability driven project based on unsubstantiated benefit assertions.⁵¹ ITC did not provide a quantifiable analysis of the system reliability benefits that would arise from building the reliability driven transmission line.

⁴⁷ MCL 460.568(5).

⁴⁸ MCL 460.568(4).

⁴⁹ MCL 460.568(6).

⁵⁰ MCL 460.568(4).

⁵¹ 2 Tr 228.

And, ITC did not provide the necessary data and analysis supporting the quantifiable and nonquantifiable public benefits of the proposed transmission line.

Staff recommends that the Commission deny ITC's application for a certificate of public convenience and necessity because ITC failed to provide sufficient information for the Staff to make an informed recommendation to the Commission that the proposed major transmission line's quantifiable and nonquantifiable public benefits justify its construction or that the proposed route is feasible and reasonable.⁵²

III. ITC's Application for a Certificate of Public Convenience and Necessity.

A. Procedural background.

On February 27, 2007 and pursuant to Public Act 30⁵³, ITC filed its application (Application) with the Commission for a certificate of public convenience and necessity (Certificate) to construct a 345 kV transmission line running from and through Sterling Heights, Troy, Clawson and Royal Oak, Michigan. As part of its Application, ITC represented that on November 6, 2006, it "offered in writing to meet with the chief elected official of each affected municipality or his or her designee."⁵⁴ ITC further represented that public meetings were held in each affected municipality during December, 2006.⁵⁵ In support of its Application, ITC filed the direct testimony of Brian A. Slocum, Dr. Peter A. Valburg, and John S. Rector, P.E. and Exhibits A-1 through A-13.⁵⁶

On April 10, 2007 a prehearing was held. At the prehearing, the ALJ granted the City of Troy's Petition to Intervene. The ALJ permitted two Rule 207 Statements to be made on the

⁵² MCL 460.568(5)(a)-(b).

⁵³ MCL 460.565.

⁵⁴ Application, ¶ 14.

⁵⁵ Application, ¶ 14.

⁵⁶ Application, Summary of Filing, p. 2.

record; the City of Sterling Heights Engineer and the City of Clawson Manager both spoke in support of ITC's Application.⁵⁷ Staff, ITC and the City of Troy agreed to a consensus schedule.⁵⁸ The ALJ denied The Detroit Edison Company (Detroit Edison) and Consumers Energy Company's (Consumers Energy) Petitions to Intervene.⁵⁹

On April 17, 2007, Detroit Edison filed an Emergency Application and Brief for Leave to Appeal the ALJ's ruling denying Detroit Edison's intervention.⁶⁰ On April 18, 2007, Consumers Energy also filed an Application for Leave to Appeal the ALJ's decision.⁶¹ Several rounds of responsive and reply briefs were filed.⁶²

On May 17, 2007, the Commission issued its Order granting both applications for leave to appeal and further granting Detroit Edison and Consumers Energy permissive intervention⁶³:

As Detroit Edison has pointed out and ITC has not rebutted, the majority of the projected \$30 million transmission line costs will likely rest with Detroit Edison and its ratepayers. To a lesser extent, Consumers may also see its costs increase. This suggests that Detroit Edison and Consumers may have interests in the proceedings that will not be protected by any of the other existing parties.

The Commission also emphasizes that the proposed major transmission line will be traversing Detroit Edison's service territory, and that, as a result, it is very likely that the FERC will assign the majority of the costs for the project to Detroit Edison. To conduct a proceeding without the presence of Detroit Edison, the entity who will likely pay for the vast majority of the proposed transmission line, would be shortsighted.

⁵⁷ 1 Tr 37, 41.

⁵⁸ 1 Tr 46-47.

⁵⁹ 1 Tr 45.

⁶⁰ Commission docket entry 28.

⁶¹ Commission docket entry 29.

⁶² Commission docket entries 31-39.

⁶³ *In the matter of the application of International Transmission Company, d/b/a ITCTransmission for a certificate of public convenience and necessity for the construction of a major transmission line running from and through Sterling Heights, Troy, Clawson and Royal Oak, Michigan*, MPSC Case No. U-14933, May 17, 2007, p 9.

Therefore, the Commission finds that Detroit Edison and Consumers should be permitted to permissively intervene in this proceeding. As a result, Detroit Edison and Consumers are granted full intervenor status.

On June 22, 2007 Consumers Energy filed the testimony of Andrew D. Dotterweich and Richard G. Cottrell. On June 25, 2007 Detroit Edison filed the testimony of Murray W. Davis. Mr. Davis sponsored Exhibits DE-1 through DE-13. On August 3, 2007 Staff witnesses Stephen M. Paytash and Donald Mazuchowski filed testimony. Mr. Paytash sponsored Exhibit S-1. On August 24, 2007 ITC filed the rebuttal testimony of Brian Slocum and Antonio Sammut. Mr. Slocum sponsored Exhibits A-14 through A-18. Mr. Sammut sponsored Exhibits A-19 through A-21.

Cross-examination of witnesses was conducted on September 27 and 28, 2007. The parties waived cross-examination of ITC witness Peter A. Valberg, Consumers Energy witness Andrew D. Dotterweich and Staff witness Donald Mazuchowski. The record consists of three volumes of testimony consisting of 783 pages and 56 exhibits. Staff, however, finds that ITC's exhibits lack credibility and should be afforded little weight in the Commission's decision whether to grant or deny ITC's request for a certificate of public convenience and necessity.

IV. Staff recommends that the Commission deny ITC's request for a Certificate of Public Convenience and Necessity.

A. Staff recommends that the Commission give ITC's exhibits minimum weight and credibility.

ITC's exhibits are not credible and should be given little weight by the Commission when considering ITC's request for a certificate. On direct examination, Mr. Slocum testified under oath that Exhibits A-1 through A-13 and rebuttal exhibits A-14 through A-17 were prepared by

him or under his supervision.⁶⁴ After extensive cross-examination, however, the weight and credibility of Exhibits A-1 through A-13 were greatly diminished⁶⁵:

JUDGE CUMMINS: Very well, I did not hear any objections, I don't believe, to Exhibits A-14 and A-15. However, I think all of the other 15 of the exhibits, 1 through 17, have been objected to, many times on overlapping grounds.

I do have grave concerns regarding two factors. I guess first and foremost is the fact that at the outset of Mr. Slocum's testimony, in rather perfunctory form, the witness indicated that all of these exhibits were prepared by him or under his direction; and that was, as we have learned in the course of the last day or two, not fully accurate. Second, I have significant problems with the foundation for several of these exhibits, particularly those A-3 through A-12. While I recognize that Rule 325 of the Commission's Rules of Practice and Procedure expand significantly the scope of the evidence that the commission will receive and consider, this really pushes the envelope, so to speak. Nevertheless, while I believe that the staff's cross-examination in particular substantially weakened the foundation for this evidence, I'm going to allow all of those 17 exhibits in, A-1 through A-17.

Specifically with regards to A-1 and A-13, as kind of an aside, I believe those documents are being used essentially in response to the filing requirements of Act 30. That does cause a problem with the amount of weight being given to them as well. But I think they are relevant, at least for purposes of proving that the filing was completed on the dates that were indicated in various parties' – or various witnesses' testimony.

With regard to Exhibits A-4 through A-7, a point that Ms. Smith raised today was the fact that these were also included as part of Exhibit A-1. While they're duplicative, I think the way that our cross-examination occurred yesterday, by referring to the specific exhibits, A-4 through 7, it behooves us to go ahead and accept those even if they are duplicative of some of the information contained in A-1. My punch is that any briefs will be citing specifically to those rather than to attachment whatever of Exhibit A-1 since the testimony will refer to A-4, A-5, A-6.

Overall, I think I'd be remiss in indicating that although I'm allowing these exhibits in, I should acknowledge that I feel the weight that can reasonably be given to many of these exhibits has been substantially diminished. I'm sure this will be indicated in briefs; it may become apparent in the PFD. But that is my ruling with regard to Exhibits A-1 through A-17; I'm accepting each of those into evidence at this time.

⁶⁴ 2 Tr 173-178.

⁶⁵ 3 Tr 423.

Staff recommends that the Commission give ITC's Exhibits A-1 through A-13 minimum weight and credibility.

1. Exhibit A-2.

Exhibit A-2 is referred to as a draft report to MISO and is considered confidential.⁶⁶ Mr. Slocum testified that he was involved in writing the Exhibit A-2 draft and that a final report was never prepared or submitted to MISO.⁶⁷ On cross-examination, however, Mr. Slocum admitted that neither he nor the three employees he supervised have any experience to support the many unsubstantiated assertions contained in Exhibit A-2⁶⁸:

- linear regression analysis of deal peak loads vs. average daily temperature;
- relying on generation re-dispatch options to manage load;
- loss of load expectations where there is minimal generation;
- cost estimating of constructing a cable at 120 kV;
- installing superconducting 120 kV technology;⁶⁹
- examining cost to rate base, depreciation studies and writing tariffs;⁷⁰
- installing 345 kV XLPE cable;⁷¹ and
- using PROMOD.⁷²

ITC did not provide any modeling data or analysis which would support the assertions made in the draft report.

Given Mr. Slocum's lack of experience in several critical areas relied upon in the draft report and the lack of supporting modeling data or analysis, Staff recommends that the Commission give very little consideration to the unsubstantiated assertions made in Exhibit A-2.

⁶⁶ 2 Tr 187.

⁶⁷ 2 Tr 342.

⁶⁸ 2 Tr 316.

⁶⁹ 2 Tr 317-318.

⁷⁰ 2 Tr 348.

⁷¹ 2 Tr 322

⁷² 2 Tr 318.

