

ATTACHMENT FF Transmission Expansion Planning Protocol

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ATTACHMENT FF

TRANSMISSION EXPANSION PLANNING PROTOCOL

I. Transmission Expansion Plan - Purpose and Scope: This Attachment FF describes the process to be used by the Transmission Provider to develop the Midwest ISO Transmission Expansion Plan (“MTEP”), subject to review and approval by the Transmission Provider Board. The provisions of this Attachment FF are consistent with the applicable provisions of Appendix B of the ISO Agreement and this Tariff. For purposes of this Attachment FF, all references to Transmission Owner(s) will include ITC(s). The costs incurred by the Transmission Provider in the performance of data collection, analyses and review, and in the development of the MTEP report, costs incurred under Section I.B of this Attachment FF, and costs incurred under Section I.C of this Attachment FF shall be recovered from all Transmission Customers under Schedule 10 of the Tariff.

A. Development of the MTEP: The Transmission Provider, working in collaboration with representatives of the Transmission Owners and the Planning Advisory Committee, shall develop the MTEP, consistent with Good Utility Practice and taking into consideration long-range planning horizons, as appropriate. The Transmission Provider shall develop the MTEP for expected use patterns and analyze the performance of the Transmission System in meeting both reliability needs and the needs of the competitive bulk power market, under a wide variety of contingency conditions. The MTEP will give full consideration to the needs of all Market Participants, will include consideration of demand-side options, and will identify expansions or

enhancements needed to support competition in bulk power markets and in maintaining reliability. This analysis and planning process shall integrate into the development of the MTEP among other things:

(i) the Transmission Issues identified from Facilities Studies carried out in connection with specific transmission service requests; (ii) Transmission Issues associated with generator interconnection service; (iii) the Transmission Issues, including proposed transmission projects, identified by the Transmission Owners in connection with their planning analyses in accordance with local planning process described in Section I.B.1.a to this Attachment FF and the coordination processes of Section I.B.1.b., or developed by Transmission Owners utilizing their own FERC-approved local transmission planning process described in Section I.B.2, as applicable, to provide reliable power supply to their connected load customers and to expand trading opportunities, better integrate the grid and alleviate congestion; (iv) the transmission planning obligations of a Transmission Owner, imposed by federal or state law(s) or regulatory authorities, which can no longer be performed solely by the Transmission Owner following transfer of functional control of its transmission facilities to the Transmission Provider; (v) plans and analyses developed by the Transmission Provider to provide for a reliable Transmission System and to expand trading opportunities, better integrate the grid and alleviate congestion; (vi) the identification, evaluation, and analysis of expansions to enable the Transmission System to fully support the simultaneous feasibility of all State 1A ARRs; (vii) the inputs provided by the Planning Advisory Committee; and (viii) the inputs, if any, provided by the state regulatory authorities having jurisdiction over any of the Transmission Owners and by the OMS.

1. Planning Cycle and Milestones: The ISO Agreement requires that a regional transmission plan be developed biennially or more frequently. A typical MTEP development cycle of 12 to 24 month duration is performed continuously. The development of the MTEP will follow specified process steps that are detailed, including process diagrams, in the Transmission Provider's Transmission Planning Business Practices Manual ("TPBPM"). The TPBPM shall be posted on the website of the Transmission Provider.

a. Planning Functions: The planning process includes the following functions which are described in detail in the TPBPM:

- i. Model Development;
- ii. Generator Interconnection Planning;
- iii. Transmission Service Planning;
- iv. Cyclical Regional Expansion Planning activities;
- v. Coordinated System Plans with other RTOs/regions;
- vi. System Support Resource ("SSR") Studies for unit de-commissioning;
- vii. Transmission-to-Transmission Interconnections;
- viii. Load Interconnections; and
- ix. Focus Studies. These are studies initiated during the cyclical baseline planning process that cannot be delayed until the next planning cycle (for example, NERC/FERC directives, or near-term critical operational issues).

Each of these planning functions may develop system expansions that are taken

into consideration in developing the entirety of the MTEP.

b. Planning Cycle: The regional planning process is performed through a continuous series of planning cycles, with each cycle typically addressing Transmission Issues through a rolling planning horizon. Each cycle commences with regional model development, and identification of potential expansions from the local planning processes of the Transmission Owners, and concludes with recommendations to the Transmission Provider Board of Directors of recommended solutions to identified Transmission Issues. Transmission Owner plans developed through local planning processes described in Section I.B.1.a are included in the beginning of each regional planning cycle as potential alternatives to local Transmission Issues identified by the Transmission Owners. The regional planning process evaluates, with stakeholder input throughout the cycle, the local plans of the Transmission Owners, as one input to the development of the regional plan. Key milestones in the typical MTEP development process are listed below and requirements and timelines for data submittal, review, and comment at each of these milestone points are described in the TPBPM:

- i. Model development;
- ii. Testing models against applicable planning criteria;
- iii. Development of possible solutions to identified Transmission Issues;
- iv. Selection of preferred solution;

- v. Determination of funding and cost responsibility; and
- vi. Monitoring progress on solution implementation.

The Transmission Provider shall address each of these milestones throughout the planning cycle through Sub-regional Planning Meetings, Planning Subcommittee and Planning Advisory Committee meetings.

2. Stakeholders Input in Planning Process: The Transmission Provider shall facilitate discussions with its Transmission Customers and other stakeholders, the Transmission Owners about the Transmission Issues and solutions involving both transferred and non-transferred facilities, as described in Section I.B.1 of this Attachment FF.

These discussions will take place at Sub-regional Planning Meetings and at regularly scheduled meetings of the Transmission Provider's Planning Subcommittee, at locations provided by the Transmission Provider and with communication capabilities for those participants unable to have in person representation at these meetings.

a. Planning Advisory Committee ("PAC"): The Planning Advisory Committee is a standing committee reporting to the Transmission Provider's Advisory Committee, and functions subject to the Stakeholder Governance Guide developed by the Stakeholder Governance Working Group, as approved by the Advisory Committee. The PAC is responsible for addressing planning policy issues of importance to stakeholders and within the responsibilities of the Transmission Provider. The PAC charter is maintained on the Transmission Provider's website.

b. Planning Subcommittee (“PS”): The Planning Subcommittee is a standing stakeholder-chaired subcommittee of the Planning Advisory Committee, and functions subject to the Stakeholder Governance Guide developed by the Stakeholder Governance Working Group, as approved by the Advisory Committee. Planning Subcommittee membership is open to interested parties, including, but not limited to: transmission delivery service and interconnection service customers, marketers, developers, Transmission Owners, state and federal regulatory staff, and other Market Participants and observers. The charter for the committee is developed by stakeholders and is maintained on the Transmission Provider’s website. The Transmission Provider will seek guidance from stakeholders through the Planning Subcommittee and/or the Planning Advisory Committee prior to the beginning of each new planning cycle. Guidance will include the scope of planning studies to be undertaken and the development of suitable models and assumptions to support such studies. The Transmission Provider will also seek guidance from stakeholders through the Planning Subcommittee and/or the Planning Advisory Committee prior to implementing changes or revisions to the scope, models, and assumptions during the planning cycle. The Planning Subcommittee and/or the Planning Advisory Committee may form working groups at the discretion of stakeholders to perform specific tasks supporting the planning processes, such as model development and detail review of study results and draft plan reports.

c. Sub-regional Planning Meetings (“SPMs”): The Transmission Provider shall utilize SPMs to provide opportunity for stakeholders to provide input to the planning process, and to carry out the tasks of coordinating transmission plans among the Transmission Owners. Input and planned coordination may occur through the use of existing sub-regional planning groups (“SPGs”) where they exist, or through the establishment of new sub-regional meeting forums. One or more SPMs will be used or established for each of the three regional Planning Sub-regions of the Transmission Provider. Planning Sub-regions shall be defined based upon the Transmission Provider Planning Sub-regions: West, Central, and East as defined in Attachment FF-3.

i) SPM Participants: Participants at an SPM will consist of representatives of the Transmission Owners operating within the associated Planning Sub-region that integrate their local planning processes with the regional process, and any parties interested in or impacted by the planning process. For those Transmission Owners engaged in local planning under their own FERC approved local planning processes, such Transmission Owners shall participate in the SPM in order to coordinate their planning activities.

Neighboring transmission-owning utilities and regulatory participants are eligible and encouraged to participate in the SPM to promote joint planning between the Transmission Provider and neighboring transmission systems.

ii) SPM Guidelines. The Sub-regional Planning Meeting participants shall:

(a) Make recommendations for a coordinated sub-regional Plan, after considering sub-regional and regional needs and alternatives, for the ensuing ten years, for all transmission facilities in the sub-region;

(b) Review and comment on proposed Transmission Owners plans identified in local planning processes described in Section I.B.1.a. of this Attachment FF, for additions and modifications to the sub-regional transmission system, as potential solutions to identify Transmission Issues and review the transmission plans developed by those Transmission Owners that have their own FERC-approved local planning process (described in Section I.B.2) to ensure coordination of the projects set forth in such plans with the potential regional planning solutions developed in the SPM process consistent with the requirements of Appendix B of the Transmission Owners' Agreement;

(c) Form technical study task forces as required to carry out the sub-regional planning responsibilities;

(d) Encourage non-Transmission Provider member participation to improve understanding by the SPM

participants, the Planning Subcommittee, and the Transmission Provider staff of facility changes outside the Transmission Provider Region to ensure the impact of such changes are considered in the planning studies;

(f) Promote stakeholder (i.e. regulators, environmental agencies, and load and generation developers) involvement in development of the sub-regional plans.

