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EXHIBIT LIST

<u>Exhibit TWV-1</u>	ITC Planning Department Organizational Chart
<u>Exhibit TWV-2</u>	Transmission Planning Criteria
<u>Exhibit TWV-3</u>	MISO Entity Organizational Chart

I. INTRODUCTION

Q1. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Thomas W. Vitez. My business address is 27175 Energy Way, Novi, Michigan 48377.

Q2. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by ITC Holdings Corp. as its Vice President of Planning.

Q3. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND.

A. I earned a Bachelor of Science Degree in Electrical Engineering from the University of Cincinnati in 1986, and a Master of Business Administration Degree from the University of Michigan in 1992.

Q4. PLEASE SUMMARIZE YOUR PROFESSIONAL QUALIFICATIONS.

A. I have been involved in the utility industry for the past thirty-one years. I began my career in 1981 as an intern at the Cleveland Electric Illuminating Company (now a subsidiary of FirstEnergy Corp.). In 1986, as an Underground Engineer, I was responsible for residential development of distribution systems. In 1992, I joined The Detroit Edison Company ("***Detroit Edison***") in its Professional Opportunity Program – a two year developmental program with a variety of assignments, including Transmission Planning. In 1994, I was assigned to the Demand Side Management section of the Marketing Department where I analyzed demand side management options. In 1995, I returned to Transmission Planning

1 where I performed studies of Detroit Edison's transmission system. In 1998, I
2 was promoted to Principal Engineer in Transmission Projects.

3 When Detroit Edison formed a separate transmission subsidiary, I was
4 appointed Principal Engineer in Transmission Projects. In 2003, I joined ITC
5 Holdings Corp. as its Director—Transmission Planning. I subsequently was
6 promoted to Director—Reliability Planning in 2006, and to my current position in
7 2007. I am responsible for all transmission system planning in my current
8 position.

9
10 **Q5. DO YOU PARTICIPATE IN ANY INDUSTRY WORKING GROUPS OR**
11 **OTHER PROFESSIONAL ORGANIZATIONS?**

12 **A.** Yes. I have served on a variety of industry working groups and panels. Most
13 recently, I served on Michigan's Wind Energy Resource Zone Board representing
14 independent transmission companies. I am the past Chairman of the East Central
15 Area Reliability Council's ("**ECAR**") Future System Study Group as well as the
16 ECAR Transmission System Performance Panel Working Group. I also served on
17 the North American Electric Reliability Corporation ("**NERC**") Distribution
18 Factors Task Force. With respect to the Midwest Independent Transmission
19 System Operator, Inc. ("**MISO**"), I am the past Chairman of MISO's Expansion
20 Planning Group and currently serve as an active participant on MISO's Planning
21 Advisory Committee. Finally, I served as Chairman of the Transmission and
22 Distribution Group for the Michigan Public Service Commission's Capacity
23 Needs Forum.

Q6. PLEASE DESCRIBE YOUR GENERAL JOB RESPONSIBILITIES AS VICE PRESIDENT OF PLANNING.

A. As Vice President of Planning, I oversee the planning and expansion of the transmission system for the corporate operating companies, including International Transmission Company (“*ITCT*”), Michigan Electric Transmission Company, LLC (“*METC*”), ITC Midwest LLC (“*ITCMW*”), and ITC Great Plains, LLC (“*ITCGP*”) (along with ITC Holdings Corp., collectively referred to as “*ITC*”). I plan expansions to the transmission system by developing planning models, performing assessments of expected future system performance, and studying requests to interconnect load and generation. I also oversee compliance with applicable planning standards, set internal transmission planning related policies, and work with stakeholders on transmission planning related issues. Load forecasting and economic analysis are also part of my transmission planning organization.

Q7. PLEASE DESCRIBE YOUR PLANNING DEPARTMENT’S ORGANIZATIONAL STRUCTURE.

A. I report directly to the company’s Executive Vice President and Chief Operating Officer, Mr. Jon Jipping, who also is a witness in this proceeding. Currently my organization is comprised of approximately thirty-six employees, including myself. My direct reports include five Managers (a Manager of Michigan Planning, Manager of Midwest Planning, Manager of Regional Planning, Manager of Planning Policies, and Manager of ITCGP), a Senior Staff Engineer, and an administrative assistant. We have several types of positions that report to

1 the Managers, including Principal Engineers, Senior Engineers, Engineers,
2 Associate Engineers, a Senior Economic Analyst, an Economic Analyst, an
3 Engineering Tech, a Senior Programming Analyst, and a Co-Op student. A copy
4 of my group's organizational chart is attached as **Exhibit TWV-1**.

5

6 **Q8. HAVE YOU PREVIOUSLY PROVIDED TESTIMONY BEFORE**
7 **REGULATORY COMMISSIONS OR IN COURT PROCEEDINGS?**

8 **A.** Yes. I testified before the Iowa Utilities Board in Docket No. SPU-07-11 and
9 before the Minnesota Public Utilities Commission in Docket No. E-001/PA-07-
10 540, both in support of ITMW's 2007 acquisition from Alliant Energy of the
11 transmission assets of Interstate Power & Light Company. I also testified before
12 the Michigan Public Service Commission in the following cases:

- 13 1) Case No. U-14861, concerning the application of ITCT for a certificate of
14 public convenience and necessity for the construction of a transmission
15 line running from and through Genoa, Oceola, Hartland, Brighton, and
16 Milford Townships in Livingston and Oakland Counties in Michigan.
- 17 2) Case Nos. U-12780 and U-12781, concerning actions taken by ITCT to
18 expand the firm commercial import capability of Michigan's transmission
19 system by 2,000 MWs to accommodate new projects identified in a "Joint
20 Report" filed with the Michigan Public Service Commission by ITCT,
21 Consumers Energy Company, and Great Lakes Energy Cooperative in
22 December 2000.

1 3) Case No. U-16200, requesting a transmission line siting certificate for
2 ITCT's "Thumb Loop Project".

3 I also testified in Docket No. ER09-681-000 at the Federal Energy
4 Regulatory Commission ("**FERC**") where I explained the technical analysis that
5 led to and supported our Green Power Express ("**GPE**") project, the purpose of
6 which was to significantly increase the amount of power that can be moved from
7 regions with favorable renewable resource attributes to load centers.