2. Exhibits A-4, A-5, A-6 and A-7.

Exhibit A-4 is an unauthored, undated, unchecked diagram of a typical 345 kV duct bank cross section. Exhibit A-5 is an unauthored, undated, unchecked diagram of a typical cable cross-section. Exhibit A-6 is an unauthored, undated, unchecked typical 345 kV manhole. Mr. Slocum testified that he did not draw Exhibits A-4, A-5, or A-6 and that they were not prepared by anyone under his supervision or control.⁷³ Mr. Slocum also testified that Exhibits A-4, A-5 and A-6 are not the actual construction plans but just “typical duct bank and typical cable cross section and typical manhole splice and typical terminator structure.”⁷⁴ Mr. Slocum further admitted that he has no experience with 345 kV XPLE cable.⁷⁵

Staff notes that ITC has not prepared the cable design specifications.⁷⁶ Mr. Slocum admitted that ITC does not yet have any construction plans that show the actual duct bank, cable cross-section or construction information for the proposed transmission line.⁷⁷ These exhibits represent only generic project details as compared to project specific details for a project which Mr. Slocum claimed is in its final steps before construction.⁷⁸ Staff recommends that the Commission determine that these exhibits are not credible, should not be given much weight, and do not satisfy the application requirements of Public Act 30.

3. Exhibit A-8, A-9 and A-10.

Exhibit A-8 is a route map sketch of an alternative route using 14 Mile Road dated September 27, 2006. Exhibit A-9 is a route map sketch of an alternative route using 15 Mile

⁷³ 2 Tr 320.

⁷⁴ 2 Tr 349-350.

⁷⁵ 2 Tr 322.

⁷⁶ 3 Tr 443.

⁷⁷ 2 Tr 350.

⁷⁸ 2 Tr 211.

Road dated September 27, 2006. Exhibit A-10 is a route map sketch overlay of the two alternative routes and ITC's preferred route. Each exhibit is marked in the upper left hand corner with the name J. Bardwell.

On cross-examination Mr. Slocum testified that J. Bardwell prepared these exhibits.⁷⁹ Mr. Slocum testified that he did not direct J. Bardwell's work and that he is not aware of any contractual relationship between ITC and J. Bardwell.⁸⁰ On redirect Mr. Slocum testified that the alternative routes described in his prefiled testimony are accurately depicted in these exhibits.⁸¹

Staff recommends that the Commission recognize these exhibits as not being properly sponsored and attribute minimal weight to them.

4. Exhibit A-11.

Exhibit A-11 is a preliminary project schedule for the underground portion of the proposed transmission line dated September 28, 2006. The engineer J. Bardwell's initials are on the preliminary schedule.

Mr. Slocum testified that he was not directly responsible for anything on the construction schedule. Mr. Slocum testified that none of his three staff were involved in any of the tasks described on the schedule.⁸² Mr. Slocum also testified that this schedule represented only the underground line work and that he was not aware if there was an overhead construction

⁷⁹ 2 Tr 322-326.

⁸⁰ 2 Tr 319.

⁸¹ 3 Tr 376-377.

⁸² 2 Tr 333.

schedule.⁸³ Finally, Mr. Slocum testified that he would not be responsible for updating the construction schedule and did not ask for it to be updated.⁸⁴

The detachment of ITC's lead project witness from the scheduling of the proposed transmission line gives Staff very little assurance that Exhibit A-11 can be relied upon for anything more than just a preliminary schedule and not an integrated underground construction and overhead construction schedule that would provide Staff and the Commission with reasonable assurances that the proposed project could be completed by the time it is allegedly needed. Staff recommends that the Commission give little weight to Exhibit A-11.

5. Exhibit A-12.

Exhibit A-12 is a set of bar graphs purporting to show population growth in Macomb and Oakland County from 1960-2000, Mr. Slocum testified that he did not produce or create this document but that he received the information from people within ITC's community relations area. Mr. Slocum testified that he was not responsible for supervising the work of the people in that area.⁸⁵ Subsequently, Mr. Slocum testified that he personally verified the information in this exhibit on the world-wide web.

Staff questions what relevance can be assigned to Exhibit A-12 when ITC has been unable to translate the information into an up-to-date load demand forecast for its reliability driven project which will be addressed later in this brief.

6. Conclusions regarding ITC's Exhibits.

Collectively, ITC's exhibits reveal to Staff ITC's superficial approach to planning, scheduling and justifying its proposed major transmission line before the Commission. These exhibits do not provide Staff with any assurances that the assertions contained in the exhibits are

⁸³ 2 Tr 362.

⁸⁴ 2 Tr 326, 362.

⁸⁵ 2 Tr 328-329.

credible or that they can be relied upon with any certainty. Staff is not able to rely on any ITC assertions of quantifiable benefits of the proposed transmission line because its initial application did not provide any supporting modeling data or analysis. By ITC's own admission, the project was reliability driven and not economically driven.⁸⁶

With this background regarding ITC's exhibits, Staff conducted a review of ITC's application.

B. ITC's application does not meet the filing requirements of Public Act 30.

Staff witness Stephen Paytash took the following approach in conducting its review of ITC's application⁸⁷:

Staff conducted a review of the progress of ITC Transmission's proposed project through the MTEP process; conducted a detailed review of the application filing and related documents; issued discovery requests for supplemental information from all parties as required; reviewed and evaluated discovery responses; as time permitted, submitted follow-up discovery requests as required by earlier responses; and finally conducted a complete review and analysis of the application in support of Staff's recommendations pursuant to the specific requirements of Public Act 30.

Staff did not conduct any computer modeling during its review of ITC's proposed major transmission line but reviewed modeling conducted in Detroit Edison's direct case and in ITC's rebuttal case⁸⁸:

Staff believes that the burden for modeling rests with the applicant to demonstrate need for the proposed major transmission line. Further, Staff believes it is the applicant's responsibility to be forthcoming in providing evidence of due diligence in its planning process and compliance with the requirements of Public Act 30.

Staff's position regarding the requirements of Public Act 30 is based upon the Commission's

⁸⁶ 2 Tr 301.

⁸⁷ 3 Tr 630.

⁸⁸ 3 Tr 630.

responsibility to protect ratepayers⁸⁹:

Staff has a history of interest in providing review, analysis and recommendations to the Commission regarding utility investments that result in financial obligations that can ultimately be recovered through retail rates. In recent years, utility restructuring changes have demanded greater efforts by Staff to understand new organizational structures, operational processes and rate recovery mechanisms through active participation in the planning process. Since the MISO planning process has the requirement of developing cost effective solutions to resolve transmission constraints, Staff believes due diligence in transmission planning is necessary to protect ratepayers.

ITC has the burden of proving to the Commission that the quantifiable and nonquantifiable public benefits of the proposed major transmission line justify its construction, that the proposed or alternative route is feasible and reasonable, and that the proposed major transmission line does not present an unreasonable threat to public health and safety.⁹⁰ Staff witness Stephen M. Paytash reviewed ITC's application and concluded that ITC's Application does not meet the filing requirements of Public Act 30.⁹¹ Staff further concluded that ITC has not shown that the quantifiable and nonquantifiable public benefits of the proposed major transmission line justify its construction or that the proposed or alternative route is feasible and reasonable.⁹²

1. Planned date of beginning construction.

The credibility of ITC's proposed project start date is basic to Staff's review of ITC's justification for the project. A project that is needed and can be justified requires a date for beginning construction that correlates to the in-service date. Without such correlation, a planned date of beginning construction lacks credibility. Staff considered ITC's project planning effort which supports its planned date for beginning construction.

⁸⁹ 3 Tr 629.

⁹⁰ MCL 460.568(5)(a)-(c).

⁹¹ 3 Tr 663.

⁹² 3 Tr 778.

Public Act 30 required ITC to state in its application the proposed date for beginning construction of the proposed project. ITC's application states the planned date for beginning construction is March 2008 with anticipated completion scheduled for approximately June 2010.⁹³ As support for the planned date of beginning construction, ITC provided Exhibit A-11 a preliminary project schedule for the underground portion of the project⁹⁴:

Exhibit A-11 is a preliminary design and construction activity sequence, provided by Black & Veatch, showing a 40 month sequence of activities beginning with conceptual design and ending with cable energization. It should be noted that the sequence of activities was not associated with calendar dates.

Exhibit A-11 represented the underground construction schedule only and did not include the planned date of beginning construction for the overhead portion of the proposed transmission line.⁹⁵

Staff took notice of a number of issues regarding Exhibit A-11. First, unlike an earlier schedule supplied to Staff via discovery, the schedule in Exhibit A-11 is not tied to calendar dates. Second, the exhibit contains monthly scheduling information for only the underground portion of the proposed project. Third, the latest revision shown on the exhibit is September 28, 2006. Fourth, ITC's application did not include scheduling information which correlated the complete range of activities necessary for coordinating such a large and complicated project.

Staff finds ITC's representations and information supporting its planned date for beginning construction does not satisfy the filing requirements of Public Act 30⁹⁶:

Staff and other interested parties must rely on ITC Transmission's application in this case as well as information obtained through the MTEP process and discovery requests to understand ITC Transmission's planning process and the progress of ITC's efforts for improving design details and scope for the proposed

⁹³ 2 Tr 188.

⁹⁴ 3 Tr 633.

⁹⁵ 2 Tr 333.

⁹⁶ 3 Tr 634.

major transmission line project which determine a reliable planned date for beginning construction that corresponds to the need for the project.

Further, Staff believes that ITC should have provided more detailed construction plans⁹⁷:

ITC Transmission should have provided a more detailed construction plan as support for its planned date for beginning construction in March 2008. Staff would expect a detailed construction plan to include the expected number of separate construction activities, the duration of each and include such information as whether some of the in-street construction activities can be done at the same time or whether they must be done sequentially. Such information is necessary for Staff to assess the reasonableness and reliability of ITC Transmission's representations of its projected beginning date for construction as well as the cost estimate, which is discussed later in my testimony. Further, it is not clear to Staff how the various activities such as in-street trenching and boring activities will be coordinated with vehicular activity and other commerce in the affected communities. From a transmission planning standpoint, it is difficult for Staff to understand how ITC Transmission can justify providing an out of date generic construction sequence with no explicit contingency plans, when Staff has asked, via discovery, for a detailed construction sequence to support the date for beginning construction presented in its current application as well as contingency plans in the event the project or portions thereof are delayed. Staff believes that such a preliminary schedule has little possibility of ensuring ITC Transmission or any other party that a reliable time frame and sequence of activities has been developed for construction of its proposed project.