(g) Recommend to the Planning Subcommittee proposed sub-regional plans to be included in the MTEP.

In addition, the transmission projects developed by any Transmission Owner or Owners utilizing the provisions of their own FERC-approved local planning process shall be submitted for inclusion in the regional MTEP after being evaluated by the Transmission Provider in the regional evaluation of SPMs in accordance with Appendix B of the Transmission Owners' Agreement in determining the Transmission Provider's recommendation for inclusion in the MTEP.

(h) Reflect, as desired, minority opinions to the Transmission Provider or the Planning Subcommittee.

i) SPM Frequency, Location and Agenda:

SPMs should meet at least two times per year or as otherwise provided for in the TPBPM, to provide

input in the planning process, review plans and recommend changes, if any, needed to address stakeholder needs and to coordinate proposed plans. Meetings involving CEII or confidential materials shall be handled under Section I.A.12 of this Attachment FF.

3. Meeting Notifications: Notice shall be provided by way of email exploder lists distribution by the Transmission Provider of all SPMs, Planning Subcommittee, and Planning Advisory Committee meetings. These email exploder lists are established and maintained by the Transmission Provider and it is the responsibility of stakeholders to have registered as described on the Transmission Provider website. Meeting dates, times, locations, and materials will also be posted on the meeting calendar page of the Transmission Provider's website. Meeting notification guidelines are set forth in the stakeholder developed Stakeholder Governance Guidelines.
4. Other Meeting Schedules: Planning Subcommittee meetings are regularly scheduled meetings that occur no less than bimonthly. Annual meeting schedules and objectives are developed at the December meeting each year for the subsequent year. Planning Advisory Committee meetings are scheduled as per the PAC Charter.
5. Planning Criteria: The Transmission Provider shall evaluate the system to Transmission Issues in a manner consistent with the ISO Agreement and this Attachment FF. Projects included in the MTEP may be based upon any

applicable planning criteria, including accepted NERC reliability standards and reliability standards adopted by Regional Entities, local planning reliability or economic planning criteria of the Transmission Owner, or required by State or local authorities, and any economic or other planning criteria or metrics defined in this Attachment FF. Transmission Owners are required to annually provide updated copies of local planning criteria for posting on the Transmission Provider's website.

6. Planning Analysis Methods: Planning analyses performed by the Transmission Provider will test the Transmission System under a wide variety of conditions as described in Section II and using standard industry applications to model steady state power flow, angular and voltage stability, short-circuit, and economic parameters, as determined appropriate by the Transmission Provider to be compliant with applicable criteria and this Tariff.

7. Planning Models: The Transmission Provider shall collaborate with Transmission Owners, other transmission providers, Transmission Customers, and other stakeholders to develop appropriate planning models that reflect expected system conditions for the planning horizon. The planning models shall reflect the projected Load growth of existing Network Customers and other transmission service and interconnection commitments. The models shall include any transmission projects identified in Service Agreements or Interconnection Agreements that are entered into in association with requests for transmission delivery service or interconnection service, as determined in Facilities Studies associated with such requests. Load forecasts applied to models will consider the

forecast Load of Network Customers reported to the Transmission Provider in accordance with the requirements of Module B and Module E of this Tariff, and the Business Practices Manuals of the Transmission Provider. Models will be posted on an FTP site maintained by the Transmission Provider and accessible to stakeholders with security measures as provided for in the TPBPM. The Transmission Provider will provide an opportunity for stakeholders to review and comment on the posted models before commencing planning studies.

The schedules for such reviews are maintained in the TPBPM. Stakeholders shall be afforded opportunities to provide input on Load projections from Tariff reporting requirements or from Transmission Owner forecasts. After the base line forecast and model are established, the Transmission Provider and/or Transmission Owners may adjust the forecast as necessary on an ad hoc basis throughout the planning year to address customer requests for new Load interconnections arising from on-going dialogue with existing and prospective customers.

8. Planning Assumptions: Each MTEP report shall list in detail the planning assumptions upon which the analyses are based. In general, planning analyses will be based on the following:

a. Planning Horizons: The MTEP will identify Transmission Issues for a minimum planning horizon of five years and a maximum planning horizon of twenty years.

b. Load: Load demand will generally be modeled by the Transmission Provider as the most probable (“50/50”) coincident Load

projection for each Transmission Owner's service territory, for the season under study. Specific studies may model alternative Load probabilities or peak Load for areas within a Transmission Owner's service territory as dictated by operational and planning experience and/or local planning criteria, but in any case shall be treated consistently in the planning for native Load and transmission access requests.

c. Generation: Planning models of five years or longer will model generation, taking into consideration applicable planning reserve requirements, that are: (i) existing and expected to be in existence in the planning horizon; (ii) not existing but with executed interconnection agreements; and (iii) additional generation as determined with stakeholder input, as necessary to adequately and efficiently meet demand forecasted through the planning horizon and to facilitate compliance with statutory or regulatory mandates. The Transmission Provider shall apply a scenario analysis to determine alternative future generation portfolio possibilities. Generation portfolio development for planning model purposes will be developed with input from the Planning Advisory Committee and its subcommittees, working groups, and task forces. Point-To-Point Transmission Service and Network Integration Transmission Service customers will have an opportunity to guide new generation portfolio development that is reflective of customer future resource plans.

d. Demand Response Resources: Planning solutions will be based upon the best available information regarding the expected amount and

location of Load that can be effectively and efficiently reduced by demand response or energy efficiency programs, as well as the amount of behind-the-meter generation that can reliably be expected to produce Energy that could impact planning solutions. The Transmission Provider shall perform and report on sensitivity analyses that indicate the effectiveness of potential demand response as alternative planning solutions, to the extent that appropriate methodology for such analyses is developed with stakeholders and documented in the TPBPM.

e. Topology: Each planning study will use the best known topology based upon the most recently approved MTEP. Planning studies will include all projects approved by the Transmission Provider Board, and shall identify, as appropriate, and as detailed in the TPBPM, any system needs already identified in the most recent approved MTEP.

9. Evaluation of Alternatives: When the planning analyses, based on the foregoing principles, identifies Transmission Issues, the Transmission Provider will consider the inputs from stakeholders derived from the SPM processes, the inputs from the Planning Subcommittee and the Planning Advisory Committee, the plans of any Transmission Owner with its own FERC-approved local planning process, and the MTEP aggregate system analyses against applicable planning criteria, in determining the solutions to be included in the MTEP and recommended to the Transmission Provider Board for implementation.

10. Facility Design: Facility design and system configuration (such as conductor sizes, transformer design, bus configuration, protection schemes) are

selected by the Transmission Owner, and must be consistently applied by the Transmission Owner for comparable system service conditions. Comparable application of system design does not preclude the consideration or selection of advanced or alternative transmission technology.

11. Status of Recommended Facilities: Upon solicitation from the Transmission Provider, the responsible Transmission Owner shall report the status of all projects recommended for implementation in the MTEP. The Transmission Provider shall report such progress to the Transmission Provider Board on a quarterly basis, or as otherwise directed by the Transmission Provider Board.

12. Treatment of Critical Energy Infrastructure Information (“CEII”) and Confidential Data: The Transmission Provider shall utilize a Non-Disclosure and Confidentiality Agreement (“NDA”) to address sharing of CEII transmission planning information. FTP sites containing such information will require such agreements to be executed in order to obtain access to those sites. Stakeholder meetings at which CEII may be available shall be noticed to email exploders and shall require execution of NDAs prior to participation in such meetings. In the alternative, such meetings will be structured to have separate discussion of issues involving CEII data only with participants that agree to execute the NDA. Confidential information related to economic (e.g., congestion) studies, as well as CEII, is clearly sensitive information which must remain confidential. The Transmission Provider shall use generic, publicly available, cost information from industry sources in the economic studies to prevent the accidental release of confidential information. This approach will promote an open planning process

because the results of economic studies are available to all interested parties.

13. Resolution of Stakeholder Input: The Transmission Provider shall solicit input and comments from all stakeholders, including Transmission Owners, during and after stakeholder planning meetings, and will use reasonable efforts to reply to comments that the Transmission Provider does not elect to implement, together with reasons for such actions. The Transmission Provider shall develop a process for the documentation and resolution of stakeholder issues raised in the planning process, including but not limited to issues related to planning criteria.