8 Additionally, I am testifying in Texas, Louisiana, the City of New
9 Orleans, Arkansas, and Mississippi regarding the transaction that is the subject of
10 this proceeding.

11
12 **Q9. ARE YOU SPONSORING ANY EXHIBITS AS PART OF THIS FILING?**

13 **A.** Yes. I am sponsoring the following Exhibits:

14 <u>Exhibit TWV-1</u>	ITC Planning Department Organizational Chart
15	
16 <u>Exhibit TWV-2</u>	Transmission Planning Criteria
17	
18 <u>Exhibit TWV-3</u>	MISO Entity Organizational Chart

19
20 **II. PURPOSE AND SUMMARY OF TESTIMONY**

Q10. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. On December 4, 2011, Entergy Corporation and ITC entered into a definitive agreement under which the Entergy Operating Companies¹ will separate and then merge their electric transmission business into a subsidiary of ITC (“*Transaction*”). This is a multi-state transaction involving the Entergy transmission operations in Louisiana, Arkansas, Mississippi, Texas, New Orleans, and a small portion of Missouri. The Transaction is subject to approval of the retail jurisdictions, FERC, and other federal agencies. In support of this Transaction, the parties are filing a joint application for change of control and any other necessary regulatory approvals in each of the respective regulatory jurisdictions.

My testimony is filed on behalf of ITC Midsouth LLC. I will discuss ITC’s independent transmission planning process and how the process is superior to transmission planning within a vertically integrated utility. My testimony will explain how ITC’s singular focus on transmission and its independence from market participants allow it to collaborate with others and plan the transmission system with a broad regional view that facilitates wholesale markets. In particular, I will describe and explain:

(1) the transmission planning processes used by MISO;

¹ The Entergy Operating Companies are Entergy Arkansas, Inc. (“EAI”), Entergy Louisiana, LLC (“ELL”), Entergy Gulf States Louisiana, L.L.C. (“EGSL”), Entergy Mississippi, Inc. (“EMI”), Entergy New Orleans, Inc. (“ENO”), and Entergy Texas, Inc. (“ETI”).

1 (2) the transmission planning processes used by ITC and how they align
2 with the MISO transmission planning processes;

3 (3) the benefits of ITC, as an independent transmission company,
4 engaging in transmission planning;

5 (4) how ITC's ownership of EAI's transmission assets will provide
6 benefits in excess of what could be expected from EAI's participation in an RTO
7 planning process; and

8 (5) ITC's plans with respect to the current Entergy transmission projects.
9

10 **Q11. PLEASE SUMMARIZE YOUR TESTIMONY.**

11 **A.** First, ITC has a proven track record of planning its transmission systems to: (1)
12 address local, state, and regional reliability needs; (2) increase the economic
13 efficiency of the overall grid; and (3) respond to transmission needs identified in
14 state and regional processes. When deficiencies are identified on the transmission
15 system, such as inadequate capacity to meet load under certain contingency
16 conditions, ITC's transmission planners develop transmission system
17 reinforcements to address those deficiencies. The reduction of transmission
18 system constraints can result in more economic dispatch of generation, ultimately
19 reducing energy costs to end-use customers. These practices expand market
20 access and also confer value through the planning and operation of a more robust,
21 reliable transmission grid. ITC has followed through on the projects that come
22 out of this transmission planning approach by making significant investment in its
23 transmission systems.

1 Second, ITC is committed to planning its transmission system in an open
2 and transparent manner. As such, ITC has its own processes that supplement the
3 already-robust open and transparent processes used by MISO. Together, the
4 MISO and ITC processes provide ITC with an opportunity to solicit feedback
5 from regulators and stakeholders² about identified and perceived transmission
6 planning needs and potential solutions.

7 Finally, the Transaction enhances customer benefits beyond what could be
8 achieved through the Entergy Operating Companies' MISO membership. MISO
9 has historically employed a bottom-up planning process that depends on the local
10 knowledge and requirements of each Transmission Owner to identify projects
11 required to support both local and regional needs. MISO, as an RTO, has no
12 ability or mandate to build transmission facilities to meet the demands of the
13 wholesale market. ITC has proven it has the expertise, resources, and capital not
14 only to plan but also to construct needed investment. In addition, ITC's regional
15 approach to transmission planning will enhance deliverability of generation
16 throughout the region to provide a more economic source of energy for
17 customers.

18

19 **III. TRANSMISSION PLANNING UNDER AN RTO**

² Examples of stakeholders include industrial customers, electric cooperatives, municipal utilities, communities, marketers, generators, load serving entities, business groups, legislators, and energy advocacy groups.

1 **Q12. DOES ITC PARTICIPATE IN AN RTO PLANNING PROCESS?**

2 A. Yes, ITC participates in MISO's and Southwest Power Pool's FERC approved
3 open and transparent planning processes. In Order No. 890³, FERC set forth nine
4 planning principles associated with transmission planning: coordination,
5 openness, transparency, information exchange, comparability, dispute resolution,
6 regional coordination, economic planning studies, and cost allocation. Further,
7 FERC required that a coordinated, open and transparent planning process be
8 utilized on the local and regional level, and that the planning process be described
9 in the tariff.

10

11 **Q13. PLEASE PROVIDE A HIGH LEVEL DESCRIPTION OF THE MISO**
12 **REGIONAL PLANNING PROCESS IN WHICH ITC PARTICIPATES.**

13 A. MISO is registered with NERC as a Planning Authority.⁴ In this capacity, MISO
14 performs regional planning of the transmission systems by evaluating and
15 planning for the reliability of the transmission system in accordance with NERC's
16 Reliability Standards and other criteria, as explained in Attachment FF of MISO's
17 tariff. Although MISO performs planning functions collaboratively with its

³ *Preventing Undue Discrimination and Preference in Transmission Service*, Order No. 890, FERC Stats. & Regs. ¶ 31,241, *order on reh'g*, Order No. 890-A, FERC Stats. & Regs. ¶ 31,261 (2007), *order on reh'g*, Order No. 890-B, 123 FERC ¶ 61,299 (2008), *order on reh'g*, Order No. 890-C, 126 FERC ¶ 61,228 (2009), *order on clarification*, Order No. 890-D, 129 FERC ¶ 61,126 (2009).