Based on the information ITC provided in its Application and in support thereof, Staff finds ITC's planned date of beginning construction not credible⁹⁸:

Staff finds ITC Transmission's planned date of March 2008 is not credible. This date appears to be based on a preliminary and very generic construction schedule provided by a third party and it is unlikely that ITC Transmission will be able to ensure confidence in its ability to meet a June 2010 in-service date.

Staff recommends that the Commission give it little weight.

⁹⁷ 3 Tr 635.

⁹⁸ 3 Tr 636.

2. A detailed description of the proposed major transmission line, its route, and its expected configuration and use.⁹⁹

ITC provided a detailed description of the proposed major transmission line, its route and its expected configuration and use.¹⁰⁰

3. A description and evaluation of one or more alternative major transmission line routes.¹⁰¹

ITC presented two alternative routes in Exhibits A-8, A-9 and A-10.¹⁰² Staff finds that “the alternative routes are not diverse enough or located far enough apart to establish that the preferred route” is the route that should be recommended to the Commission¹⁰³:

This transmission line is defined as a major transmission line by Act 30, therefore the Staff expects a complete analysis of the regional area for the route selection. The alternatives cover too small of a geographical area. When designing a major transmission line, the alternatives are essentially endless, while it would be impossible for ITC to provide Staff with an infinite number of alternatives, ITC should have broadened their review of this region to demonstrate that the preferred route was compared with several other alternatives routes in the area and was selected as the preferred route. The Staff has reviewed the preferred route and alternatives and discovered they are really only subsets of each other. ITC has nearby transmission lines to the North near Pontiac and to the west near Wixom, in addition to the east transmission line they have proposed as a starting point. Staff is aware of gas transmission line corridors in the area. Railroad and/or other similar public rights-of-way would also provide a potential corridor for this project. By examining a larger geographical area an above ground solution may be found reducing the cost three or four times.

Staff explained that ITC did not provide a complete analysis of the regional area for the route selection¹⁰⁴:

This transmission line is defined as a major transmission line by Act 30, therefore the Staff expects a complete analysis of the regional area for the route selection.

⁹⁹ MCL 460.567(2)(b).

¹⁰⁰ 3 Tr 636-637.

¹⁰¹ MCL 460.567(2)(c).

¹⁰² 2 Tr 194-196.

¹⁰³ 3 Tr 776-777.

¹⁰⁴ 3 Tr 777.

The alternatives cover too shall of a geographic area. When designing a major transmission line, the alternatives are essentially endless, while it would be impossible for ITC to provide Staff with an infinite number of alternatives, ITC should have broadened their review of this region to demonstrate that the preferred route was compared with several other alternative routes in the area and was selected as the preferred route. The Staff has reviewed the preferred route and alternatives and discovered they are really only subsets of each other. ITC has nearby transmission lines to the North near Pontiac and to the west near Wixom, in addition to the east transmission line they have proposed as a starting point. Staff is aware of gas transmission line corridors in the area. Railroad and/or other similar public rights-of-way would also provide a potential corridor for this project. By examining a larger geographical area an above ground solution may have been found reducing the cost three or four times.

Staff concluded that the alternative analysis was “deficient and not enough information was provided to conclude that the preferred route was in the public interest.”¹⁰⁵ Staff recommends that the Commission determine that the description of alternatives does not satisfy the filing requirements of the Act and further does not provide a basis for concluding that the proposed route is feasible and reasonable.

4. Whether or not zoning ordinances prohibit or regulate the location of the route.

ITC provided testimony that it “is not aware of any zoning ordinances which would prohibit or regulate the location or development of any portion of the proposed route.”¹⁰⁶ Staff was not convinced that ITC actually verified that any zoning ordinances prohibited or regulated the location or development of the proposed major transmission line.¹⁰⁷ On rebuttal, ITC clarified this issue for Staff.¹⁰⁸

¹⁰⁵ 3 Tr 778.

¹⁰⁶ 2 Tr 197.

¹⁰⁷ 3 Tr 639.

¹⁰⁸ 2 Tr 233.

5. The estimated overall cost of the proposed major transmission line.

ITC provided testimony that “the estimated overall cost of the proposed transmission line is \$150 million which would result in an approximate \$30 million increase in annual transmission rates.”¹⁰⁹ Staff found that the estimated overall cost lacked credibility¹¹⁰:

The Staff recognizes that a cost estimate is just an estimate and would typically need to be updated to reflect changes in project scope, schedule, or equipment costs. However, ITC’s cost estimate tripled in the very late stages of MTEP 06 and just a few months before the Bismarck Troy project and related cost allocation were approved by the Midwest ISO Board in February 2007 following an 18-month stakeholder process. The bulk of discussions and evaluations of the proposed project in the MTEP stakeholder process took place within the context of a \$50 million total project cost.

Through discovery, Staff learned that ITC had additional cost estimates that were either not shared with the Midwest ISO or were shared but never reflected in updated drafts of MTEP 06 that were available to stakeholders. If ITC was indeed prepared to start construction in June 2007 – as it indicated to the municipalities along the route up until at least December 13, 2006 – it is difficult to understand how ITC did not have a refined cost estimate, based on more detailed knowledge regarding project scope, equipment costs, engineering, and routing, much earlier than late November 2006. The Staff suggests that it was also unfair to Midwest ISO stakeholders to have this 11th hour change to the cost estimate as they were reviewing and discussing the final versions of MTEP 06, including potential alternatives to the preferred transmission projects.

Throughout the MTEP 06 process, it appears that ITC Transmission was still adjusting the route for Bismarck-Troy and deciding whether pipe-type cable or some other cable technology would be used. Although it appears that ITC took additional steps to refine the scope of the project and routing shortly before its application was filed in this proceeding, the Staff is not convinced that ITC Transmission’s latest announced cost (\$150 million) accurately reflects the project’s current status as discussed in Mr. Slocum’s testimony and ITC’s discovery responses. An accurate estimate should be tied to an updated construction activity schedule, but such a schedule does not exist based on information available to Staff. As previously discussed in more detail, ITC’s latest construction schedule, dated September 28, 2006, does not reflect substantial changes to the project schedule that occurred shortly before ITC’s application was filed in this proceeding.

¹⁰⁹ 2 Tr 197.

¹¹⁰ 3 Tr 642.

Staff recommends that the Commission find that the estimated overall cost ITC provided does not satisfy the filing requirements of Public Act. 30.

Staff believes that additional uncertainty exists regarding ITC's estimated overall costs due, in part, to the fact that much of the engineering designs are not complete.¹¹¹ Staff is also very concerned with the development of the \$150 million cost estimate because when asked on discovery ITC expressed that the cost of the project was beyond the scope of this proceeding¹¹²:

For example, ITC's response to Staff's discovery mentions an "earlier estimate of \$68 million based on non-detailed design without a full understanding of the project." This was the first time the Staff heard of the \$68 million estimate. In response to Staff's discovery request asking ITC to explain the basis for this amount, how it was used, and how it relates to other estimates, ITC states that this request: "...irrelevant to the issues in this proceeding which concern the siting of a transmission line; they are beyond the scope of the factors to be considered pursuant to PA 30; and, are also irrelevant because the project is a reliability driven project."

Staff believes that an estimated overall cost for a proposed major transmission line must be based on some estimated project scope. ITC's process for refining the scope of its proposed project leads Staff to conclude that ITC did not carefully consider the estimated cost of the proposed major transmission line when planning the project.

ITC states that planning for its proposed project began in 2004.¹¹³ ITC's project was initially described as the Bismarck-Troy project in the MTEP 05. The project was defined as "tentative solutions to identified needs, and require additional planning before being endorsed by the Transmission Owners or the MISO as the preferred solution". Then, at some point during either MTEP 05 or MTEP 06, the project became known as the Central System Project.¹¹⁴ In

¹¹¹ 2 Tr 358.

¹¹² 3 Tr 644-645.

¹¹³ Exhibit S-4.

¹¹⁴ Exhibit S-1.

July 2005, as MTEP 06 began, the Central System Project included the Bismarck-Troy line, work at Goodison, and Pontiac-Joslyn-Walton circuits.

ITC continued to refine the scope and cost of the Bismarck-Troy project into 2006. On October 27, 2006, the first draft of MISO's publicly available MTEP 06 report identified Bismarck-Troy as stand-alone project #692.¹¹⁵ On November 21, 2006, ITC provided MISO with a significantly increased cost estimate due to "better cost estimates based on route and engineering analysis".¹¹⁶ The cost estimate tripled from \$50 million to \$150 million. In December 2006, ITC was advising the affected municipalities that construction would begin in June 2007.

Staff's Exhibit S-1 describes the trail of cost estimate changes as ITC's project scope was being refined. The history of ITC's cost control appears to have been disconnected from ITC's planning of the project scope and schedule. ITC's planning process seemed to wander from a Central System Project with consideration for 120 kV cable replacement to a 345 kV project to reduce loading on the 120 kV (with possibly either 345 kV pipe-type cable, 345 kV XLPE cable or possibly even a superconducting cable design) while dismissing, without investigation, the use of 120 kV composite conductor at much lower cost.¹¹⁷

ITC's proposed "reliability driven" project appears to be driven by a choice not supported by sufficient project experience or a desire carefully to consider costs. ITC's lead planning witness, Mr. Slocum, appears to be only partially acquainted with what is required to plan and schedule the large and expensive proposed project. Even the underground construction expert witness, John S. Rector, testified that his prior experience with the relatively new proposed cable

¹¹⁵ MISO MTEP 06, p 35.