14. Dispute resolution: Consistent with Attachment HH of this Tariff and Appendix D to the ISO Agreement, the Transmission Provider shall resolve disputes concerning MTEP issues. The first step will be for designated representatives of the affected parties to work together to resolve the relevant issues in a manner that is acceptable to all parties. If that step is unsuccessful, each affected party shall designate an officer who shall review disputes involving them that their designated representatives are unable to resolve. The applicable officers of the parties involved in such dispute shall work together to resolve the disputes so referred in a manner that meets the interests of such parties, either until such agreement is reached, or until an impasse is declared by any party to such dispute. If such officers are unable to satisfactorily resolve the issues, the matter shall be referred to mediation, in accordance with the procedures described in Appendix D to the ISO Agreement. Parties that are not satisfied with the dispute resolution procedures may only file a complaint with the Commission during the negotiation or mediation steps.

If a matter remains unresolved, the affected parties may pursue arbitration pursuant to Appendix D of the ISO Agreement.

B. Project Coordination: In the course of the MTEP process, the Transmission Provider shall seek out opportunities to coordinate or consolidate, where possible, individually defined transmission projects into more comprehensive cost-effective developments subject to the limitations imposed by prior commitments and lead-time constraints. The Transmission Provider shall coordinate with Transmission Owners, and shall consider the input from the SPMs, Planning Subcommittee, and Planning Advisory Committee to develop expansion plans to meet the needs of the system. This multi-party collaborative process will allow for all projects with regional and inter-regional impact to be analyzed for their combined effects on the Transmission System. Moreover, this collaborative process is designed to ensure that the MTEP address Transmission Issues within the applicable planning horizon in the most efficient and cost effective manner, while giving consideration to the inputs from all stakeholders. In addition to the requirements of this Attachment FF, there may be state or local procedural requirements applicable to the planning or siting of transmission facilities by the Transmission Owners. A current list of those requirements can be found on the Transmission Provider's website.

1. Transmission Owners Electing to Integrate their Local Planning Processes into the Transmission Provider's Processes: Some Transmission Owners have agreed to integrate internal planning process with the Transmission Provider's open and coordinated planning processes for all of their transmission facilities to comply with Order 890 Planning Principles instead of filing a separate Attachment K. Through this election, the local planning for all transmission

facilities of these Transmission Owners, regardless of whether the facilities are ultimately transferred to the functional control of the Transmission Provider, shall be integrated with and included in the regional planning processes of the Transmission Provider. These regional planning processes, as provided for in this Attachment FF and in additional detail in the TPBPM, ensure that the planning decisions for all such facilities are made in an open and transparent environment. This planning environment provides opportunity for input from, and review by, stakeholders of the Open Access Transmission Tariff services throughout the planning process, and is in accordance with the Planning Principles of the Order 890 Final Rule. The open and transparent planning provisions of this Attachment FF shall not preclude interaction between stakeholders and Transmission Owners prior to the submittal of proposed projects to the regional planning process.

Transmission Owners integrating local planning processes into the regional planning processes are listed in Attachment FF-4. Such Transmission Owners shall be responsible for providing the Transmission Provider with sufficient information regarding all planning activities to enable the Transmission Provider to adequately review and incorporate all of the Transmission Owner's transmission facilities into the regional planning process of the Transmission Provider, as described in Sections I.B.1.a. and I.B.1.b. of this Attachment FF.

The foregoing Transmission Owners will utilize the planning stakeholder forums of the Transmission Provider to demonstrate the need for, identify the alternatives to, and report the status of non-transferred transmission facilities using the same open, transparent and coordinated planning process provided by the Transmission

Provider for transferred facilities as described in this Attachment FF.

a. Local Planning Processes of Transmission Owners: In accordance with the ISO Agreement, each Transmission Owner engages in local system planning in order to carry out its responsibility for meeting its respective transmission needs in collaboration with the Transmission Provider subject to the requirements of applicable state law or regulatory authority. In meeting its responsibilities under the ISO Agreement, the Transmission Owners may, as appropriate, develop and propose plans involving modifications to any of the Transmission Owner's transmission facilities which are part of the Transmission System. The Transmission Owners shall include the following specific local planning steps in order to develop plans for potential inclusion in the regional plan, in accordance with the annual regional planning process as described in Section I.B.1.b. of this Attachment FF, and in accordance with the regional planning principles of Section I.A of this Attachment. In addition to the local planning steps below, Transmission Owners shall adhere to any applicable state or local regulatory planning processes.

- i. Define local study area and study horizon;
- ii. Develop appropriate power system models;
 - a) Utilize existing NERC or Transmission Provider cases to model external systems;
 - b) Insert detailed model of Transmission Owner system if required;

- c) Insert updated detailed models of neighboring system models if required; and
 - d) Verify model topology and generation.
- iii. Update loads (spatial and magnitude) in study area;
 - a) Review historical MW and MVAR data to develop growth trends;
 - b) Obtain Load forecasts from customers in study area; and
 - c) Obtain input from local distribution planners in the study area.
- iv. Perform contingency analysis using applicable Transmission Owner planning criteria;
- v. Identify any violations to planning criteria for each of study period;
- vi. Develop alternative solutions to the criteria violations and test against the planning criteria;
 - a) Obtain cost estimates for each alternative and perform economic analyses; and
 - b) Determine non-cost attributes of each alternative such as operating flexibility, robustness, among others.
- vii. Select alternative based on cost and non-cost attributes;
- viii. Submit proposed solution and list of alternatives and assumptions to the Transmission Provider;

- ix. Participate in stakeholder evaluations and discussions as a part of annual regional plan development process;
- x. Perform additional analysis as required based on feedback from stakeholder groups (SPM/PS) in the regional planning process;
- xi. Submit results of additional analysis (if performed) to the Transmission Provider for further discussion with stakeholders (SPM/PS);
- xii. Consider regional planning process results, including stakeholder feedback on needs, proposed solutions, and alternatives, in determining whether or not to proceed with implementation of Transmission Owner proposed expansions; and
- xiii. Post the planning criteria and assumptions, and power flow models used in development of each Transmission Owner's current local planning proposal in accordance with Section I.B.1.b below. To the extent that the Transmission Owner uses the Midwest ISO MTEP models in developing its list of newly proposed projects, the Transmission Owner shall indicate as per Section I.B.1.b. below, the associated MTEP model used.

The Transmission Provider will maintain a link to applicable MTEP models on its website together with instructions for accessing such models consistent with CEII criteria and suitable non-disclosure agreements. In the event that the Transmission

Owner applies its own power flow models in developing its proposed local plans, the Transmission Owner shall provide such models to the Transmission Provider for posting, or shall provide to the Transmission Provider a link to the location of such Transmission Owner model(s) and to instructions for accessing such models consistent with the Transmission Owner's CEII and non-disclosure requirements. Transmission Provider shall post on its website links to such postings on Transmission Owner's website.

b. Integration of Local Planning Processes of Transmission Owners: Transmission Owners listed on Attachment FF-4 as integrating local planning processes with those of the Transmission Provider, shall integrate proposals for transmission expansions into the regional planning process as follows. Each Transmission Owner shall submit its proposals for transmission plans to the Transmission Provider prior to the start of each regional planning cycle. Each Transmission Owner's local plan, which consists of a list of proposed projects, shall be made available on the Transmission Provider's website for review by the PAC, the PS, and the SPM participants, subject to CEII and the confidentiality provisions in this Attachment FF. Such local plans shall be posted by September 15 each year in order to provide time for written comments by stakeholders. In addition to the list of proposed projects, each Transmission Owner submitting newly proposed projects by September 15 in any MTEP annual

cycle shall provide to the Transmission Provider by June 1 of the same year identification of any Midwest ISO base power flow model used by the Transmission Owner in support of the identification of the list of proposed projects to be subsequently posted in September, or in the event that the Transmission Owner uses a non-Midwest ISO base power flow model in support of the identification of the list of proposed projects the Transmission Owner shall provide to the Transmission Provider such base power flow model or a link to the power flow model and assumptions used.

Each Transmission Owner's local planning model and associated assumptions shall be accessible on or through a link on the Transmission Provider's website for review, subject to CEII and the confidentiality provisions in this Attachment FF and consistent with section I.B.1.a. In the event that the Transmission Owner uses a non-Midwest ISO base power flow model, the Transmission Owner shall provide for posting updates if there are significant changes in the model by July 15, August 15, and September 15 of each year. Comments by stakeholders on the local planning models and assumptions that are provided to the Transmission Provider SPM Planning Contact by July 1, or August 1 or September 1 with respect to updates, shall be forwarded to the applicable Transmission Owner by July 8, August 8, or September 8, respectively. The Transmission Provider shall address any unresolved stakeholder issues through the SPM process.

Each Transmission Owner shall also provide to the Transmission Provider by June 1 of each year any updates to the posted transmission planning criteria, or a notification that the posted documents have not changed. In the event a Transmission Owner has additional significant updates to the posted transmission planning criteria, the Transmission Owner shall provide such updates for posting by July 15, August 15, and September 15 of each year.