⁴ MISO is the FERC-approved RTO which has functional control over transmission assets of ITCT, METC, and ITCMW rated 69 kV and above.

1 Transmission Owners, MISO also provides an independent assessment and
2 perspective of the transmission system's overall needs.

3 Each year, MISO and its members report the outcome of its annual
4 planning cycles to the MISO Board of Directors, resulting in the annual MISO
5 Transmission Expansion Plan ("*MTEP*"). The project information exchange
6 cycle starts when stakeholders submit newly proposed projects, usually in early
7 September. Throughout the MTEP process, Planning Advisory Committee,
8 Planning Subcommittee, Subregional Planning Meetings ("*SPM*") and other more
9 local meetings such as the Michigan Technical Task Force ("*MITTF*") are held.
10 The purposes of the meetings are to provide MISO, Transmission Owners,
11 stakeholders and regulators with an opportunity to discuss study results, the future
12 needs of the transmission system, and the transmission projects proposed to meet
13 those needs. MISO then spends approximately one year evaluating the projects
14 for inclusion in the MTEP. Then, by the following September (approximately one
15 year after the start of the planning cycle), MISO submits a proposed MTEP to the
16 MISO Board of Directors. The MISO Board subsequently evaluates the MTEP
17 and determines whether approval of the plan is warranted (typically within the
18 December timeframe)⁵.

⁵ A copy of the latest MTEP can be accessed at:
<https://www.midwestiso.org/Planning/TransmissionExpansionPlanning/Pages/MTEP12.aspx>

1 The projects listed in Appendix A of the MTEP constitute the
2 essential transmission projects recommended to the MISO Board of Directors for
3 review and approval. MISO believes, in aggregate, that the Appendix A projects
4 will:

- 5 ○ Ensure the reliability of the transmission system;
- 6 ○ Provide economic benefits such as increased market efficiency;
- 7 ○ Facilitate public policy objectives such as integrating renewable energy;
8 and
- 9 ○ Address other issues or goals identified through the stakeholder process.

10 The projects listed in Appendix B of the MTEP Report represent proposed
11 projects for which a need has been identified, but require additional analysis.
12 Appendix C of the MTEP Report contains more conceptual projects for which the
13 need has not been verified. This MISO planning process assures that the
14 transmission projects developed by individual Transmission Owners, such as ITC,
15 will be properly integrated with other proposed projects within MISO and that
16 these projects will be fully vetted in an open and transparent manner.

17 The Transmission Owners in the MISO region, including ITCT, METC,
18 and ITCMW, typically perform the initial planning for their individual
19 transmission systems by detecting deficiencies, selecting the alternatives that they
20 want to advance as proposed projects, and submitting the proposed projects into
21 the MISO planning process. MISO does not typically initiate transmission
22 projects to be built by the Transmission Owners unless the projects are regional in
23 nature and affect several pricing zones and other MISO member Transmission

1 Owners. More recently, MISO has submitted regional projects to the MTEP for
2 future study consistent with the thrust of FERC Order 1000. Under FERC Order
3 1000, RTOs are directed to take a more active role in regional planning.

4 **Q14. HOW DO THE MULTIPLE SUBREGIONAL AND LOCAL MEETINGS**
5 **HELD THROUGHOUT THE MTEP PROCESS ENSURE SUFFICIENT**
6 **INPUT FROM STAKEHOLDERS AND REGULATORS?**

7 A. As mentioned above, MISO holds SPM's and more local meetings throughout the
8 MTEP process in addition to the regional Planning Advisory Committee and
9 Planning Subcommittee meetings. While the regional Planning Advisory
10 Committee and Planning Subcommittee meetings typically focus more on the
11 higher level issues that impact MISO as a whole, the local meetings are typically
12 held close to the regions they focus on and allow for more detailed discussions
13 around specific projects in each local region. The meetings provide a forum for
14 stakeholders and regulators to comment on the project proposals and submit
15 additional project proposals for consideration in the MTEP process.

16

17 **Q15. WHAT INPUTS TYPICALLY ARE CONSIDERED IN THE REGIONAL**
18 **PLAN ADOPTED BY MISO?**

19 A. MISO generally considers:

- 20 ○ Transmission needs identified by the Transmission Owners in
21 connection with their planning analyses, in accordance with their local
22 planning process, to provide reliable power supply to their connected
23 load customers and to expand trading opportunities, better integrate the
24 grid and alleviate congestion;
- 25 ○ Transmission planning obligations of a Transmission Owner imposed
26 by federal or state laws or regulatory authorities;
- 27 ○ Transmission needs identified from studies carried out in connection
28 with specific transmission service requests;

- 1 ○ Transmission needs associated with generator interconnection service;
- 2 ○ Plans and analyses developed by the Transmission Provider to provide
- 3 for a reliable transmission system and to expand trading opportunities,
- 4 better integrate the grid and alleviate congestion;
- 5 ○ Inputs from Planning Advisory Committee; and
- 6 ○ Inputs provided from state regulatory authorities having jurisdiction
- 7 over any of the Transmission Owners and by the Organization of
- 8 MISO States (“*OMS*”).

9

10 **Q16. PLEASE DESCRIBE MISO’S GOVERNANCE STRUCTURE AND HOW**
11 **IT ALLOWS OTHERS TO PARTICIPATE IN MISO’S PLANNING**
12 **PROCESSES.**

13 **A.** MISO, as approved by FERC, uses a process that is open, transparent and
14 coordinated. From an overall corporate governance perspective, MISO is
15 managed under the direction of an independent Board of Directors, which
16 establishes broad corporate policies and authorizes various types of transactions.
17 The MISO Board of Directors consists of seven independent directors elected by
18 the membership, plus the President/Chief Executive Officer of MISO. MISO
19 Board of Directors meetings occur six times a year and are open to the public.

20 The Advisory Committee is important to the stakeholder governance
21 structure at MISO. The committee reports directly to the MISO Board of
22 Directors and contains voting representatives from a number of sectors including:
23 state regulatory authorities, independent power producers/exempt wholesale
24 generators, transmission owners, transmission-dependent utilities, power
25 marketers, public consumer advocates, environmental advocates, eligible end-use
26 customers and coordinating members. Subcommittees focused on planning,

1 market, reliability, cost allocation, finance, and governance issues provide updates
2 to the Advisory Committee. A copy of the MISO Entity Organization Chart is
3 attached as **Exhibit TWV-3**.