¹¹⁶ Exhibit S-1.

¹¹⁷ Exhibit A-2.

technology which is a major cost component of the project is related to providing conceptual designs.¹¹⁸

Staff believes that ITC has not provided a credible estimated overall cost and has not provided sufficient information regarding the components that add up to \$150 million.¹¹⁹

Staff recommends that the Commission find ITC's estimated overall cost assertion does not satisfy the requirements of Public Act 30. In the alternative, Staff recommends that the Commission give very little weight to the ITC's estimated overall cost.

6. Information supporting the need for the proposed major transmission line.

In its initial testimony, ITC presented a number of future 120 kV circuit overload conditions as the basis for the need to construct its proposed major transmission line. Further, ITC stated that the future overload conditions are caused by a forecasted load demand in the Bismarck-Troy area.¹²⁰ ITC merely asserted that the project is based upon the application of ITC's planning criteria to specific transmission line projected overloads under normal and contingency conditions.¹²¹ ITC's Application did not include specific forecasted peak system load demand conditions and did not include specific load forecast modeling data and analysis. Such information is necessary for Staff and the Commission to determine that the proposed major transmission line in-service date is necessary to relieve the projected overloads. Even ITC's Exhibit A-2 does not provide the forecasted system peak load demand used for its MTEP 06 study year.

¹¹⁸ 2 Tr 446-448.

¹¹⁹ 3 Tr 646.

¹²⁰ 2 Tr 197-199.

¹²¹ 3 Tr 646.

Staff finds ITC's Application insufficient regarding the need for the proposed major transmission line. Staff believes ITC should have provided the forecast modeling data and analysis supporting ITC's claims that this project is needed. Staff recommends that the Commission determine that ITC's Application did not present sufficient information regarding the need for the proposed major transmission line.

7. Estimated quantifiable and nonquantifiable public benefits of the proposed major transmission line.

ITC's initial testimony claimed a number of economic and reliability benefits for its proposed reliability driven project: increased reliability, loss savings, reactive power benefits and generation dispatch savings.¹²² These claims are similar to the unsubstantiated claims presented in ITC's draft narrative, Exhibit A-2. ITC's concluding assertion on page 23 of Exhibit A-2 stated: "We have proven these positive economic benefits internally using PROMOD analysis." ITC did not provide the production cost modeling and the associated assumptions regarding dispatch patterns and annual load duration data assumptions that support this claim. It is unreasonable for ITC to make such assertions and not provide the internal PROMOD analysis to Staff. Without providing the internal PROMOD analysis, Staff cannot validate ITC's claims.

ITC provided one page of unsubstantiated and anecdotal assertions of economic benefits assignable to its \$150 million proposed major transmission line.¹²³ Staff believes that these unsubstantiated claims for estimated quantifiable and nonquantifiable public benefits are insufficient on their face. Staff recommends that the Commission find that ITC failed to provide the information necessary to verify any estimate of public benefits claimed for its proposed major transmission line.

¹²² 2 Tr 200.

¹²³ 2 Tr 200.

8. Estimated private benefits of the proposed major transmission line.

ITC asserted that its proposed \$150 million transmission line would add to ITC's investment base.¹²⁴ Staff does not find this statement sufficient. Staff would expect that other non public entities could also benefit from the proposed major transmission line and yet ITC has failed to indicate that it has performed such an analysis¹²⁵:

In its testimony, ITC asserts that its proposed \$150 million transmission line would add to ITC Transmission investment base. Staff believes that a \$150 million capital project would likely add more to ITC Transmission's investment base than the \$2.4 million which is the approximate ITC related capitalization associated with Detroit Edison's proposed alternative. Staff believes that a transmission planning process should not encourage increased private benefits over public benefits.

Staff recommends that the Commission determine that ITC's Application did not present sufficient information regarding private benefits.

9. Information addressing potential effects of the proposed transmission line on public health and safety.

ITC provided the testimony of Dr. Peter A. Valberg regarding the potential health effects of electric and magnetic fields related to 345 kV transmission lines. Staff is satisfied that ITC Transmission has offered assurances that the project will meet all reasonable requirements for project-specific EMF levels at edge of right-of-way (ROW).¹²⁶

10. Summary of public comments.

ITC provided a summary of public comments received at each public meeting and its response to those comments.¹²⁷ ITC testified that a court reporter recorded all of the comments

¹²⁴ 2 Tr 201.

¹²⁵ 3 Tr 660.

¹²⁶ 3 Tr 661.

¹²⁷ 3 Tr 661, Exhibit A-13.

and responses.¹²⁸ Staff is satisfied that the summary meets the requirements of Public Act 30.

11. Compliance with all applicable state and environmental standards, laws and rules.

While ITC did not identify environmental standards, laws and rules, it represents through the testimony of witnesses Brian Slocum and John S. Rector that the proposed transmission line will comply with all applicable state and federal environmental standards, laws and rules.¹²⁹

Staff is satisfied that ITC's representations are sufficient.

12. Staff's conclusion regarding ITC's Application.

ITC has the burden of proving to the Commission that the quantifiable and nonquantifiable public benefits of the proposed major transmission line justify its construction, that the proposed or alternative route is feasible and reasonable, and that the proposed major transmission line does not present an unreasonable threat to public health and safety.¹³⁰ Staff concludes that the application does not meet the requirements of Public Act 30 and recommends that the Commission deny ITC's request for a certificate of public convenience and necessity.¹³¹

V. Detroit Edison's analysis of ITC's proposed major transmission line.

Detroit Edison offered direct testimony that the overloads that drove ITC's justification for the proposed major transmission line do not exist.¹³²

A. Detroit Edison witness Murray Davis.

Murray Davis, a registered professional engineer in the State of Michigan since 1972, has extensive experience in transmission facility related issues. Mr. Davis participated on various electric transmission-related councils and committees including the U.S. Canada Power System

¹²⁸ 3 Tr 332.

¹²⁹ 3 Tr 661.

¹³⁰ MCL 460.568(5)(a)-(c).

¹³¹ 3 Tr 663.

¹³² 3 Tr 506, Exhibit S-11.

Outage Task Force which studied the 2004 Blackout and developed “recommendations on how to prevent future power system blackouts.”

Mr. Davis filed testimony in this case that comments on ITC’s application, discusses studies performed by Detroit Edison, and recommends practical alternatives to ITC’s proposed major transmission line¹³³:

The purpose of my testimony is (1) to comment on the results of the normal and contingency analysis studies performed by ITC and on which ITC relied in proposing the Bismarck-Troy 345 kV Project, (2) to discuss studies performed by Detroit Edison to determine the need for the Bismarck-Troy Project and (3) based on the results of Detroit Edison’s studies, to recommend practical alternatives that have significantly lower costs, shorter construction periods, and considerably less impact on the community than the proposed ITC Bismarck-Troy 345 kV Project.

Without having the benefit of ITC’s base conditions used by ITC to justify the project, Mr. Davis used Detroit Edison’s Positive Sequence Load Flow program and closely matched ITC’s forecasting results¹³⁴:

Detroit Edison requested that ITC provide the base conditions used in their modeling but for reasons stated in their response to our request, they declined to provide that data to us (See Exhibit DE-13). As previously indicated, the base case system conditions used in my contingency analysis program are identified below. When I performed my analysis, the resultant normal and contingency overloads closely matched the results indicated by ITC from their analysis. The fact that I achieved similar results validates the base case conditions selected and enables me to use the Positive Sequence Load Flow program and base case to evaluate alternatives and be assured that the results are accurate.

Mr. Davis asserted that there are no overload problems using MISO’s MTEP 06, 13,460 MW system peak for a 2011 study year¹³⁵:

Q. Mr. Davis, ITC’s proposed Bismarck-Troy project was evaluated for a 14,193 MW system peak load during the 2012 study year. MISO’s MTEP06 indicates the project was evaluated at a 13,460 MW system peak for a 2011 study year. Did you evaluate the need for the proposed Bismarck-Troy project at a system peak load of 13,460 MW?

¹³³ 3 Tr 480-492.

¹³⁴ 3 Tr 492-493.

¹³⁵ 3 Tr 506.

- A. Yes and I found that the overload problems at this reduced load level are non-existent. Exhibits, DE-10, DE-11, and DE-12 show the results for a load flow analysis at 13,476 MW. Exhibit DE-10 shows the results of the studies on the Bloomfield-Troy “near” overload. This near overload is now “no” overload showing only 85.3% of its normal summer rating. And, when the strain bus, trainers and disconnects are replaced the flow is only 52.2% of its rating. With Troy generation running at 75 MW and when all the circuit improvements I recommended above are implemented, this flow is only 47.1% of its rating. Exhibit DE-11 shows the results of the Lincoln-Northeast-Northwest studies and the percent of emergency rating is reduced to 99.3% for loss of the Lincoln-Northeast, but with the conductor replacement the flow is now only 68.5% of rating. When the Troy generation is turned “on” at 75 MW, the percent of rating is 63.3. Exhibit DE-12 shows the percent of emergency flow on the Northeast-Pluto of 97.5%, and if the conductor is replaced with ACCC, the percent of emergency flow drops to 68.3%. With the Troy generation on line at 75 MW, the percent of emergency rating flow is 64.7%.

The results of Mr. Davis’ studies are summarized on Exhibits DE-1, DE-3, DE-8 and DE-10 through DE-12. These exhibits outline “a solution for the near overload problems on the Bloomfield-Troy line that ITC asserts justifies the project”.¹³⁶

Mr. Davis suggested solutions to the near overload conditions on the _____ which is laid out in Exhibit DE-2.¹³⁷ One of these solutions “consists of installing an 83.5 MW peaking generator at the _____ and connection to the 40 kV line.”¹³⁸ Mr. Davis proposed a solution to the _____ overload.¹³⁹ This solution consists of replacing ACSR (aluminum conductor steel reinforced) conductors with “much higher rated ACCC (aluminum conductor composite core) conductor. Mr. Davis continued to address overload situations with solutions short of building a new major transmission line.”¹⁴⁰

¹³⁶ 3 Tr 496.