The Transmission Provider shall post on its website the lists of newly proposed projects, criteria and assumptions, and supporting base power flow models or links to supporting base power flow models, as provided by the Transmission Owners. Initial comments by stakeholders to the proposed projects should be provided to the Transmission Provider SPM Planning Contact 45 days after the posting of local plans otherwise comments may be made pursuant to Section I.A.2.c.ii. The Transmission Provider SPM Planning Contact shall be identified on the Transmission Provider's web site page devoted to Expansion Planning. The Transmission Provider shall provide to the applicable Transmission Owner within five working days of receipt, a copy of all stakeholder comments received within 45 days of the posted information regarding Transmission Owner planning criteria and assumptions, models applied, and list of proposed projects. The Transmission Provider shall address any unresolved stakeholder issues through the SPM process. Each Transmission Owner must participate in SPMs in the respective Planning

sub-region as indicated in the Transmission Providers meeting schedule. Such SPMs shall provide input to and review of the results of the needs assessments and adequacy of plans proposed by the Transmission Owners, or by stakeholders to the planning process, or by the Transmission Provider, to best meet the needs of the sub-region.

Transmission Owners identified in Attachment FF-4, must submit to the Transmission Provider, on an annual basis and at a time to be determined by the Transmission Provider, which shall be prior to the beginning of each regional planning cycle, all proposed transmission plans for both transferred and non-transferred transmission facilities. The submitted projects of such Transmission Owners shall be considered potential alternatives to system needs identified, and as such must be submitted when initially identified as a potential system solution, in order to permit the evaluation of such projects along with other potential alternatives that may be proposed by stakeholders or the Transmission Provider, in the SPM processes. Such alternatives may include transmission, generation, and demand-side resources. The Transmission Provider will review and evaluate such alternatives on a comparable basis and select the most appropriate solution. Comparability includes the ability of the Transmission Provider to obtain contractual assurances that the selected solution will be implemented by the required in-service dates. Contractual commitments associated with transmission solutions to be constructed by Midwest ISO Transmission Owners are provided for by the ISO

Agreement.

Contractual commitments associated with generation solutions require that a generator interconnection agreement be filed with the Commission pursuant to Attachment X of this Tariff by the time the alternative transmission solution would need to be committed to in order to ensure installation on the required need date. Contractual commitments associated with demand-side resource solutions require demonstration to the Transmission Provider of an executed contract between LSE and End-Use Customers. Such demand-side contracts must be in place by the time that the transmission solution would otherwise need to be committed to in order to ensure a timely solution to the identified planning need, and must be of a sufficient duration such that a reliable solution can be assured through the planning horizon. Notwithstanding the provisions of Section VII of the ISO Agreement regarding the Transmission Provider review of Transmission Owner plans, no proposed project of a Transmission Owner that has elected to integrate their local planning processes into the Transmission Provider's processes, as indicated on Attachment FF-4, shall be recommended in the MTEP for implementation until completion of the annual needs analysis carried out in the annual MTEP cycle, as described in Section I. A. of this Attachment FF, except as provided for in Section I.B.1.c. of this Attachment FF.

c. Out-of-Cycle Review of Transmission Owner Plans: In the event that a Transmission Owner determines that system conditions warrant the

urgent development of system enhancements that would be jeopardized unless the Transmission Provider performs an expedited review of the impacts of the project, Transmission Provider shall use a streamlined approval process for reviewing and approving projects proposed by the Transmission Owners so that decisions will be provided to the Owner within thirty (30) days of the projects submittal to the Midwest ISO unless a longer review period is mutually agreed upon.

2. Transmission Owners Filing Separate Attachment K: Some Transmission Owners as listed on the last page of Attachment FF-4 have developed individual open, local planning processes for their facilities, that comply with the Planning Principles of the Order 890 Final Rule. These Transmission Owners have an Attachment K that describes how the Transmission Owner will comply with the Order No. 890 Planning Principles for all transmission facilities that they plan for, regardless of whether those facilities are ultimately transferred to the functional control of the Transmission Provider. With the exception of Sections I.B.1.a and I.B.1.b., the provisions of this Attachment FF remain applicable to all Transmission Owners notwithstanding the filing by any Transmission Owner of an Attachment K pursuant to the Order 890 Final Rule.

C. Joint Regional Planning Coordination: The MTEP shall be developed in accordance with the principles of interregional coordination through collaboration with representatives from adjacent transmission providers, their designated regional planning organizations, or regional transmission organizations, as provided for in this Attachment FF, or as otherwise provided for in existing joint agreements between the Transmission

Provider and other regional entities that engage in planning activities. The Transmission Provider has joint operating and coordination agreements with MAPPOR, as contractor for Mid-Continent Area Power Pool (“MAPP”), the PJM Interconnection (“PJM”), Southwest Power Pool (“SPP”), Tennessee Valley Authority (“TVA”), and Manitoba Hydro (Manitoba). Because TVA is non-jurisdictional, that agreement has not been submitted for Commission approval, but is available on the Transmission Provider’s public website.

1. Initial Contact: The Transmission Provider will initiate a meeting with representatives of adjacent transmission providers, their designated regional planning organizations, or regional transmission organizations with which existing joint agreements are not already established with the Transmission Provider (“Regional Planning Coordination Entities” or “RPCEs”), in order to establish a Joint Planning Committee.
2. Joint Planning Committee. The Transmission Provider shall offer to form a Joint Planning Committee (“JPC”) with the RPCE. The JPC shall be comprised of representatives of the Transmission Provider and the RPCE in numbers and functions to be identified from time to time. The JPC may combine with or participate in similarly established joint planning committees amongst multiple RPCEs or established under joint agreements to which the Transmission Provider is a signatory, for the purpose of providing for broader and more effective inter-regional planning coordination. The JPC shall have a Chairman. The Chairman shall be responsible for: the scheduling of meetings; the preparation of agendas for meetings; the production of minutes of meetings; and for chairing JPC

meetings. The Chairmanship shall rotate amongst the Transmission Provider and the RPCEs on a mutually agreed to schedule, with each party responsible for the Chairmanship for no more than one planning study cycle in succession. The JPC shall coordinate planning of the systems of the Transmission Provider and the RPCEs, including the following:

- a. Coordinate the development of common power system analysis models to perform coordinated system planning studies including power flow analyses and stability analyses. For studies of interconnections in close electrical proximity at the boundaries among the systems of the Transmission Provider and the RPCEs the JPC or its designated working group will coordinate the performance of a detailed review of the appropriateness of applicable power system models.
- b. Conduct, on a regular basis, a Coordinated Regional Transmission Planning Study (CRTPS), as set forth in Section 8.3.4.
- c. Coordinate planning activities under this Section 8, including the exchange of data and developing necessary report and study protocols.
- d. Maintain an Internet site and e-mail or other electronic lists for the communication of information related to the coordinated planning process. Such sites and lists may be integrated with those existing for the purpose of communicating the open and transparent planning processes of the Transmission Provider.
- e. Meet at least semi-annually to review and coordinate transmission planning activities.

f. Establish working groups as necessary to address specific issues, such as the review and development of the regional plans of the RPCE and the Transmission Provider, and localized seams issues.

g. Establish a schedule for the rotation of responsibility for data management, coordination of analysis activities, report preparation, and other activities.

3. Data and Information Exchange. The Transmission Provider shall make available to each RPCE the following planning data and information. Unless otherwise indicated, such data and information shall be provided annually. The Transmission Provider shall provide such data in accordance with the applicable CEII policy, and maintain data and information received from each RPCE in accordance with their applicable confidentiality policies.

a. Data required for the development of power flow cases, and stability cases, incorporating up to a ten year load forecasts as may be requested, including all critical assumptions that are used in the development of these cases.

b. Fully detailed planning models (up to the next ten (10) years as requested) on an annual basis and updates as necessary to perform coordinated studies that reflect system enhancement changes or other changes.

c. The regional plan documents, any long-term or short-term reliability assessment documents, and any operating assessment reports produced by the Transmission Provider and the RPCE.

- d. The status of expansion studies, system impact studies and generation interconnection studies, such that the Transmission Provider and the RPCE have knowledge that a commitment has been made to a system enhancement as a result of any such studies.
- e. Transmission system maps for the Transmission Provider and the RPCE bulk transmission systems and lower voltage transmission system maps that are relevant to the coordination of planning between or among the systems.
- f. Contingency lists for use in load flow and stability analyses, including lists of all contingency events required by applicable NERC or Regional Entity planning standards, as well as breaker diagrams for the portions of the Transmission Provider and the RPCE transmission systems that are relevant to the coordination of planning between or among the systems. Breaker diagrams to be provided on an as requested basis.
- g. The timing of each planned enhancement, including estimated completion dates, and indications of the likelihood that a system enhancement will be completed and whether the system enhancement should be included in system expansion studies, system impact studies and generation interconnection studies, and as requested the status of related applications for regulatory approval. This information shall be provided at the completion of each planning cycle of the Transmission Provider, and more frequently as necessary to indicate changes in status that may be important to the RPCE system.

h. Quarterly identification of interconnection requests that have been received and any long-term firm transmission services that have been approved, that may impact the operation of the Transmission Provider or the RPCE system.

i. Quarterly, the status of all interconnection requests that have been identified.

j. Information regarding long-term firm transmission services on all interfaces relevant to the coordination of planning between or among the systems.

k. Load flow data initially will be exchanged in PSS/E format. To the extent practical, the maintenance and exchange of power system modeling data will be implemented through databases. When feasible, transmission maps and breaker diagrams will be provided in an electronic format agreed upon by the Transmission Provider and the RPCE. Formats for the exchange of other data will be agreed upon by the Transmission Provider and the RPCE.