4 To facilitate planning collaboration specifically, MISO has developed a
5 number of forums in which staff, transmission owners, stakeholder entities, and
6 policy makers participate, or contribute to, the planning process. Those forums
7 include the Planning Advisory Committee, the Planning Subcommittee, the
8 Interconnection Process Task Force, the Loss of Load Expectation Working
9 Group, the Reliability Subcommittee, and the Market Subcommittee.

10 Specific to retail regulators, the OMS was formed in 2004 as a non-profit,
11 self-governing organization of representatives from each state with regulatory
12 jurisdiction over entities participating in the MISO. As indicated on its website,
13 the purpose of the OMS is to coordinate regulatory oversight among the states,
14 including recommendations to MISO, the MISO Board of Directors, FERC, other
15 relevant government entities, and state commissions as appropriate. In connection
16 with the integration of Entergy into MISO, an enhanced transmission planning
17 role for the OMS has been proposed by MISO in Docket No. ER13-708 at FERC.

18

19 **IV. ITC'S TRANSMISSION PLANNING PROCESSES**

20 **Q17. WHAT IS ITC'S OVERALL VIEW OF TRANSMISSION PLANNING?**

21 A. ITC believes transmission planning is essential to a reliable and efficient
22 transmission system. Effective transmission planning is the most important tool
23 to address system limitations, which are major drivers of reliability issues and

1 higher energy costs to customers. In order to facilitate planning, ITC employs a
2 robust planning process that purposefully engages stakeholders and regulators,
3 effectively and efficiently identifies issues and solutions, and implements those
4 solutions in a cost-effective and timely manner. ITC believes it is critical that the
5 right infrastructure solutions be implemented and the transmission system be
6 appropriately sized to benefit end-use customers. ITC also believes in planning
7 the transmission system through an open and transparent process, on a forward
8 looking basis, and in a way that considers a broad range of needs. The
9 consequences of not doing so can be detrimental as there can be a significant time
10 between issue identification and solution implementation.

11
12 **Q18. PLEASE DESCRIBE ITC'S TRANSMISSION PLANNING SYSTEM**
13 **PERFORMANCE OBJECTIVES.**

14 **A.** ITC plans its transmission systems to address local, state, and regional reliability
15 needs, allow for the interconnection of generation sources, and increase the
16 economic efficiency of the overall grid. When deficiencies are identified on the
17 transmission system, such as inadequate capacity to meet load under contingency
18 conditions, ITC's transmission planners develop transmission system
19 reinforcements to address those deficiencies. ITC also contemplates transmission
20 projects with a view to increasing the economic efficiency of the overall grid. For
21 example, the reduction of transmission system constraints can result in more
22 economic dispatch of generation, ultimately reducing energy costs to end-use
23 customers. It has been our experience that these practices expand market access

1 for customers, and also confer value through the existence of a more robust,
2 reliable transmission grid. Finally, ITC also plans its transmission systems to
3 address transmission needs identified in state and regional processes. A copy of
4 each ITC operating subsidiary's "Transmission Planning Criteria" is attached as
5 **Exhibit TWV-2.**

6 **Q19. DOES ITC FOLLOW THE SAME APPROACH AS EAI AND THE**
7 **OTHER ENTERGY OPERATING COMPANIES FOR RELIABILITY**
8 **PLANNING?**

9 A. The two businesses plan their transmission systems to meet the same NERC
10 Reliability Standards. However, the two businesses implement the requirement to
11 include planned (including maintenance) outages differently. Using the planning
12 requirement to perform single contingency analysis, EAI and the other Entergy
13 Operating Companies only consider planned outages identified in the immediate
14 future in combination with the other single contingencies. Whereas planning at
15 ITC's Michigan Operating Companies considers the possibility that any element
16 may be taken out of service as a planned outage even if those outages are not yet
17 specifically identified. This N-1-1 analysis results in a broad encompassing of the
18 possible combinations of any single contingency occurring during any planned
19 outage for the ITC Michigan Operating Companies. This analysis is done for load
20 levels up to 85% of peak load with the assumption that planned outages will not
21 generally be scheduled during times of peak usage. The N-1-1 analysis results in
22 a system with additional flexibility to obtain facility outages for maintenance or
23 upgrades.

24

1 **Q20. PLEASE DESCRIBE A TYPICAL PLANNING CYCLE AT ITC.**

2 **A.** I will use the planning of the ITCT and METC transmission systems (i.e., the
3 Michigan system) as an example in this response.

4 The analysis begins with the development of a load forecast. This forecast
5 contemplates a range of future scenarios, for which the primary drivers are
6 economic and demographic projections. This forecast is then incorporated into
7 system models used for planning assessments of the transmission system.

8 In the assessments, any potential constraints on the existing system are
9 identified. An important part of the assessment is simulating system performance
10 under peak load conditions. Thus, these assessments are performed at load levels
11 from the 50th and 70th percentile of the peak load forecast distribution. The 50th
12 percentile case represents the base analysis and is what is used in the MISO
13 planning processes. The 70th percentile forecast is used as a sensitivity analysis.
14 This sensitivity analysis is reflective of the fact that planning for a 70th percentile
15 peak forecast (a higher load level than the 50th percentile forecast) helps to ensure
16 projects are developed to meet the long-term needs of the system in a cost-
17 effective manner. The planning process at ITC entails the simulation of all of the
18 various contingencies as required by the regional and local planning criteria (at a
19 baseline 50th percentile peak load forecast and a higher 70th percentile peak
20 forecast case). While the peak load conditions are an important part of the
21 assessments, it is also important to assess expected system performance under off-
22 peak load conditions.

1 In the assessments for Michigan, the system is divided into geographic
2 areas that share common growth patterns, facilities, and system issues. Along
3 with assessing the system using a 70th percentile peak load forecast as a
4 sensitivity, the system is also tested by considering various power transfers across
5 the system from west to east, east to west, north to south and south to north.
6 These sensitivities further help ensure that projects are developed so as to allow
7 for a range of possible future scenarios. The annual near-term and long-term
8 assessments describe the nature of the system problems identified, the limiting
9 elements giving rise to the problems, the possible impact of the issues on system
10 operations, and, ultimately, proposed solutions. The proposed solutions are
11 derived by ITC's transmission planners through their knowledge of the system,
12 communications with ITC's operations department, communications with
13 regulators and stakeholders and general engineering expertise.