¹³⁷ 3 Tr 497.

¹³⁸ 3 Tr 497.

¹³⁹ 3 Tr 498-499.

¹⁴⁰ 3 Tr 500-504.

Mr. Davis summarized the benefits of Detroit Edison's solutions compared to ITC's proposed solution¹⁴¹:

Yes, I have explained how the overload problems described by ITC could be solved by replacing strain bus, trainers, wave traps, and reconductoring existing lines with higher rated ACCC conductors and installing the RTTRS, all at a much lower cost than the Bismarck-Troy Project proposed by ITC. The total cost for all of these solutions is estimated to be \$2.4 M. Also, my proposed solutions would have significantly less impact on existing infrastructure because there is no trenching needed for underground cable as is the case for the ITC proposed project. In general, my solutions involve replacing line on existing towers. In addition to the line work, the siting of one 75 MW summer-rated peaking unit at the existing station site increases reliability in the area. The line upgrades and the generation addition can all be done for an estimated \$37.4.

Mr. Davis further asserted that Detroit Edison's proposed alternative solutions to the near overload and overload conditions will improve the reliability of the central area of ITC's footprint¹⁴²:

My proposed solutions will also increase the reliability of the electric system because the total solution includes the addition of generation at _____ which will improve reliability in the central area. The _____ site can accommodate a second generating unit and if it were to be installed at roughly twice the cost of the first unit, total summer capacity would increase to 150 MW and 30 MVAr further improving reliability and reducing system losses by 15 MW at peak, which is 2 MW more than the loss savings of the Bismarck-Troy Project. Furthermore, the area 120 kV voltage would be improved by 2.04 meter volts (0.017 p.u.) at _____.

Further, Mr. Davis explained that ITC's proposal plans for NERC Category C contingencies that were not listed as justifications in MTEP 06 and that even considering Category C contingencies, overload conditions were resolved¹⁴³:

Most of the contingencies listed below (in items 1-8) are various NERC Category C contingencies. These categories state that the controlled interruption of electric supply to customers (load shedding) . . . may be necessary to maintain the overall reliability of the interconnected transmission systems. ITC planning criteria sets the allowable load loss at 300 or 500 MW depending on the category. When

¹⁴¹ 3 Tr 504.

¹⁴² 3 Tr 505.

¹⁴³ Exhibit S-11.

Detroit Edison's solutions were applied to the outages listed below (in items 1-8), not only were the overloads resolved, but they were resolved without utilizing any load shedding.

None of the Category C contingencies below (in items 1-8) were listed as justification for MTEP 06 Project ID 692. Most were not listed in the e-mail from Brian Slocum dated January 23, 2007 as concerns either. As such they were not initially reviewed as they were apparently not considered violations that needed resolution by ITC. However, they are reviewed below (in items 1-8). ITC filed rebuttal testimony challenging Mr. Davis' assertions.

Finally, Mr. Davis stated that when ITC's proposed Bismarck-Troy project is evaluated at MISO's MTEP 06 13,460 MW system peak for a 2011 study year the overload problems are non-existent.¹⁴⁴ Detroit Edison stated that the overloads that drove ITC's justification for the proposed major transmission line do not exist¹⁴⁵:

I found that the overload problems at this reduced load level are non-existent. Exhibits DE-10, DE-11, and DE-12 show the results for a load flow analysis at 13,476 MW.

* * *

The system changes proposed by Detroit Edison would be solutions that will provide long term benefits to the lines that are either overloaded or approaching their capacity. Any time a utility proposes a solution to a problem the solution is sufficient until another limiting element is reached. Because the projected Detroit Edison load forecast through 2012 will not reach the studied load level of 14,200 MW, the solutions provided will satisfy the need for years to come. None of the contingencies with which ITC is concerned have materialized in the real-time contingency analysis to date, nor did they show up during the 2006 peak which was 12,767 MW.

Detroit Edison's alternatives to the proposed transmission line presented compelling support for Staff's position that ITC has not provided adequate information. Therefore Staff recommends that the Commission deny ITC's request for a certificate of public convenience and necessity.

¹⁴⁴ 3 Tr 506, Exhibits DE-10, DE-11 and DE-12 shows the lower flow analysis at 13,460 MW.

¹⁴⁵ 3 Tr 506, Exhibit S-11.

VI. ITC's rebuttal case does not change Staff's recommendation.

On rebuttal, ITC attempted to shift the focus of its reliability driven project by providing economic analysis of an alternative (one proposed by Detroit Edison) not previously considered in ITC's planning and evaluation of alternatives leading to its proposed project. Staff must emphasize that the timing of ITC's rebuttal analysis offered Staff and other stakeholders minimal opportunity to conduct a meaningful analysis of the data, obtain the necessary additional information through discovery and analyze the assertions made on rebuttal.

ITC filed the rebuttal testimony of Brian A. Slocum and Antonio Sammut. The rebuttal testimony does not convince Staff that the quantifiable and nonquantifiable public benefits justify the construction of the proposed major transmission line.

A. Antonio Sammut

Mr. Sammut is the Director of Economic Cost Benefits with ITC Holdings Corporation.¹⁴⁶ Mr. Sammut was employed with Detroit Edison for many years and "held positions of increasing responsibility in relay, telecommunications, transmission planning, load research, corporate strategy, marketing and regulatory affairs."¹⁴⁷ Mr. Sammut completed his "tenure at Detroit Edison as Director of Load Research, where (he) was responsible for developing and leading a comprehensive load research program."¹⁴⁸ Mr. Sammut has served on various NERC and MISO work groups and task forums.¹⁴⁹ Currently, Mr. Sammut participates in the MISO PROMOD User Group.¹⁵⁰ Mr. Sammut did not file direct testimony supporting

¹⁴⁶ 2 Tr 110.

¹⁴⁷ 2 Tr 110.

¹⁴⁸ 2 Tr 110-111.

¹⁴⁹ 2 Tr 111.

¹⁵⁰ 2 Tr 111.

ITC's application for a certificate of public convenience and necessity. Instead, Mr. Sammut filed rebuttal testimony to Detroit Edison witness Murray Davis.¹⁵¹

Mr. Sammut's rebuttal testimony focused on the "differences in reliability, operating costs, market impacts and losses" between Detroit Edison's proposal to install a peaking generator at the _____ and ITC's proposed Bismarck-Troy Project.¹⁵² Mr. Sammut alleged that Mr. Davis' comparisons are "not only invalid" but "misleading as well."¹⁵³ Mr. Sammut testified that he conducted a PROMOD IV production cost simulation analysis, a PROMOD IV reliability model analysis, and conducted an economic comparison between installing two peakers at the _____ and building a \$150 million major transmission line through the cities of Sterling Heights, Troy, Clawson and Royal Oak.¹⁵⁴ Finally Mr. Sammut asserted that the _____ may impact the LMP market and result in higher rates for Detroit Edison customers.¹⁵⁵ Mr. Sammut's analysis was summarized in Exhibits A-18, A-19, A-20, and A-21.

ITC's primary rebuttal witness, Mr. Sammut, performed economic modeling using the 21st Century Energy Plan high case peak load forecast 14,196 MW for the year 2012.¹⁵⁶ Mr. Sammut admitted that he consistently used the 21st Century Energy Plan 2012 highest forecast peak system load demand of 14,196 MW throughout his reliability and economic modeling runs.¹⁵⁷ When asked why he did not use the base or the low forecast, Mr. Sammut stated that ITC's internal forecast was showing a peak load demand higher than the 2012 base case for the

¹⁵¹ 2 Tr 110-124.

¹⁵² 2 Tr 113.

¹⁵³ 2 Tr 114.

¹⁵⁴ 2 Tr 115-120.

¹⁵⁵ 2 Tr 120.

¹⁵⁶ 2 Tr 127.

¹⁵⁷ 2 Tr 127, 154.

21st Century Energy Plan.¹⁵⁸ Staff does not find Mr. Sammut's assumptions credible for the following reasons.

Staff is aware that on April 13, 2007, Detroit Edison filed a peak load demand forecast in its current rate Case No. U-15244.¹⁵⁹ That forecast presents expected peak load demands of 12,683 MW and 12,664 MW for the years 2011 and 2012 respectively. The same forecast projects the expected peak load demand for 2016 to be only 13,201 MW which is considerably below the peak values assumed for ITC's modeling. Even the 21st Century Energy Plan base case load forecast does not expect peak load demand to reach 14,190 MW until 2019. Even though Detroit Edison's rate case load demand forecast was filed on April 13, 2007 and Mr. Sammut did not file his rebuttal testimony until August 24, 2007, Mr. Sammut stated that he was not familiar with Detroit Edison's most recently filed load forecast.¹⁶⁰ Mr. Sammut, however, finally admitted on cross-examination that he was aware through hearsay from people who work for him that Detroit Edison's rate case load forecast was lower than the high case in the 21st Century Energy Plan.¹⁶¹ Rather than defending ITC's reliability driven project, Mr. Sammut's testimony appears to be offered for the sole purpose of rebutting an alternative reliability driven project not considered by ITC in its Application.

Staff believes that it was unreasonable for Mr. Sammut to have used only one forecast, let alone a high forecast. Staff believes that it would have been reasonable and prudent for Mr. Sammut to have considered sensitivity analysis around his load forecast assumptions. More troubling to Staff is why Mr. Sammut did not more carefully investigate the information he

¹⁵⁸ 2 Tr 154.