4. Coordinated System Planning. The Transmission Provider shall agree to coordinate with the RPCEs studies required to assure the reliable, efficient, and effective operation of the transmission system. Results of such coordinated studies will be included in the Coordinated System Plan. The Transmission Provider shall agree to conduct with the RPCEs such coordinated planning as set forth below

a. Single Entity Planning. The Transmission Provider shall engage in

such transmission planning activities, including expansion plans, system impact studies, and generator interconnection studies, as necessary to fulfill its obligations under the Tariff. Such planning shall conform to applicable reliability requirements of NERC, applicable regional reliability councils, and any successor organizations thereto.

Such planning shall also conform to any and all applicable requirements of Federal or State regulatory authorities. The Transmission Provider will prepare a regional transmission planning report that documents the procedures, methodologies, and business rules utilized in preparing and completing the report. The Transmission Provider shall agree to share the transmission planning reports and assessments with each RPCE, as well as any information that arises in the performance of its individual planning activities as is necessary or appropriate for effective coordination among the Transmission Provider and the RPCEs on an ongoing basis. The Transmission Provider shall provide such information to the RPCEs in accordance with the applicable CEII policy and shall maintain such information received from the RPCEs in accordance with their applicable confidentiality policies.

b. Analysis of Interconnection Requests. In accordance with the procedures under which the Transmission Provider provides interconnection service, the Transmission Provider will agree to coordinate with each RPCE the conduct of any studies required in determining the impact of a request for generator or merchant transmission

interconnection. Results of such coordinated studies will be included in the impacts reported to the interconnection customers as appropriate.

Coordination of studies shall include the following:

- i. When the Transmission Provider receives a request under its interconnection procedures for interconnection, it will determine whether the interconnection potentially impacts the system of a RPCE. In that event, the Transmission Provider will notify the RPCE and convey the information provided in the interconnection queue posting. The Transmission Provider will provide the study agreement to the interconnection customer in accordance with applicable procedures.
- ii. If the RPCE determines that it may be materially impacted by an interconnection on the Transmission Provider System, the RPCE may request participation in the applicable interconnection studies. The Transmission Provider will coordinate with the RPCE with respect to the nature of studies to be performed to test the impacts of the interconnection on the RPCE System, and who will perform the studies. The Transmission Provider will strive to minimize the costs associated with the coordinated study process undertaken by agreement with the RPCE.
- iii. Any coordinated studies associated with requests for

interconnection to the Transmission Provider's system will be performed in accordance with the study timeline requirements and scope of the applicable generation interconnection procedures of the Transmission Provider.

- iv. The RPCE may participate in the coordinated study either by taking responsibility for performance of studies of its system, if deemed reasonable by the Transmission Provider, or by providing input to the studies to be performed by the Transmission Provider. The study cost estimates indicated in the study agreement between the Transmission Provider and the interconnection customer, will reflect the costs, and the associated roles of the study participants including the RPCE. The Transmission Provider will review the cost estimates and scope submitted by all participants for reasonableness, based on expected levels of participation, and responsibilities in the study. If the RPCE agrees to perform any aspects of the study, the RPCE must comply with the timelines and schedule of the Transmission Provider's interconnection procedures.
- v. The Transmission Provider will collect from the interconnection customer the costs incurred by the RPCE associated with the performance of such studies and forward collected amounts, no later than thirty (30) days

after receipt thereof, to the RPCE. Upon the reasonable request of the RPCE, the Transmission Provider will make their books and records available to the requestor pertaining to such requests for collection and receipt of collected amounts.

- vi. The Transmission Provider will report the combined list of any transmission infrastructure improvements on either the RPCE and/or the Transmission Provider's system required as a result of the proposed interconnection.
- vii. Construction and cost responsibility associated with any transmission infrastructure improvements required as a result of the proposed interconnection shall be accomplished under the terms of the applicable OATT, Transmission Service Guidelines, controlling agreements, and consistent with applicable Federal or State regulatory policy and applicable law.
- viii. Each transmission provider will maintain separate interconnection queues. The JPC will maintain a composite listing of interconnection requests for all interconnection projects that have been identified as potentially impacting the systems of the Transmission Provider and coordinating RPCEs. The JPC will post this listing on the Internet site maintained for the

communication of information related to the coordinated system planning process.

c. Analysis of Long-Term Firm Transmission Service Requests. In accordance with applicable procedures under which the Transmission Provider provides long-term firm transmission service, the Transmission Provider will coordinate the conduct of any studies required to determine the impact of a request for such service. Results of such coordinated studies will be included in the impacts reported to the transmission service customers as appropriate. Coordination of studies will include the following:

- i. The Transmission Provider will coordinate the calculation of ATC values associated with the service, based on contingencies on their systems that may be impacted by the granting of the service.
- ii. When the Transmission Provider receives a request for long-term firm transmission service, it will determine whether the request potentially impacts the system of the RPCE. If the Transmission Provider determines that the RPCE system is potentially impacted, and that the RPCE would not receive a transmission service request to complete the service path, the transmission provider will notify the RPCE and convey the information provided in the posting.

- iii. If the RPCE determines that its system may be materially impacted by granting the service, it may contact the Transmission Provider and request participation in the applicable studies. The Transmission Provider will coordinate with the RPCE with respect to the nature of studies to be performed to test the impacts of the requested service on the RPCE system, and will strive to minimize the costs associated with the coordinated study process. The JPC will develop screening procedures to assist in the identification of service requests that may impact systems of the JPC members other than the transmission provider receiving the request.
- iv. Any coordinated studies for request on the transmission Provider's system will be performed in accordance with the study timeline and scope requirements of the applicable transmission service procedures of the Transmission Provider.
- v. The RPCE may participate in the coordinated study either by taking responsibility for performance of studies of its system, if deemed reasonable by the Transmission Provider or by providing input to the studies to be performed by the Transmission Provider. The study cost estimates indicated in the study agreement between the Transmission Provider

and the transmission service customer will reflect the costs and the associated roles of the study participants. The Transmission Provider will review the cost estimates and scope submitted by all participants for reasonableness, based on expected levels of participation and responsibilities in the study.

vi. The Transmission Provider will collect from the transmission service customer, and forward to the RPCE, the costs incurred by the RPCE with the performance of such studies.

vii. The Transmission Provider receiving the request will identify any transmission infrastructure improvements required as a result of the transmission service request.

viii. Construction and cost responsibility associated with any transmission infrastructure improvements required as a result of the transmission service request shall be accomplished under the terms of the applicable OATT, Transmission Service Guidelines, controlling agreements, and consistent with applicable Federal or State regulatory policy and applicable law.

d. Coordinated Regional Transmission Planning Study: The Transmission Provider agrees to participate in the conduct of a periodic Coordinated Regional Transmission Planning Study (CRTPS). The CRTPS shall have as input the

results of ongoing analyses of requests for interconnection and ongoing analyses of requests for long-term firm transmission service. The Parties shall coordinate in the analyses of these ongoing service requests in accordance with Sections 8.3.2 and 8.3.3. The results of the CRTPS shall be an integral part of the expansion plans of each Party. Construction of upgrades on the Transmission System of the Transmission Provider that are identified as necessary in the CRTSP shall be under the terms of the Owners Agreement of the Transmission Provider, applicable to the construction of upgrades identified in the expansion planning process. Coordination of studies required for the development of the Coordinated System Plan will include the following:

- i. Every three years, the Transmission Provider shall participate in the performance of a CRTPS. Sensitivity analyses will be performed, as required, during the off years based on a review by the JPC of discrete reliability problems or operability issues that arise due to changing system conditions.
- ii. The CRTPS shall identify all reliability and expansion issues, and shall propose potential resolutions to be considered by The Transmission Provider and the coordinating RPCEs.
- iii. As a result of participation in the CRTPS, except as provided for in Section II. A. 1., the Transmission Provider is not obligated in any way to construct, finance, operate, or

otherwise support any transmission infrastructure improvements or other transmission-related projects identified in the CRTPS. Any decision to proceed with any transmission infrastructure improvements or other transmission-related projects identified in the CRTPS shall be based on the applicable reliability, operational and economic planning criteria established for the Transmission Provider as applicable to the development of the MTEP and set forth in this Attachment FF.

- iv. As a result of participation in the CRTPS, the RPCEs are not entitled to any rights to financial compensation due to the impact of the transmission plans of the Transmission Provider upon the RPCE system, including but not limited to its decisions whether or not to construct any transmission infrastructure improvements or other transmission-related projects identified in the CRTPS.
- v. The JPC will develop the scope and procedure for the CRTPS. The scope of the CRTPSs performed over time will include evaluations of the transmission systems against reliability criteria, operational performance criteria, and economic performance criteria applicable to the Transmission Provider and the RPCEs.
- vi. In the conduct of the CRTPS, the Transmission Provider

and the coordinating RPCEs will use planning models that are developed in accordance with the procedures to be established by the JPC. Exchange of power flow models will be in a format that is acceptable to the coordinating parties.