14 Results that indicate a need for new infrastructure in the near term, or that
15 would require multiple years for implementation, are then submitted to the MISO
16 MTEP process for inclusion in the MTEP as Appendix A projects (meaning
17 approval is requested at the conclusion of the MTEP cycle).

18 As described in further detail elsewhere in my testimony, this planning
19 cycle is subject to the MISO and ITC stakeholder processes where information is
20 both solicited and shared.

1 **Q21. PLEASE EXPLAIN WHAT YOU MEAN WHEN YOU SAY ONE OF ITC'S**
2 **OBJECTIVES IS TO PLAN THE SYSTEM TO INCREASE THE**
3 **ECONOMIC EFFICIENCY OF THE OVERALL GRID.**

4 A. As mentioned above, in addition to obtaining compliance with NERC's
5 Reliability Standards, ITC's planning process also considers the economic
6 efficiencies that may be realized by planning, and ultimately constructing,
7 additional transmission. For example, when it is found to be economically
8 justified, ITC develops projects to reduce costs associated with generation
9 dispatch patterns that are more costly than what could be achieved in the absence
10 of certain transmission system constraints.

11
12 **Q22. WHY IS ANALYZING SYSTEM CONSTRAINTS IMPORTANT FOR**
13 **ENSURING SYSTEM RELIABILITY?**

14 A. A transmission constraint arises when an element or part of the system is at a limit
15 and cannot reliably handle more power flow. Because of the transmission
16 constraint, no more power can be allowed to flow through that constraint.
17 Consequently, the element or part of the system that is limited by the constraint
18 can no longer meet incremental needs by utilizing resources in the portion of the
19 system that is not bound by the constraint. This means that load affected by a
20 constraint is limited to a smaller pool of resources, and thus the load that is on the
21 limiting side of the constraint is at an increased risk for a power outage due to a
22 generator or transmission line failure. Likewise, in a case where all the
23 generation resources bound by the constraint are already deployed, it may not be
24 possible to serve additional load in this portion of the system. In other words,

1 there are fewer options available to compensate for the effects of the loss of a
2 facility or increased power demand in the area of the system for which the
3 constraint is active. All else being equal, the removal of transmission constraints
4 makes it less probable that load loss (power outage) will occur.

5

6 **Q23. CAN SYSTEM CONSTRAINTS ALSO HAVE ECONOMIC**
7 **IMPLICATIONS?**

8 **A.** Yes. Transmission system constraints can also have undesired economic impacts
9 because system limitations may decrease overall grid efficiency. For example, by
10 preventing the most economic dispatch of generation to be used to serve load, a
11 system limitation may lead to an increase in total cost of energy. In other words,
12 the transmission constraint prevents a dispatch pattern that could provide lower
13 costs. Remediating a constrained transmission system can allow the lower cost
14 generation to serve load when needed, thereby resulting in reduced purchased
15 power costs to end-use customers.

16

17 **Q24. WHAT OPTIONS ARE GENERALLY AVAILABLE TO MITIGATE**
18 **TRANSMISSION CONSTRAINTS?**

19 **A.** In the short-term, flow through constraints must be managed to adhere to system
20 limitations through methodologies such as re-dispatch or, in extreme cases, load
21 shedding. Some constraints are the result of temporary conditions on the system
22 and can be mitigated through returning the system to its more permanent
23 configuration. Those temporary conditions may be the result of an unusual or
24 unexpected condition such as the unavailability of parts of the transmission

1 system or generators in the vicinity of the constraints. While temporary
2 conditions are important and should be assessed, ITC planners typically are more
3 interested in recurring constraints. In the long-term, transmission constraints
4 (which, as described above, can cause reliability concerns and increased economic
5 costs) can be alleviated by: (1) reducing electricity demand in the area limited by
6 the constraint through energy efficiency and demand-side management programs;
7 (2) building more generation capacity in the area limited by the constraint; (3)
8 building additional transmission capacity to either alleviate the constraint or
9 provide another transmission path to enable more power to get to the area for
10 which the constraint is limiting; or (4) continuing to rely on the short-term
11 operating practices if other more cost-effective solutions are not available.

12
13 **Q25. DOES ITC'S PLANNING PROCESS CONSIDER NON-TRANSMISSION**
14 **SOLUTIONS TO MITIGATE TRANSMISSION CONSTRAINTS?**

15 **A.** As an independent transmission-only entity, ITC provides transmission solutions
16 to mitigate transmission constraints. However, non-transmission solutions (e.g.
17 demand side management and reconfiguration of load on the lower voltage
18 systems) may be identified by others and considered in MISO's open and
19 transparent planning forum and therefore in ITC's planning process.

20
21 **Q26. IN YOUR OPINION, HOW WELL DO THE ITC AND MISO PLANNING**
22 **PROCESSES WORK TOGETHER?**

23 **A.** These processes work well together and are integrated appropriately. They also
24 bring together a good aggregation of core competencies. MISO is not designed to

1 have the in-depth knowledge, data, and experience that local Transmission
2 Owners possess about their own systems. This expertise is a key driver behind
3 each project proposed by Transmission Owners. MISO, however, is in a better
4 position to coordinate and facilitate the extensive MTEP processes.

5 **Q27. PLEASE PROVIDE EXAMPLES OF WHERE ITC'S TRANSMISSION**
6 **PLANNING BROUGHT CUSTOMER BENEFITS.**

7 **A.** The Jewell to Spokane Project, which is located in southeast Michigan, is a good
8 example of how a relatively small investment in transmission resulted in
9 significant cost savings to customers by relieving transmission constraints. The
10 project consisted of: (1) a new 13-mile long 230 kV transmission circuit; (2) a
11 345-230 kV transformer installed at Jewell; (3) a 230-120 kV transformer
12 installed at Spokane, and (4) approximately 2.9 miles of 1431 ACSR conductor
13 installed from a tower position to Jewell Station thus creating a new Adams-
14 Jewell 120 kV circuit. The Project had a one-time cost of \$10.2 million. It was
15 determined that this investment was reasonable in light of the economic
16 efficiencies this project brought to the overall grid. The economic benefits
17 metrics used in this analysis resulted in estimated annual net benefits of over \$60
18 million.