¹⁵⁹ *In the matter of the application of The Detroit Edison Company for authority to increase its rates, amend its rate schedules and rules governing the distribution and supply of electric energy, and for miscellaneous accounting authority*, MPSC Case No. U-15244.

¹⁶⁰ 2 Tr 128.

¹⁶¹ 2 Tr 149-150.

received from his staff that Detroit Edison's rate case load forecast was lower than the high case in the 21st Century Energy Plan.¹⁶²

Staff finds that the forecasted load demand used by Mr. Sammut in his modeling and analysis lacks credibility and adds no verifiable benefit to ITC's justification for its reliability driven project. Staff recommends that the Commission determine that ITC's load forecast assumptions do not provide reasonable and prudent forecasts upon which to justify the construction of a major transmission line.

B. Brian Slocum

On rebuttal, Mr. Slocum, a 1999 electrical engineer graduate with entry level and mid-management experience in transmission planning, criticizes both Staff's analysis of ITC's Application and Detroit Edison's solutions. Four exhibits accompanied Mr. Slocum's rebuttal testimony: Exhibits A-14, A-15 and A-16 economically compare Detroit Edison's alternative to the proposed transmission line. Of importance to Staff is that Mr. Slocum's prefiled direct testimony did not include any economic analysis supporting ITC's reliability driven project.

1. Mr. Slocum's rebuttal to Staff.

Mr. Slocum's rebuttal testimony does not convince Staff that ITC's Application satisfied the requirements of Public Act 30 nor does it convince Staff that the quantifiable and nonquantifiable benefits justified the construction of the project transmission line nor does ITC's rebuttal testimony convince Staff that the proposed route is feasible and reasonable.

a. Planned date for beginning construction.

Mr. Slocum filed rebuttal testimony to Staff's criticism that the planned date for beginning construction is "not backed by credible planning and analysis,"¹⁶³ Mr. Slocum stated

¹⁶² 2 Tr 149-150.

¹⁶³ 2 Tr 228.

that “the planned date for beginning construction is not tied to an in-service date.”¹⁶⁴ Mr. Slocum further stated that “the planned date of construction is not tied to any construction schedule and is provided just to answer the statutory requirement to provide a date. ITC’s planned date appears to be just a plug date to satisfy the statutory requirement to provide a date. Staff finds that the date is not credible and is merely a superficial attempt to get project approval without prudent planning and scheduling necessary to justify the project.

Prior to filing its Application, ITC represented to the affected municipalities a June 2007 planned beginning date of construction. In October 2006, ITC sent letters to municipalities stating that the construction phase of the project was expected to begin in June 2007.¹⁶⁵ ITC repeated the June 2007 start for construction in formal presentations given to each municipality in December 2006.¹⁶⁶ ITC did not file its Application for a Certificate until February 27, 2007 and should have known that it had no guarantee of a three-month expedited hearing schedule at the Commission to meet a June 2007 start of construction.

On rebuttal, Mr. Slocum testified that ITC is “at the final step of the Bismarck-Troy project before construction is to begin.”¹⁶⁷ However, on cross-examination, Mr. Slocum testified that the cable specification has not been finalized yet.¹⁶⁸ Mr. Slocum testified that he is not even directly involved in either the conceptual or detailed design for the 345 kV underground line.¹⁶⁹ Further, Mr. Slocum confirmed that ITC has no prior experience with installing 345 kV XLPE

¹⁶⁴ 2 Tr 228.

¹⁶⁵ Exhibit S-1.

¹⁶⁶ Exhibit S-1.

¹⁶⁷ 2 Tr 211.

¹⁶⁸ 2 Tr 357-358.

¹⁶⁹ 2 Tr 327.

cable.¹⁷⁰ Finally, Mr. Slocum testified that he was not aware of what percentage of the project's detailed design had been completed.¹⁷¹ According to Mr. Slocum, he was not aware of whether or not there is a contract in place with Black & Veatch, an underground construction company that provided consulting to ITC on this project.¹⁷² If ITC had prepared a complete project schedule, will all major project activities tied to calendar dates, it would have been immediately apparent that construction could not begin in June, 2007 or for that matter, in March, 2008.

It is apparent to Staff that ITC has not adequately planned and scheduled for a number of activities which have not been completed. Consequently, Staff has little confidence that ITC's planned dates for beginning construction, March 2008 and planned in-service date, 2010, will not be revised again. Staff still has no information regarding the planned date for beginning construction on the overhead work for the project and its relationship to the underground work.¹⁷³

Staff recommends that the Commission find that ITC's planned date of beginning construction is not credible and cannot be relied upon to ensure that the in-service date, which should correlate to ITC's justification for the project, is accurate.

b. Description and evaluation of one or more alternative major transmission line routes.

Mr. Slocum filed rebuttal testimony regarding Mr. Paytash's analysis of ITC's representation of alternative routes. Mr. Slocum essentially repeated his direct testimony description of why these routes were not chosen.¹⁷⁴ ITC failed to respond to Mr. Mazuchowski's analysis that the alternative routes are not diverse enough or located far enough apart to establish

¹⁷⁰ 3 Tr 448.

¹⁷¹ 2 Tr 358.

¹⁷² 2 Tr 356-357.

¹⁷³ 2 Tr 333.

¹⁷⁴ 2 Tr 230-232.

that the preferred route is indeed the route which should be recommended.”¹⁷⁵ In Staff’s opinion, a complete application would have examined a larger geographic area to determine whether an above ground solution may be available reducing the cost three or four times.¹⁷⁶ ITC did not provide this information in its Application or on rebuttal. Staff believes that without this information the application is not sufficient to make a determination that the proposed route is feasible and reasonable.

Staff recommends that the Commission deny ITC’s request for a certificate because ITC has not proven that the proposed route is feasible and reasonable.

c. Local zoning ordinances.

Mr. Slocum filed rebuttal testimony to Staff’s criticism that ITC is not aware of any zoning ordinances that would prohibit or regulate the location of any portion of the proposed route.”¹⁷⁷ Mr. Slocum stated that in their review of zoning ordinances and “repeated visits with local officials, no prohibitive zoning ordinance was brought to our attention.”¹⁷⁸ ITC represented that they relied on others to bring any prohibiting zoning ordinances to their attention. Staff expected a representation from ITC that based on the preferred route, there are no zoning ordinances that prohibit or regulate the proposed major transmission line route. It appears ITC got Staff’s point when Mr. Slocum stated on rebuttal that “there is no zoning ordinance which might prohibit or regulate the location or construction of the proposed route.”¹⁷⁹

Even though ITC did not make this representation in its Application, Staff is satisfied that ITC’s rebuttal testimony satisfies the requirements of Act 30 regarding local zoning ordinances.

¹⁷⁵ 3 Tr 776.

¹⁷⁶ 3 Tr 777.

¹⁷⁷ 3 Tr 639.

¹⁷⁸ 2 Tr 233.

¹⁷⁹ 2 Tr 233.

d. Estimated overall cost of the proposed major transmission line.

Mr. Slocum also filed rebuttal testimony regarding Staff's opinion that the estimated overall cost of the proposed \$150 million major transmission line does not satisfy the requirements of Public Act 30.¹⁸⁰ Mr. Slocum testified that MISO required ITC "to provide costs associated with projects when these projects were in the preliminary stages."¹⁸¹ ITC wants Staff to rely on MISO's 2-3 month review of why a proposed project that cost \$50 million in the summer of 2006 suddenly tripled to \$150 million in November, 2006.

MISO approved the MTEP06 (which includes ITC's proposed transmission line) on February 15, 2007.¹⁸² Contrary to ITC's representations, MISO did not have months to review the revised cost estimate before approving the MTEP06. The project cost tripled from September, 2006 to November, 2006 from \$50 million to \$150 million.¹⁸³ MISO had one month to "vett" ITC's draft response to MISO's questions. The draft report (Exhibit A-2) was provided to MISO on January 18, 2007.¹⁸⁴ The stakeholders, including Detroit Edison, were not even given an opportunity to review this self-serving draft report until May, 2007 when Detroit Edison was granted intervention in this case.¹⁸⁵

ITC stated on rebuttal that the \$150 million cost estimate satisfies the requirement of Section 7(e) of Public Act 30.¹⁸⁶ ITC did not provide any information in its application, direct case or rebuttal case that substantiates this cost estimate. ITC did not provide or conduct a cost

¹⁸⁰ 2 Tr 233-235.

¹⁸¹ 2 Tr 234.

¹⁸² 2 Tr 188.

¹⁸³ 2 Tr 187-188.

¹⁸⁴ 2 Tr 342.

¹⁸⁵ 2 Tr 287-289.

¹⁸⁶ 2 Tr 235.

benefit study for this project.¹⁸⁷ ITC's sloppy scoping and scheduling of the project puts its cost estimate at risk. ITC did not have any response to Staff's discussion regarding the relevancy of cost issues in this docket.¹⁸⁸ ITC's primary transmission planning witness Mr. Slocum, in rebuttal testimony, stated that he had no comment regarding Staff's discussion as to the relevancy of cost issues in this docket. ITC does not believe costs are relevant to the Commission's determination. Instead he asserts that such discussion is a legal issue.¹⁸⁹

Staff believes that the estimated overall cost of the project is relevant. The estimated cost of the project is one component of whether the quantifiable benefits justify the construction of the proposed major transmission line. The Commission made it clear in its May 17, 2007 Order granting Detroit Edison and Consumers Energy intervention that the Commission considers the cost of the proposed major transmission line important.¹⁹⁰

Staff believes that a one line representation that the \$150 million cost estimate "is the only cost estimate that has been provided in this docket," does not satisfy the filing requirements of Public Act 30. Based upon the information ITC provided, Staff is unable to make a recommendation about whether the quantifiable benefits justify the construction of the proposed major transmission line. Therefore, Staff recommends that the Commission deny ITC's request for a certification of public convenience and necessity.

e. ITC's justification for the proposed major transmission line.