- vii. **Stakeholder Review Processes.** The Transmission Provider, in coordination with coordinating RPCEs shall review the scope and results of the CRTPS with impacted stakeholders, and shall modify the study scope as deemed appropriate by the Transmission Provider in agreement with the coordinating RPCEs, after receiving stakeholder input. Such reviews will utilize the existing planning stakeholder forums of the coordinating parties including as applicable joint Sub Regional Planning Meetings.

II. Development Process for MTEP Projects: The Transmission Provider will develop the MTEP biennially or more frequently. The MTEP will identify expansion projects for inclusion in the MTEP according to the factors set forth in Appendix B of the ISO Agreement and Section I.A. of this Attachment FF. For purposes of assigning cost responsibility, expansion projects in the MTEP shall be categorized pursuant to the following criteria.

- A. Reliability Needs:** Reliability projects are identified either in the periodically performed Baseline Reliability Study, or in Facilities Studies associated with the request processes for new transmission access. Transmission access includes requests for both new transmission delivery service and new generation interconnection service.

1. Baseline Reliability Projects: Baseline Reliability Projects are Network Upgrades identified in the base case as required to ensure that the Transmission System is in compliance with applicable national Electric Reliability Organization (“ERO”) reliability standards and reliability standards adopted by Regional Reliability Organizations and applicable within the Transmission Provider Region. Baseline Reliability Projects include projects that are needed to maintain reliability while accommodating the ongoing needs of existing Market Participants and Transmission Customers. Baseline Reliability Projects may consist of a number of individual facilities that in the judgment of the Transmission Provider constitute a single project for cost allocation purposes. The Transmission Provider shall collaborate with Transmission Owning members, other transmission providers, Transmission Customers, and other stakeholders to develop appropriate planning models that reflect expected system conditions for the planning horizon. The planning models shall reflect the projected load growth of existing network customers and other transmission service and interconnection commitments, and shall include any transmission projects identified in Service Agreements or interconnection agreements that are entered into in association with requests for transmission delivery service or transmission interconnection service, as determined in Facilities Studies associated with such requests. The Transmission Provider shall test the MTEP for adequacy and security based on commonly applicable national Electric Reliability Organization (“ERO”) standards, and under likely and possible dispatch patterns of actual and projected Generation Resources within the Transmission System and

of external resources, including dispatch reflective of Long-Term Transmission Rights of Transmission Customers, and shall produce an efficient expansion plan that includes all Baseline Reliability Projects determined by the Transmission Provider to be necessary through the planning horizon of the MTEP. The Transmission Provider shall obtain the approval of the Transmission Provider Board, as set forth in Section VI, for each MTEP published.

2. New Transmission Access Projects: New Transmission Access Projects are defined for the purposes of Attachment FF as Network Upgrades identified in Facilities Studies and agreements pursuant to requests for transmission delivery service or transmission interconnection service under the Tariff. New Transmission Access Projects include projects that are needed to maintain reliability while accommodating the incremental needs associated with requests for new transmission or interconnection service, as determined in Facilities Studies associated with such requests. New Transmission Access Projects may consist of a number of individual facilities, which in the judgment of the Transmission Provider constitute a single project for cost allocation purposes. New Transmission Access Projects are either Generation Interconnection Projects or Transmission Delivery Service Projects as defined in Sections II.A.2.a. and II.A.2.b. The Transmission Provider shall consider the Baseline Reliability Projects already determined to be needed in the most current MTEP, as well as any other base-case needs not associated with the request for new service that may be identified during the impact study process when determining the need for New Transmission Access Projects. Any identified base-case needs determined

in the impact study process that are not a part of the Baseline Reliability Projects already identified in the most current MTEP shall become new Baseline Reliability Projects and shall be included in the next MTEP. New Transmission Access Projects identified in Facilities Studies and agreements pursuant to requests for transmission delivery service or transmission interconnection service under this Tariff shall be included in the next MTEP.

a. **Generation Interconnection Projects:** Generation Interconnection Projects are New Transmission Access Projects that are associated with interconnection of new, or increase in generating capacity of existing, generation under Attachments X to this Tariff.

b. **Transmission Delivery Service Projects:** Transmission Delivery Service Projects are New Transmission Access Projects that are needed to provide for requests for new Point-To-Point Transmission Service, or requests under Module B of the Tariff for Network Service or a new designation of a Network Resource(s).

B. Market Efficiency Projects: Market Efficiency Projects are Network Upgrades: (i) that are proposed by the Transmission Provider, Transmission Owner(s), ITC(s), Market Participant(s), or regulatory authorities; (ii) that are found to be eligible for inclusion in the MTEP or are approved pursuant to Appendix B, Section VII of the ISO Agreement after June 16, 2005, applying the factors set forth in Section I.A. of this Attachment FF; (iii) that have a Project Cost of \$5 million or more; (iv) that involve

facilities with voltages of 345 kV or higher¹; and that may include any lower voltage facilities of 100kV or above that collectively constitute less than fifty percent (50%) of the combined project cost, and without which the 345 kV or higher facilities could not deliver sufficient benefit to meet the required benefit-to-cost ratio threshold for the project as established in Section II.B.1.e, or that otherwise are needed to relieve applicable reliability criteria violations that are projected to occur as a direct result of the development of the 345 kV or higher facilities of the project; (v) that are not determined to be Multi Value Projects; and (vi) that are found to have regional benefits under the criteria set forth in Section II.B.1 of this Attachment FF.

1. Criteria to Determine Whether a Project Should be Included as a Market Efficiency Project: The Transmission Provider shall employ multiple future scenarios and multi-year analysis including sensitivity analyses guided by input from the Planning Advisory Committee to evaluate the anticipated benefits of a proposed Market Efficiency Project in order to determine if such a project meets the criteria for inclusion in the regional plan as a Market Efficiency Project eligible for regional cost sharing. Sensitivity analyses shall include, among other factors, consideration of: (i) variations in amount, type, and location of future generation supplies as dictated by future scenarios developed with stakeholder input and guidance; (ii) alternative transmission proposals; (iii) impacts of variations in load growth; and (iv) effects of demand response resources on transmission

¹ Transformer voltage is defined by the voltage of the low-side of the transformer for these purposes.

benefits. The Transmission Provider shall perform this inclusion analysis as follows:

- a. The Transmission Provider shall utilize a weighted futures, no loss (“WFNL”) metric to analyze the anticipated annual economic benefits of construction of a proposed Market Efficiency Project to Transmission Customers in each of the Local Resource Zones, as described in Section II.B.1.a.i, based upon adjusted production cost (“APC”) savings. APC savings will be calculated as the difference in total production cost of the Resources in each Local Resource Zone adjusted for import costs and export revenues with and without the proposed Market Efficiency Project as part of the Transmission System. The WFNL metric for each Local Resource Zone shall be calculated using the weighted APC savings determined for each future scenario included in the analysis.

- i. If the Local Resource Zones as defined in accordance with Module E for Resource Adequacy purposes are modified, the Transmission Provider, working with stakeholders, may define different Local Resource Zones for purposes of allocating Market Efficiency Project costs. The definition of different Local Resource Zones in connection with the allocation of Market Efficiency Project costs will be detailed in the Business Practices Manual for Transmission Planning.

- b. Project benefit evaluations will include benefits for the first 20 years of project life after the projected in-service date, with a maximum planning horizon of 25 years from the approval year. The annual benefit for a proposed Market Efficiency Project shall be determined as the sum of the WFNL values for each Local Resource Zone. The total project benefit shall be determined by calculating the present value of annual benefits for the multiple year scenarios and multi-year evaluations.
- c. The costs applied in the benefit to cost ratio shall be the present value, over the same period for which the project benefits are determined, of the annual Network Upgrade Charges for the project as determined in accordance with the formula in Attachment GG for the Transmission Owner constructing the proposed Market Efficiency Project.
- d. The present value calculation for both the annual benefits and annual costs will apply a discount rate representing the after-tax weighted average cost of capital of the Transmission Owners that make up the Transmission Provider Transmission System.
- e. The Transmission Provider shall employ a benefit to cost ratio test to evaluate a proposed Market Efficiency Project. Only projects that meet a benefit to cost ratio of 1.25 or greater shall be included in the MTEP as a Market Efficiency Project and be eligible for regional cost sharing.
- f. The benefits of the project and the cost allocations as a percentage

of project cost shall be determined one time at the time that the project is presented to the Transmission Provider Board for approval. Estimated Project Cost will be used to estimate the benefit to cost ratio and the eligibility for cost sharing at the time of project approval. To the extent that the Commission approves the collection of costs in rates for Construction Work in Progress (“CWIP”) for a constructing Transmission Owner, costs will be allocated and collected prior to completion of the project.