19 Likewise, ITCMW is in the process of constructing a new 80-mile 345 kV
20 line in Iowa intended to improve reliability in eastern Iowa and improve market
21 efficiency by reducing transmission congestion. When completed, the Salem-
22 Hazelton transmission line will connect ITCMW's Hazelton Transmission
23 Substation in Buchanan County, Iowa to ITCMW's Salem Transmission

1 Substation in Dubuque County, Iowa. The Salem-Hazleton Line was modeled in
2 2006 as a solution to transmission constraints in eastern Iowa in MISO's Eastern
3 Iowa Study. MISO found that the construction of the Salem-Hazelton line would
4 reduce annual load and production costs by approximately \$108 million. The
5 total capital cost of the line is currently projected to be \$123 million, which will
6 be collected over the 60-year depreciable life of the line. The need for the line was
7 recognized for several years prior to 2006 but was not built until after ITC's
8 acquisition of ITCMW.

9

10 **Q28. CAN YOU PROVIDE AN EXAMPLE OF HOW ITC ALSO PLANS ITS**
11 **TRANSMISSION SYSTEMS TO ADDRESS TRANSMISSION NEEDS**
12 **IDENTIFIED IN REGIONAL AND STATE PLANNING PROCESSES?**

13 **A.** Yes. For example, ITCT is making a significant investment in Michigan's high
14 voltage electric grid by developing a new 140-mile transmission line and four new
15 substations which, taken together, will help increase transmission system
16 reliability, reduce system congestion, provide more efficient transmission of
17 energy and serve as a "backbone" for future interconnection of new generation
18 sources. MISO approved the Thumb Loop Project as the first Multi-Value
19 Project ("**MVP**") with regional benefits beyond just the accessing of new
20 renewable generation. ITCT has received siting approval for this project and
21 currently is undertaking construction activities.

22 In addition, on December 8, 2011, ITC received approval from MISO to
23 construct portions of four other MVPs. The portions of these projects that ITC

1 will build, own, and operate will be located in parts of Iowa, Minnesota, and
2 Wisconsin.

3 Finally, ITCMW has been upgrading the existing 34.5 kV system to a 69
4 kV system in Iowa. The 34.5 kV lines primarily serve rural Iowa and the age,
5 condition, and limited capacity on these lines limits economic development in
6 rural communities. ITCMW is committed to upgrading the 34.5 kV system so
7 portions of rural Iowa can effectively connect ethanol and other biodiesel plants
8 which typically locate in these areas, thus advancing state and local economic
9 development.

10 **Q29. DOES ITC HAVE ITS OWN STAKEHOLDER PROCESSES FOR**
11 **SOLICITING AND SHARING PLANNING INFORMATION?**

12 A. Yes, ITC considers its stakeholder engagement to be as important as the
13 aforementioned ITC system performance objectives for planning. As such, ITC
14 also has its own regulator and stakeholder processes for planning purposes in
15 addition to the MISO stakeholder processes.

16 For example, ITCT, METC and ITCMW hold meetings with regulators
17 and stakeholders where ITC presents its views on system planning, detailed
18 descriptions of capital plans, load forecasts, rates, and a general review of the
19 regulatory environment. With respect to planning, these meetings are intended to
20 give stakeholders details of ITC's project plans, keep them apprised as to what
21 ITC will be submitting for MTEP consideration, keep them informed on the need
22 each project is intended to address, and inform them of emerging planning issues.
23 The meetings also are used to solicit feedback from regulators and stakeholders

1 including retail regulators, large retail industrial customers connected at
2 transmission level voltages, electric cooperatives, municipal utilities, community
3 leaders, marketers, generators, load serving entities, business groups, legislators,
4 and energy advocacy groups.

5 ITC also makes an extra effort to keep regulators and policy makers
6 informed and aware of emerging planning issues. For example, ITC meets
7 separately with regulators to discuss its plans for transmission development, to
8 share ideas about transmission issues, and to gather input from the regulators'
9 perspective. In fact, as described by ITC witness Mr. Thomas Wrenbeck, ITC has
10 dedicated individuals in each jurisdiction responsible for meeting the needs of
11 regulators, including soliciting input and providing information on transmission
12 plans.

13 Likewise, ITC also has a dedicated "Stakeholders Relations" group.
14 Among its other duties, this group works with ITC planners to facilitate one-on-
15 one meetings with affected customers, stakeholders, and regulators. ITC witness
16 Mr. Thomas Wrenbeck provides a more detailed description of this group in his
17 testimony.

18 Further, ITC's planning group participates in industry forums established
19 to discuss and consider transmission needs. For example, the State of Michigan
20 initiated a "Capacity Needs Forum," under which I chaired the Transmission and
21 Distribution Group, where meetings were held with transmission-dependent
22 utilities and state regulators to discuss transmission and distribution issues.

1 **Q30. BASED ON THE COLLABORATIVE PROCESSES DESCRIBED ABOVE,**
2 **HAS ITC BEEN SUCCESSFUL IN CONSIDERING THE NEEDS OF**
3 **INTERCONNECTION CUSTOMERS?**

4 Yes. ITC works to interconnect new customers and generation efficiently,
5 economically, in a timely manner, and to design and plan transmission that meets
6 customer needs. Given ITC's sole focus on transmission, its operating
7 subsidiaries have the time and the resources to sit down with customers or
8 generators wishing to interconnect and walk them through the MISO
9 interconnection process. In part, based on these practices, ITC has had significant
10 success in interconnecting new generators to its transmission systems. ITCMW
11 alone has interconnected over 16 new generators in the last four years, adding
12 approximately 2,150 MW of energy production capacity to the grid.