ITC filed rebuttal testimony regarding Staff's analysis of ITC's justification for the major transmission line.¹⁹¹ Following the discussion of peak load demand forecast data by Detroit

¹⁸⁷ 2 Tr 300.

¹⁸⁸ 2 Tr 235.

¹⁸⁹ 2 Tr 235.

¹⁹⁰ MPSC Case No .U-14933, May 17, 2007, p 9.

¹⁹¹ 2 Tr 235-240.

Edison, subsequent rebuttal testimony from ITC and cross examination of witnesses, Staff has been able to obtain a clearer picture of the reduced load demand conditions mentioned in Staff testimony.¹⁹²

The relevant peak load demand values used in the modeling conducted by Detroit Edison were the 2011 MTEP system peak load demand of 13,460 MW. On rebuttal ITC used the 2012 case system peak high load demand of 14,196 MW as presented in the 21st Century Energy Plan to respond to Detroit Edison's modeling.¹⁹³ Detroit Edison's witness, Mr. Davis, stated that after evaluating the need for the proposed Bismarck-Troy project at a system peak load of 13,460 MW, the overload problems are non-existent.¹⁹⁴ According to Detroit Edison's most recent load forecast, the 13,460 MW system peak load will not be reached until after 2016.¹⁹⁵ The obvious question in Staff's mind is why would ITC propose construction of a reliability driven project years before it is needed?

Staff is aware that ITC's justification of need of the proposed transmission line is sensitive to assumed load forecasts.¹⁹⁶ The Staff recognizes that forecasts cannot flawlessly predict future electric general requirements, but "forecasting remains the best way to begin to assess future needs."¹⁹⁷ Staff believes that ITC is obligated to use the most up-to-date load forecast data to support the need for its reliability driven proposed transmission line. ITC did not use the most current load forecasts available. ITC's rebuttal testimony attempts to model

¹⁹² 3 Tr 647.

¹⁹³ 2 Tr 236.

¹⁹⁴ 3 Tr 506.

¹⁹⁵ MPSC Case No. U-15244, Exhibit A-16, Schedule F1-3, p 1 of 2.

¹⁹⁶ 3 Tr 647.

¹⁹⁷ *In the Matter of the Application of International Transmission Company, for a certificate of public convenience and necessity for the construction of a transmission line other than a major transmission line, running through Genoa Township, Hartland Township, Oceola Township, Milford Township and Brighton Township*, MPSC Case No. U-14861, p 9, fn 11.

economic benefits for its proposed major transmission line using the high load forecast of the 21st Century Energy Plan for 2012. Staff is not aware of any attempt by ITC to update its load forecast assumptions. ITC's forecasted peak load demand does not appear to be credible.

On rebuttal ITC asserted that the forecasted load that was used were before MISO and summarily dismissed the importance of the load forecasts¹⁹⁸:

Mr. Paytash addresses varying levels of load forecasts, including Mr. Davis's evaluation of system need for the proposed project at the MISO MTEP 06 system peak load of 13,460 MW. Again, these load forecasts were before MISO and it approved the project after careful review and analysis. Also, whether the project is evaluated for a 14,193 MW system peak load during the 2012 study year or the 13,460 MW system peak load during the 2011 study year is sawing sawdust as far as *ITC Transmission* is concerned.

The load forecasts, while not an exact prediction of actual future load, should be based upon reasonable assumptions. ITC used a 14,193 MW system peak load which is not a reasonable assumption. Last spring, the Detroit Edison Company filed its most recent rate case and claims that annual system maximum demands will only reach 13,201 MW by the year 2016. ITC used only one load forecast and did not provide modeling to support that forecast until the rebuttal phase of the case challenging Detroit Edison's proposed solutions.

Mr. Slocum's rebuttal testimony also attempts to expand the definition of overloads requiring additional transmission infrastructure. His direct testimony emphasized the application of ITC's planning criteria, which is based on NERC, to require increased capacity for transmission facilities which are overloaded under contingency conditions during high load periods.¹⁹⁹ Mr. Slocum's rebuttal testimony repeatedly expanded the definition of facilities which require load relief to "ones that are overloaded and ones that are not yet overloaded."²⁰⁰ This statement and a related one asserting the need for "additional infrastructure" to achieve

¹⁹⁸ 2 Tr 236.

¹⁹⁹ 2 Tr 197-199.

²⁰⁰ 2 Tr 215, 218, 219, 226.

system benefit by unloading existing facilities are mentioned numerous times in his rebuttal testimony.²⁰¹

Staff notes that this approach is noticeably more strident in Mr. Slocum's rebuttal testimony and is characteristic of a noticeable shift away from specific reliability driven overload conditions and toward a posture of advocating a "more infrastructure is better" stance. As Staff has already pointed out, ITC has not presented the information necessary to justify its reliability driven project. After insisting that the proposed project is reliability driven and that economics was not a driver, Staff finds ITC's shift to claims of economic benefit for added infrastructure even less credible.²⁰² Further, Staff would point out that recommendations for infrastructure additions along the lines of the "super highway concept" without an integrated planning approach to modeling and analysis would be reckless. Collectively, ITC's rebuttal witnesses have moved beyond defending the incomplete justification for its reliability driven project as described by Staff and initiated new unsubstantiated economic claims for its poorly planned project.

ITC further claimed on rebuttal that the project is justified because MISO approved it as part of MTEP 06 and that since the MISO MTEP process is open to stakeholders, Staff's criticism of ITC's justification for the project is misplaced.²⁰³ On cross-examination of Consumers Energy's witness, it was revealed that the proposed transmission projects are not reviewed at MISO at a detailed level²⁰⁴:

- A. Again the – the ability of a company to participate, maybe on paper they may have a full –on paper they are allowed to participate to whatever extent they want to, but in reality with MISO evolving as it

²⁰¹ 2 Tr 214, 216, 217, 218, 219, 221.

²⁰² 2 Tr 301.

²⁰³ 2 Tr 257.

²⁰⁴ 3 Tr 606.

is at the moment, it's more of an overall policy overview; it's not a project specific.

The fact remains that the reality is that the individual companies are not reviewing the specific projects at this time. Now they may in the future, but at this time it's not reality.

Consumers' testimony is compelling proof that ITC's assertions that its project has been fully vetted at MISO are an overstatement of what really happens at MISO. Contrary to ITC's assertions MISO has not given the proposed major transmission line project the level of review that the Commission is statutorily required to conduct before granting a certificate of public convenience and necessity.

ITC also filed testimony rebutting Staff's observations that Staff was "unable to find evidence that ITC considered any of the project solutions proposed by Detroit Edison."²⁰⁵ ITC stated that Detroit Edison's "presentation is the fourth round of alternatives made known to ITC *Transmission*." ITC did not provide any modeling data in its direct case associated with Detroit Edison's proposals to upgrade specific circuits, replace underground cables with overhead cables, including the option of installing a distributed generator or any alternative that may be available.²⁰⁶ If ITC analyzed any alternatives at all, it should have been able to produce the cost models, reliability models and supporting documentation to show that ITC's proposed major transmission line is justified based on the quantifiable and unquantifiable public benefits. Instead ITC referred Staff and the Commission to the self-serving unsubstantiated draft document Exhibit A-2 and the admission that ITC did not conduct a cost benefit analysis of its project.²⁰⁷

²⁰⁵ 3 Tr 652.

²⁰⁶ 2 Tr 241.

²⁰⁷ 2 Tr 300.

Staff finds that ITC has not presented quantifiable public benefits that justify construction of the proposed major transmission line. The load demand forecasts ITC used lacks credibility and adds no verifiable benefit to ITC's justification for its reliability driven project. Staff recommends that the Commission determine that ITC has not satisfied its burden of proof that the construction of a major transmission line is justified and therefore recommends that the Commission deny ITC's request for a certificate of public convenience and necessity.

f. Estimated quantifiable and nonquantifiable public benefits.

ITC filed rebuttal testimony that claimed its draft Exhibit A-2, at pages 19 through 24, “detail public benefit after public benefit.”²⁰⁸ Starting at page 19 of Exhibit A-2, ITC began its discussion of project benefits with the following assertion:

In the analysis of the project by outside entities the focus has been on single (NERC Category B) contingencies and ways to alleviate those contingencies. While the Bismarck-Troy project certainly addresses these issues, the benefits of the project are far greater than simply reducing loading on a few circuits to just below their rating.

ITC continues for the next three pages to sprinkle its narrative with phrases such as: “approaches its normal rating”, “approaching their capability for the loss of the other circuit in the area”, “allowing for load growth”, “unloads these transformers in the base case allowing for further load growth”, “work to further unload these transformers”, “provides further flexibility to shutdown equipment”, “circuits in the area of this project that can not be shutdown for maintenance for significant periods of the year due to overloads”, “reduces average loading per circuit providing benefits in loss savings, operating flexibility and providing for increased reliability” The statement that is of particular interest to Staff is "There are also benefits with the unloading of other circuits in the area that may not be violating NERC criteria at this time.”

²⁰⁸ 2 Tr 243.

Staff is convinced that, on cross examination, ITC provided no defense for this approach.²⁰⁹

ITC's inability or unwillingness to support the many claims of benefits for its proposed project convinces Staff that the project is not justified. ITC insists on relying on Exhibit A-2 as an example of competent transmission planning and analysis supporting its proposed project. ITC's own testimony has discredited Exhibit A-2 as support for its proposed Bismarck-Troy project.