- g. The aforementioned Market Efficiency Project inclusion criteria shall be used for the exclusive purpose of determining whether projects are eligible for regional cost sharing in accordance with Section III.A.2.f below. These criteria shall not affect the existing criteria set forth in Appendix B of the ISO Agreement for determining whether projects are eligible for inclusion in the MTEP. Moreover, the costs of projects included in the MTEP, but not eligible for regional cost sharing, shall continue to be eligible for inclusion in the calculation of Transmission Owner revenue requirements under Attachment O of this Tariff.

C. Multi Value Projects: A Multi Value Project is one or more Network Upgrades that address a common set of Transmission Issues and satisfy the conditions listed in Sections II.C.1, II.C.2., and II.C.3 of Attachment FF. All Network Upgrades associated with a Multi Value Project including any lower voltage facilities that may be needed to relieve applicable reliability criteria violations that are projected to occur as a direct result

of the development of the Multi Value Project; may be cost shared per Section III.A.2.g of Attachment FF except for i) any Network Upgrade cost associated with constructing an underground or underwater transmission line above and beyond the cost of a feasible alternative overhead transmission line that provides comparable regional benefits, and ii) any DC transmission line and associated terminal equipment when scheduling and dispatch of the DC transmission line is not turned over to the Transmission Provider's markets, real-time control of the DC transmission line is not turned over to the Transmission Provider's automatic generation control system and/or the DC transmission line is operated in a manner that requires specific users to subscribe for DC transmission service.

1. A Multi Value Project must be evaluated as part of a Portfolio of projects, as designated in the transmission expansion planning process, whose benefits are spread broadly across the footprint.
2. A Multi Value Project must meet one of the three criteria outlined below:
 - a. Criterion 1. A Multi Value Project must be developed through the transmission expansion planning process for the purpose of enabling the Transmission System to reliably and economically deliver energy in support of documented energy policy mandates or laws that have been enacted or adopted through state or federal legislation or regulatory requirement that directly or indirectly govern the minimum or maximum amount of energy that can be generated by specific types of generation. The MVP must be shown to enable the transmission system to deliver such energy in a manner that is more reliable and/or more economic than it otherwise would be without

the transmission upgrade.

b. Criterion 2. A Multi Value Project must provide multiple types of economic value across multiple pricing zones with a Total MVP Benefit-to-Cost ratio of 1.0 or higher where the Total MVP Benefit - to-Cost ratio is described in Section II.C.7 of this Attachment FF. The reduction of production costs and the associated reduction of LMPs resulting from a transmission congestion relief project are not additive and are considered a single type of economic value.

c. Criterion 3. A Multi Value Project must address at least one Transmission Issue associated with a projected violation of a NERC or Regional Entity standard and at least one economic-based Transmission Issue that provides economic value across multiple pricing zones. The project must generate total financially quantifiable benefits, including quantifiable reliability benefits, in excess of the total project costs based on the definition of financial benefits and Project Costs provided in Section II.C.7 of Attachment FF.

3. All of the following conditions must be satisfied in order for a project to be classified as a Multi Value Project:

a. Facilities associated with the transmission project must not be in service, under construction, or approved for construction by the Transmission Provider Board prior to July 16, 2010 or the date a Transmission Owner becomes a signatory member of the ISO

Agreement, whichever is later.

- b. The transmission project must be evaluated through the Transmission Provider's transmission planning process and approved for construction by the Transmission Provider Board prior to the start of construction, where construction does not include preliminary site and route selection activities.
 - c. The transmission project must not contain any transmission facilities listed in Attachment FF-1 of this Tariff.
 - d. The total capital cost of the transmission project must be greater than or equal to the lesser of \$20,000,000.00 or 5% of the constructing Transmission Owner's net transmission plant as reported in Attachment O of the Tariff at the time the transmission project is approved in an MTEP.
 - e. The transmission project must include, but not necessarily be limited to, the construction or improvement of transmission facilities operating at voltages above 100 kV. A transformer is considered to operate above 100 kV when at least two sets of transformer terminals operate at voltages above 100 kV.
 - f. Network Upgrades driven solely by an Interconnection Request, as defined in Attachment X of the Tariff, or a Transmission Service request will not be considered Multi Value Projects.
4. Any transmission project that qualifies as a Multi-Value Project shall be classified as an MVP irrespective of whether such project is also a Baseline

Reliability Project and/or Market Efficiency Project.

5. The specific types of economic value provided by a Multi Value Project include the following:

- a. Production cost savings where production costs include generator startup, hourly generator no-load, generator energy and generator Operating Reserve costs. Production cost savings can be realized through reductions in both transmission congestion and transmission energy losses. Production cost savings can also be realized through reductions in Operating Reserve requirements within Reserve Zones and, in some cases, reductions in overall Operating Reserve requirements for the Transmission Provider.
- b. Capacity losses savings where capacity losses represent the amount of capacity required to serve transmission losses during the system peak hour including associated planning reserve.
- c. Capacity savings due to reductions in the overall Planning Reserve Margins resulting from transmission expansion.
- d. Long-term cost savings realized by Transmission Customers by accelerating a long-term project start date in lieu of implementing a short-term project in the interim and/or long-term cost savings realized by Transmission Customers by deferring or eliminating the need to perform one or more projects in the future.
- e. Any other financially quantifiable benefit to Transmission Customers resulting from an enhancement to the Transmission

System and related to the provisions of Transmission Service.

6. Any project to facilitate like-for-like capital replacements of plant originally installed as part of a Multi Value Project where replacement is due to aging, failure, damage or relocation requirements where such replacement is not the result of negligence by the constructing Transmission Owner will be treated as a Multi Value Project. The minimum project cost limitation for Multi Value Projects described in Section II.C.3.d of Attachment FF will not apply to the like for- like capital replacement projects described in this Section.

7. The following Total MVP Benefit-to-Cost Ratio will be applied to any Multi Value Project justified solely on the basis of Sections II.C.2.b or II.C.2.c of this Attachment FF to ensure such project qualifies as a Multi Value Project:

Total MVP Benefit-to-Cost Ratio = financial benefits / Project Costs.

For the purpose of this calculation, Financial Benefits will be set equal to the present value of all financially quantifiable benefits provided by the project projected for the first 20 years of the project's life and Project Costs will be set equal to the present value of the annual revenue requirements projected for the first 20 years of the project's life.

8. The aforementioned Multi Value Project inclusion criteria shall be used for the exclusive purpose of determining whether projects are eligible for regional cost sharing in accordance with Section III.A.2.g below. These criteria shall not affect the existing criteria set forth in Appendix B of the ISO Agreement for determining whether projects are eligible for inclusion in the MTEP. Moreover, the costs of projects included in the MTEP, but not eligible for regional cost sharing, shall

continue to be eligible for inclusion in the calculation of Transmission Owner revenue requirements under Attachment O of this Tariff.

III. Designation of Cost Responsibility for MTEP Projects: Based on the planning analysis performed by the Transmission Provider, which shall take into consideration all appropriate input from Market Participants or external entities, including, but not limited to, any indications of a willingness to bear cost responsibility for an enhancement or expansion, the recommended MTEP shall, for any enhancement or expansion that is included in the plan, designate: (i) the Market Participant(s) in one or more pricing zones that will bear cost responsibility for such enhancement or expansion, as and to the extent provided by any applicable provision of the Tariff, including Attachments N, X, or any applicable cost allocation method ordered by the Commission; or, (ii) in the event and to the extent that no provision of the Tariff so assigns cost responsibility, the Market Participant(s) or Transmission Customer(s) in one or more pricing zones from which the cost of such enhancements or expansions shall be recovered through charges established pursuant to Attachment GG of this Tariff, or as otherwise provided for under this Attachment FF.

Any designation under clause (ii) of the preceding sentence shall be determined as provided for in Section III.A and III.B of this Attachment FF. For all such designations, the Transmission Provider shall calculate the cost allocation impacts to each pricing zone. The results will be reviewed for unintended consequences by the Transmission Provider and the Tariff Working Group and any such identified consequences shall be reported to the Planning Advisory Committee, and the OMS.

A. Allocation of Costs Within the Transmission Provider Region

1. Default Cost Allocation: Except as otherwise provided for in this Attachment FF, or by

any other applicable provision of this Tariff and consistent with the ISO Agreement, the responsibility for Network Upgrades included in the approved MTEP will be addressed in accordance with the provisions of the ISO Agreement.

2. Cost Allocation: The Transmission Provider will designate and assign cost responsibility on a regional, and sub-regional basis for Network Upgrades identified in the MTEP subject to the grand-fathered project provisions of Section III.A.2.b, and to the threshold criteria for facility voltage and Project Cost found in Section III.A.2.c.