13 **Q31. HOW DOES ITC ENSURE THAT THE ITC PLANNING PROCESSES**
14 **RESULT IN PRUDENT TRANSMISSION PROJECTS?**

15 A. ITC actively participates in the MTEP process, which is a FERC-sanctioned
16 process for reviewing and approving projects. The MISO planning forum is a
17 transparent and participatory process, which, as described above, allows for ample
18 opportunity for input from regulators and stakeholders including transmission
19 developers and customers. Within this process, anyone is free to introduce
20 alternatives to a proposed transmission project. MISO conducts its own review of
21 proposed projects and will inform the sponsoring operating company and
22 involved stakeholders of any concerns. Projects are evaluated based on modeled
23 reliability improvements, estimated costs, performance using MISO-specified
24 economic metrics, and assessed ability to meet public policy objectives. MISO

1 also determines whether correcting a constraint in one area of its region could
2 impact transmission congestion in another area. In some cases, MISO may
3 propose another alternative for improving reliability or relieving a constraint that
4 it believes is more economic or effective. When differences arise, the
5 transmission planners at the MISO member company and the planners at MISO
6 often will work together to develop a collaborative solution to an identified
7 problem. If a solution cannot be agreed upon, MISO makes the final
8 determination as to what project should be proposed for inclusion in Appendix A
9 to be reviewed and voted on by the MISO Board of Directors.

10 As described above, ITC also meets regularly with affected stakeholders
11 and regulators. This provides another opportunity to identify system needs and
12 discuss optimal solutions for those needs, ensuring efficient coordination between
13 the transmission and distribution systems. Moreover, almost all jurisdictions have
14 siting processes for infrastructure such as transmission. This provides yet another
15 forum and means to discuss ITC's proposed projects

16 Further, given ITC's commitment to professional integrity, as well as
17 ITC's status as a FERC-regulated utility, it is incumbent upon ITC to advance
18 only prudent projects. ITC's reputation and credibility would be seriously harmed
19 if it proposed inappropriate or imprudent projects. As testified to by ITC witness
20 Mr. Joseph Welch, ITC is unique in the industry as an independent, transmission-
21 only utility. The merits of the independent transmission business model and the
22 future role it will play in the U.S. utility industry rests very much on the

1 company's performance and the extent to which ITC's business model is shown
2 to be desirable for customers.

3 Finally, ITC has grown its business, in part, by acquiring other
4 transmission systems from existing vertically integrated utilities that ultimately
5 become its customers and stakeholders. If ITC developed a poor reputation due
6 to its unwillingness to comply with the wishes of affected regulators and
7 stakeholders in its current jurisdictions, growth by acquisition would be
8 impossible.

9

10 **V. TRANSMISSION PLANNING ON THE ENTERGY SYSTEM**
11 **POST-TRANSACTION**

12 **Q32. WILL THE NEW ITC OPERATING COMPANIES PARTICIPATE IN**
13 **THE MISO PLANNING PROCESS IF THE TRANSACTION IS**
14 **APPROVED?**

15 **A.** Yes. Participation in the MTEP process assures that projects identified by the
16 New ITC Operating Companies⁶ will be integrated and consistent with the plans
17 of other transmission entities within the region. Further, it ensures that projects
18 are consistent with the needs of the existing and emerging energy markets in the
19 region served by EAI and the other Energy Operating Companies. It also provides

⁶ The term "New ITC Operating Companies" refers to the newly created operating companies that will own electric transmission assets as part of the ITC Holdings Corp. corporate structure. The New ITC Operating Companies will be a direct subsidiary of ITC Midsouth LLC, which in turn will be a direct subsidiary of ITC Holdings Corp.

1 a forum for those projects to be vetted in an open and transparent process
2 inclusive of interested stakeholders.

3

4 **Q33. YOU HAVE DISCUSSED HOW ITC INTERACTS WITH THE OMS AS**
5 **PART OF ITC'S PLANNING EFFORTS. CAN YOU PLEASE DESCRIBE**
6 **HOW THE NEW ITC OPERATING COMPANY WOULD EXPECT TO**
7 **INTERACT WITH THE E-RSC IN ITC'S PLANNING PROCESS AFTER**
8 **THE TRANSACTION?**

9 A. ITC witness Mr. Joseph Welch addresses this issue directly, but my understanding
10 is that ITC has committed to support retention of the ERSC's existing authority
11 over cost allocation and the construction of transmission upgrades for the five
12 year transition period after EAI and the other Entergy Operating Companies join
13 MISO.

14

15 **Q34. DO THE ENTERGY OPERATING COMPANIES HAVE AN**
16 **ESTABLISHED EXPANSION PLAN FOR THE TRANSMISSION**
17 **SYSTEM?**

18 A. Yes. The Entergy OASIS website posts various documents relating to
19 transmission plans for the Entergy Region. One of these documents is the current
20 Construction Plan ("CP"). The CP also considers the needs of the transmission
21 system over a five year period. The Entergy CP may contain more than
22 reliability-driven projects. The latter portion of this document is the Year 6
23 through 10 projects, referred to as the Horizon Projects ("HP").

24

1 **Q35. HAVE YOU REVIEWED THE PROJECTS INCLUDED IN THE**
2 **CURRENT ENTERGY CP?**

3 A. Yes. ITC will consider the projects in the current Entergy CP. As ITC witness
4 Mr. Joseph Welch explains, ITC would generally expect to complete any in-
5 progress transmission projects, as well as follow through on near term planned
6 projects in order to make sure that none of the New ITC Operating Companies fail
7 to meet any reliability requirements. Likewise, Mr. Welch explains that ITC
8 would not want to disrupt any established project schedules, or fail to honor any
9 then-existing contractual obligations.

10 **Q36. WOULD THE NEW ITC OPERATING COMPANIES LOOK BEYOND**
11 **THE CURRENT PROJECTS IDENTIFIED IN THE CURRENT**
12 **ENTERGY CP?**

13 A. Yes. Once the Transaction closes, the New ITC Operating Companies will
14 engage regulators and stakeholders through processes similar to those described
15 above, to help us determine the future needs of the transmission system in the
16 Entergy footprint.