ITC's lack of attention to proving quantifiable and non quantifiable public benefits supports Staff's conclusion that ITC has not proven that the quantifiable and nonquantifiable public benefits of the proposed major transmission line justify its construction. ITC has testified that its project is reliability driven and economics was not a driver.²¹⁰ ITC still has not conducted a study to quantify how many hours of the year circuits in the 1000 megawatt area would be overloaded.²¹¹ Modeling, study and analysis would be necessary to document the economic benefits claimed by ITC.²¹² Staff would expect to see production cost modeling and the associated assumptions regarding existing generation dispatch patterns and annual load duration data assumptions. In Exhibit A-2, ITC asserted that they "have proven these positive economic benefits internally using PROMOD analysis."²¹³ It is unreasonable for Staff or the Commission to rely on this assertion when ITC provided no modeling data or analysis for Staff to review. Not to mention, Mr. Slocum, ITC's lead transmission planning witness who sponsored Exhibit A-2 testified that neither he nor anyone reporting to him have any experience using PROMOD.²¹⁴ It is impossible for Staff or the Commission to independently verify any of these

²⁰⁹ 2 Tr 259-260.

²¹⁰ 2 Tr 301.

²¹¹ 2 Tr 301.

²¹² 2 Tr 345.

²¹³ Exhibit A-2, p 19.

²¹⁴ 2 Tr 318.

assertions when ITC did not provide supporting PROMOD data analysis with its application. ITC has failed to provide the necessary data, studies and analysis supporting its assertions that the proposed transmission line provides quantifiable benefits.

The record demonstrates that ITC failed to consider the alternative of upgrading the overloaded circuit elements in a manner similar to the Detroit Edison proposal.²¹⁵ ITC admitted that the study of Detroit Edison's proposal took place only after Detroit Edison filed its testimony.²¹⁶ Also, since Staff received no modeling data, studies or analysis supporting the benefit assertions of Exhibit A-2, Staff has no basis for understanding how benefits associated with a Detroit Edison type of alternative would compare with benefits ITC claims for its proposed project.

Staff finds ITC claims for project benefits baseless. ITC's rebuttal has not provided Staff with additional information necessary to validate any of ITC's claims for either quantifiable or nonquantifiable public benefits. Staff finds no reason to revise its conclusion that ITC's claims for quantifiable and unquantifiable public benefits are not substantiated.²¹⁷ Staff recommends that the Commission deny ITC's request for a certificate of public convenience and necessity.

2. Mr. Slocum's rebuttal to Mr. Davis.

Mr. Slocum's rebuttal testimony begins with general comments about how "Mr. Davis' approach is to challenge the proposed investment" and not focus on the appropriate route, and how Detroit Edison, a market participant, is suggesting how the transmission system "should be designed."²¹⁸ Yet, Mr. Slocum, under cross examination, admitted that he is not aware of the right-of-way requirements for overhead and underground transmission lines at typical ITC

²¹⁵ 3 Tr 658.

²¹⁶ Exhibit S-6.

²¹⁷ 3 Tr 658-660.

²¹⁸ 3 Tr 210.

voltages.²¹⁹ Then Mr. Slocum claimed that compared to Mr. Davis' solution "the level of study and vetting that the Bismarck-Troy Project has gone through" is significant.²²⁰ It would be unreasonable for MISO or any stakeholder to "vett" a project with many revisions of scope, as previously described by Staff, and to vett the revised analysis as presented in Exhibit A-2 when Exhibit A-2 was not provided to stakeholders before MISO approved the project. Mr. Slocum even admitted that he made a mistake in his original analysis by assuming an incorrect rating for the Walton Section Breaker.²²¹ Mr. Slocum also admitted that he did not represent overload conditions in a consistent manner when comparing discovery responses to Staff, MTEP 06 and Exhibit A-2.²²²

Mr. Slocum testified for fourteen pages regarding how ITC's Bismarck-Troy Project solves far more problems than Mr. Davis' individual solutions.²²³ Mr. Slocum sponsored Exhibits A-14, A-15 and A-16 in response to Detroit Edison's assertions that the project is not justified.²²⁴ In response to almost every solution Mr. Davis recommends, Mr. Slocum summarily concludes that the Bismarck-Troy project is better.²²⁵ However, ITC admits that delays in distribution interconnection projects were not included in the case²²⁶:

Mr. Paytash states that "Detroit Edison indicates a number of changed load demand conditions". In fact, the cited discovery response did not address "changed load demand conditions"; instead, it addressed delays in distribution interconnection projects at various locations across ITC*Transmission's* footprint. This project is not being constructed in response to distribution interconnection projects. The distribution interconnection projects mentioned were not included

²¹⁹ 2 Tr 276-277.

²²⁰ 3 Tr 211.

²²¹ 2 Tr 254-256.

²²² 2 Tr 269-272.

²²³ 2 Tr 214.

²²⁴ 2 Tr 212, 223-226.

²²⁵ 2 Tr 215, 218, 219.

²²⁶ 2 Tr 236.

in the cases used to analyze the transmission system due to the fact that they were unknown at the time the project was initially studied. The inclusion of the distribution projects (none of which have been permanently cancelled) will only further add to the need for this project.

Since distribution interconnection projects drive local forecasts, it is unreasonable for ITC to disregard reduced load forecasts in its modeling that is used to justify this project. ITC wants the Commission to defer to MISO's MTEP stakeholder process as a proxy determination that the project is justified.²²⁷ Staff does not recommend that the Commission defer to MISO its statutory obligation to determine whether this project is justified.

Mr. Slocum, on more than one occasion, attributes the shortcomings of Mr. Davis' solution to the differences between the "networked nature of the transmission system which differs from most distribution systems."²²⁸ Mr. Slocum's assertions, as well as his summary dismissal of Mr. Davis' analysis of ITC's project, lacks serious credibility given Mr. Davis' extensive electric transmission background, especially since Detroit Edison used to own all of ITC's transmission facilities in the greater southeast Michigan footprint.

Mr. Slocum claimed that the project is at the final step before construction is to begin.²²⁹ On cross-examination, however, Mr. Slocum testified that the actual construction plans are not available at this time.²³⁰ Mr. Slocum is "not aware of any contractual relationship between ITC and Beach & Veatch, and that there is "some remaining work to be done regarding the detailed design of the project, and that the cable specifications have not been finalized."²³¹

²²⁷ 2 Tr 237-238.

²²⁸ 2 Tr 215, 218.

²²⁹ 2 Tr 211.

²³⁰ 2 Tr 357-358.

²³¹ 2 Tr 351-358.

Mr. Slocum also claimed that ITC began considering alternatives as early as 2004 and then provides a summary of the type of analysis he claims was conducted.²³² Staff notes that none of these studies were provided with ITC's application, testimony or exhibits (e.g., Exhibit A-2). Therefore, Staff has no way of providing reasonable assurances to the Commission that the Bismarck-Troy Project is justified based on this rebuttal testimony. Therefore, Staff recommends that the Commission deny ITC's request for a certificate.

VII. Staff Conclusions and Recommendation

Unreasonable project planning and scheduling led to unrealistic assumptions regarding the time required to coordinate the construction with affected municipalities, to conduct a Public Act 30 application process, to execute a complete quantifiable public benefit analysis justifying need for the project, and to plan for a credible construction schedule. These deficiencies were manifested in the following ways.

1. A lack of attention to project planning led to delays in refining scope and need for the proposed project.
2. Delays in refining the project scope prevented responsible coordination with the affected municipalities and compromised ITC's ability to analyze all reasonable alternatives before recommending the proposed project to MISO.
3. ITC's delay in finalizing its project scope did not allow sufficient time for Staff and other stakeholders to analyze and comment on the proposed project during the approval process and to correlate up-to-date load demand forecast data.
4. ITC's application described an expensive 345 kV project to address a reliability-driven need to solve a number of future 120 kV circuit overload conditions based on an out-of-date forecast of peak load conditions.

²³² 2 Tr 211.

5. ITC presented an incomplete and undated project construction schedule.
 6. ITC failed to prudently analyze all reasonable 120 kV solutions (e.g. composite conductors) for solving future 120 kV overload conditions.
 7. ITC did not quantify the economic and reliability risks associated with proposing and planning a large and substantially underground 345 kV cable system using a cable design which has little history of use in the United States.
 8. Without customary transmission planning circumspection, ITC proposed an expensive 345 kV solution without demonstrating the necessary and thorough benefit analysis required to justify such a 345 kV transmission line project.
 9. After filing its reliability-driven project application, ITC presented supplemental economic analysis of a previously unexamined alternative as rebuttal to intervenor testimony
- Inadequate project planning and scheduling led to an incomplete evaluation of all reasonable alternatives to and risks associated with the proposed project. ITC has not offered in its application the necessary data and analysis to support quantifiable and non-quantifiable public benefits to justify the proposed project.

The need for transmission system upgrades is determined by the forecasted load demand. The forecasted load demand determines the timing of overload conditions. The timing of overload conditions determines the required in-service date for projects to relieve the overload conditions. And finally, the required date for beginning project construction is determined by the required in-service date for projects to relieve the overload conditions.

Transmission planning requires the application of reliable forecasted load demand data to a thorough transmission system modeling and analysis effort. Subsequent to that, a determination of the timing of overload conditions and an examination of a complete range of alternatives for relieving the overload conditions must be completed. Then, with a thoughtful

grasp of project planning and scheduling, an experienced planning engineer should plan, with all necessary contingencies, a project scope, approval process, design schedule, and construction schedule which coordinates all activities preceding and following the beginning of construction so that the project is in-service before the projected overloads occur.

The record in this case shows that ITC's Application is insufficient and that ITC's planning has not resulted in quantifiable and nonquantifiable public benefits that justify construction of the proposed major transmission line and has not proven that the route is feasible and reasonable. Based on the foregoing analysis, Staff recommends that the Commission deny ITC's request for a certificate of public convenience and necessity.

Respectfully submitted,

Michigan Public Service Commission Staff

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Dated: October 19, 2007

Subscribed and sworn to before me
this 19th day of October, 2007.

Pamela A. Walters

Carol Ann Dane, Notary Public
State of Michigan, County of Eaton
Acting in the County of Ingham
My Commission Expires: 07/23/2011