17

18 **Q37. FROM A TRANSMISSION PLANNING PERSPECTIVE, HOW WOULD**
19 **THE TRANSACTION ENHANCE CUSTOMER BENEFITS BEYOND**
20 **WHAT COULD BE ACHIEVED THROUGH MISO MEMBERSHIP?**

21 A. MISO has been very successful in implementing FERC's open access policies in
22 its current footprint. This success, coupled with the growth in competitive
23 wholesale markets, has led to improvements in economic dispatch of the grid by
24 increased usage of the grid at a time when more investment in, and expansion of,
25 the grid is critically necessary. As the Entergy Operating Companies seek to
26 move into MISO, with its efficient, transparent, and successful regional energy

1 market, the demands placed on the transmission system for the Entergy Region
2 likely will increase, along with market transactions. MISO has no ability or
3 mandate to undertake the construction of transmission facilities to meet the
4 demands of the wholesale market. Instead, the member Transmission Owners
5 must plan, attract the necessary capital, and build the transmission facilities
6 approved as part of the MTEP. Further, as I previously testified, MISO generally
7 uses a bottom-up stakeholder-driven process in which the Transmission Owners
8 address deficiencies and explore the opportunities on their own systems.
9 Transmission Owners identify alternatives to solve any deficiencies and capture
10 economic opportunities by recommending projects to the MISO for inclusion in
11 the MTEP. Typically, if a project is not brought forward by a Transmission
12 Owner, regulator or other stakeholder, it is less likely to have the necessary study
13 and development required to be considered in the MTEP planning process.

14 ITC's singular focus on maintaining, operating, and enhancing the
15 robustness of the transmission grid is essential during this time when the Entergy
16 Operating Companies are planning a move into the MISO market and use of the
17 grid for market transactions is likely to increase. ITC has the expertise, resources,
18 and capital to plan and construct the needed investment. Moreover, ITC's
19 independence assures that market participants, regulators and stakeholders have
20 confidence in how the system is planned and that an open and transparent
21 planning process is utilized.

22 Likewise, ITC has no internal competition for capital across functions or
23 operating companies, so the New ITC Operating Companies will have capital

1 available to make the necessary investment. ITC's regional approach to
2 transmission planning will also facilitate enhanced deliverability of generation
3 throughout the region to provide economic sources of energy for its customers or
4 advance policy goals of the retail jurisdictions it serves. In that regard, the New
5 ITC Operating Companies will plan and build transmission to improve the overall
6 efficiency of the market and to enhance economic dispatch at the RTO level.

7 **Q38. DO YOU ANTICIPATE THAT THE ORGANIZATIONAL STRUCTURE**
8 **FOR ITC'S PLANNING GROUP WILL CHANGE SUBSTANTIALLY IF**
9 **THIS TRANSACTION IS APPROVED?**

10 **A.** No, I don't anticipate that the organizational structure will change substantially.
11 We are still in the process of determining the post-transaction organizational
12 design. However, I anticipate that I will continue to report to the Executive Vice
13 President and Chief Operating Officer, that the Planning functions for the newly
14 created operating companies will also report to a high ranking executive officer
15 (likely Mr. Richard Riley), and that the overall positions and functions will
16 remain the same (*i.e.*, we still will have Managers, Principal Engineers, Senior
17 Engineers, Engineers, Associate Engineers, Economic Analysts, Programming
18 Analysts, and Engineering Technicians functions). Importantly, as described in
19 ITC witness Mr. Jon Jipping's testimony, ITC's New Operating Companies will
20 employ an organizational structure that augments the performance accountability
21 of a traditional line reporting structure with corporate-level governance and
22 oversight for the Operations, Planning, Engineering, and Asset Management
23 functions.

1

2 **Q39. WILL END-USE CUSTOMERS BENEFIT FROM ITC'S APPROACH TO**
3 **TRANSMISSION PLANNING IF THIS TRANSACTION IS APPROVED?**

4 A. Yes. For example, because ITC is independent and has no generation affiliations
5 with competitive interests, developers are comfortable sharing their generation
6 plans with ITC. This open communication was key to the transmission planning
7 that resulted in the Thumb Loop and GPE projects described above. ITC believes
8 its GPE project, based on a regional approach to planning, helped advance the
9 regional planning process and ultimately resulted in several MVPs being
10 submitted to MISO for consideration.

11 Likewise, ITC's independent business model has allowed it to successfully
12 participate in statewide and federal initiatives to consider transmission
13 development. For example, in Michigan, ITC was an active participant in the
14 Michigan Wind Working Group, which served as a technical committee for the
15 Michigan Public Service Commission's Michigan Renewable Energy Program.
16 Goals of the Wind Working Group included continuing efforts to inform and
17 educate the public, farmers, businesses, institutions, and political leaders about
18 wind energy opportunities as well as providing forums and assistance to foster
19 wind energy development. In years 2008 through 2009, the group considered the
20 transmission needs for various locations of wind generation across Michigan,
21 which ultimately led to the identification of Michigan's Thumb Loop project.

22 Similarly, when the carbon dioxide emissions standards were being
23 considered by the Environmental Protection Agency, at the request of various

1 stakeholders, ITC's independence allowed it to lead a study effort that considered
2 the transmission needs in Michigan associated with various generation
3 requirement scenarios driven by the new standards.

4 The processes ITC will use to value potential upgrades are intended to
5 find and appropriately size beneficial transmission investments in order to,
6 amongst other things:

- 7 ○ enhance customer reliability by improving the transmission system's
8 ability to serve load through upgrades that increase thermal capacity
9 and keep the system within acceptable voltage, stability and short
10 circuit limits as well as improve storm hardening and create additional
11 paths for generation to reach load;
- 12 ○ increase economic efficiency of the overall grid such as
 - 13 ■ reducing energy costs by removing transmission constraints
14 that cause congestion and must-run commitments, particularly
15 during challenging load, outage, and market conditions;
 - 16 ■ reducing resource adequacy and operating reserve costs by
17 decreasing system congestion and reducing the need for
18 isolated areas to hold additional reserves and by broadening the
19 pool of generating capacity that is accessible to meet resource
20 adequacy requirements;
 - 21 ■ reducing transmission line losses, resulting in less generation
22 being needed to serve peak load;
 - 23 ■ facilitating the development of competitive wholesale energy
24 markets by increasing access to competing generation sources;
- 25 ○ improve optionality for utilities at a time of significant uncertainty
26 with regards to new environmental regulations potentially impacting
27 fossil-fuel-fired generation; and
- 28 ○ ensure adequate transmission capacity to advance state and federal
29 policy objectives.

1 **Q40. DOES THIS CONCLUDE YOUR PREPARED DIRECT TESTIMONY?**

2 **A.** Yes.