- a. Market Participant's Option to Fund: Notwithstanding the Transmission Provider's assignment of cost responsibility for a project included in the MTEP, one or more Market Participants may elect to assume cost responsibility for any or all costs of a Network Upgrade that is included in the MTEP. Provided however, in the event the Market Participant is also a Transmission Owner such election of the option to fund must be made on a consistent, non-discriminatory basis.
- b. Grandfathered Projects: The cost allocation provisions of this Attachment FF shall not be applicable to transmission projects identified in Attachment FF-1, which is based on the list of projects designated as Planned Projects in the MTEP approved by the Transmission Provider Board on June 16, 2005 (MTEP 05) and some additions of proposed projects that the Transmission Provider has determined to be in the advanced stages of planning.

c. **Baseline Reliability Projects: Costs of Baseline Reliability**
Projects included in the MTEP and for which (1) the Network Upgrade has a Project Cost of \$5 million or more or (2) the Network Upgrade has a Project Cost of under \$5 million and is five percent (5 %) or more of the Transmission Owner's net plant as established in Attachment O of this Tariff in effect at the time of designation of cost responsibility for the Network Upgrade, shall be subject to the cost sharing of this Attachment FF and will be assigned to the Transmission Customers in pricing zones as follows:

i. **Projects of Voltage 100 kV through 344 kV:** 100% of the Project Cost for Baseline Reliability Projects with a voltage class of 100 kV through 344 kV shall be allocated on a sub-regional basis to all Transmission Customers in designated pricing zones. The designated pricing zones and the sub-regional allocation of the Project Cost shall be determined on a case-by-case basis in accordance with a Line Outage Distribution Factor Table ("LODF Table") developed by the Transmission Provider which is similar in form to that attached hereto as Attachment FF-2. The LODF Table is based on Transmission System topology and Line-Outage Distribution Factors associated with the project under consideration and is used to determine the pricing zones to

be included in the sub-regional allocation of the Project Cost. The percentage of the sub-regional allocation assigned to each designated pricing zone shall be determined based on the relative share between pricing zones of the sum of the absolute value of the product of the Line-Outage Distribution Factor on each Branch Facility in a pricing zone and the length in miles of the Branch Facility.

- ii. Projects of Voltage 345 kV and Higher: 20% of the Project Cost for Baseline Reliability Projects with a voltage class of 345 kV or higher shall be allocated on a system-wide basis to all Transmission Customers and recovered through a system-wide rate. The remaining 80% of the Project Cost for Baseline Reliability Projects with a voltage class of 345 kV or higher shall be allocated on a sub-regional basis to all Transmission Customers in designated pricing zones. The designated pricing zones and the sub-regional allocation of the Project Cost shall be determined on a case-by-case basis in accordance with a Line Outage Distribution Factor Table (“LODF Table”) developed by the Transmission Provider similar in form to that attached hereto as Attachment FF-2.

The LODF Table is based on Transmission System

topology and Line-Outage Distribution Factors associated with the project under consideration and is used to determine the pricing zones to be included in the sub-regional allocation of the Project Cost. The percentage of the sub-regional allocation assigned to each designated pricing zone shall be determined based on the relative share between pricing zones of the sum of the absolute value of the product of the Line-Outage Distribution Factor on each Branch Facility in a pricing zone and the length in miles of the Branch Facility.

- d. Generation Interconnection Projects: Costs of Generation Interconnection Projects that are not determined by the Transmission Provider to be Baseline Reliability Projects, Market Efficiency Projects, or Multi-Value Projects, and the Network Upgrade costs associated with advancing a Baseline Reliability Project, Market Efficiency Project, or Multi-Value Project associated with a generator interconnection will be paid for by the Interconnection Customer(s) in accordance with Attachment X. For Generator Interconnection Projects interconnecting to the American Transmission Company LLC transmission system, such costs will be subject to the provision of Attachment FF – ATCLLC.

- 1) For Network Upgrades to facilities in voltage classes at or

above 345 kV, the Interconnection Customer shall be repaid 10 percent of the costs of the Generation Interconnection Project funded by the Interconnection Customer once Commercial Operation is achieved. The Transmission Owner(s) constructing the Generation Interconnection Project will repay 10% of the Generation Interconnection Project costs associated with Network Upgrade facilities in a voltage class of 345 kV or greater to the Interconnection Customer under repayment terms consistent with the schedules and other terms of Attachment X.

The 10% of the Project Cost associated with Network Upgrade facilities of voltage class 345 kV or above and repaid to the Interconnection Customer shall be allocated on a system-wide basis and recovered pursuant to Attachment GG of this Tariff.

- 2) An Interconnection Customer may be required to contribute to the cost of Shared Network Upgrades, as defined in Attachment X to the Tariff, that are funded by another Interconnection Customer as a Generator Interconnection Project pursuant to Attachment X.

Each Interconnection Customer with one or more Shared Network Upgrade(s) identified in Appendix A of its

Generator Interconnection Agreement shall make a one-time payment under Schedule 26-B to the Transmission Provider in accordance with the terms in the Generator Interconnection Agreement. The one-time payment will reflect the cost of the Shared Network Upgrade assigned to the Interconnection Customer as determined by the Transmission Provider.

All revenue collected by the Transmission Provider through Schedule 26-B shall be distributed to the appropriate Interconnection Customer(s).

- 3) The Interconnection Customer shall be entitled, pursuant to Section 46 of this Tariff, to any Financial Transmission Rights or other rights to the extent provided for under this Tariff, for any Network Upgrade costs funded by or charged to the Interconnection Customer and not subject to repayment under the provisions of this Section III.A.2.d. In the event that a Generator Interconnection Project defers or displaces a Baseline Reliability Project, the costs of the Generator Interconnection Project up to the costs of the deferred or displaced Baseline Reliability Project shall be allocated consistent with the cost allocation for the Baseline Reliability Project.
- 4) International Transmission/Michigan Electric Transmission

Company/ITC Midwest LLC:

(a) For those Generator Interconnection Projects for which International Transmission Company, Michigan Electric Transmission Company, LLC, or ITC Midwest LLC (“International” or “METC” or “ITC Midwest”) as Transmission Owners will be a signatory to the interconnection agreement under the terms of Attachment X of this Tariff or any successor provision of the Tariff executed by the parties after the effective date of this Attachment FF Section III.A.2.d.4, this Attachment FF Section III.A.2.d.4 shall apply, except that, where ITC Midwest is the Transmission Owner, the Interconnection Customer may elect to have another approved methodology under Attachment FF Section III.A.2.d apply.

(b) Generation Interconnection Projects: The cost of Network Upgrades for Generation Interconnection Projects that are not determined by the Transmission Provider to be Baseline Reliability Projects shall be reimbursed by the Transmission Owner as provided in this Section III.A.2.d.4. All costs of Network Upgrades for Generation Interconnection Projects will initially be paid by the Interconnection Customer in accordance with the terms of the Interconnection Agreement entered into pursuant to

Attachment X of this Tariff. To the extent the Interconnection Customer demonstrates at the time of Commercial Operation of the Generating Facility one of the following:

- i. Generating Facility has been designated as a Network Resource in accordance with the Tariff, or
- ii. Contractual commitment has been entered into with a Network Customer for capacity, or in the case of an Intermittent Resource, for energy, from the Generating Facility for a period of one (1) year or longer.

The Interconnection Customer will receive up to one hundred percent (100%) reimbursement of reimbursable costs within ninety (90) days of the Commercial Operation Date, such reimbursement prorated by the percentage of the Generating Facility capacity or annual available energy output contracted for and as demonstrated to the satisfaction of the Transmission Provider.

If the Interconnection Customer is unable to demonstrate to the satisfaction of the Transmission Provider at the time of Commercial Operation of the Generating Facility that the Generating Facility has met the

repayment obligations set forth in Attachment FF Sections III.A.2.d.4.b.i. or III.A.2.d.4.b.ii. the Interconnection Customer shall be directly assigned 100% of the costs of the Generation Interconnection Project. The Transmission Owner may effect this direct assignment of costs by either foregoing any repayment of costs funded by the Interconnection Customer, or by electing to repay 100% of the costs under repayment terms consistent with the schedules and other terms of Attachment X.

The Interconnection Customer shall be entitled, pursuant to Section 46 of this Tariff, to any Financial Transmission Rights or other rights to the extent provided for under this Tariff, for any Network Upgrade costs funded by or charged to the Interconnection Customer and not subject to repayment under the provisions of this Attachment FF Section III.A.2.d.4. In the event that a Generator Interconnection Project defers or displaces a Baseline Reliability Project, the costs of the Generator Interconnection Project up to the costs of the deferred or displaced Baseline Reliability Project shall be allocated consistent with the cost allocation for the Baseline Reliability Project.

(c) For all amounts to be reimbursed by a Transmission

Owner to an Interconnection Customer in accordance with this Attachment FF Section III.A.2.d.4, the Transmission Owner will reimburse the sums received from the Interconnection Customer in cash together with any applicable interest, in accordance with the terms of the Interconnection Agreement.

(d) Allocation of Generator Interconnection

Reimbursement. For all amounts reimbursed by a Transmission Owner to an Interconnection Customer under this Attachment FF Section III.A.2.d.4, fifty percent (50%) of the reimbursement will be allocated consistent with the allocations under this Attachment FF Sections III.A.2.c.i and III.A.2.c.ii, except that such costs associated with Generation Interconnection Projects of less than 100 kV voltage class shall also be allocated consistent with Section III.A.2.c.i. The remaining fifty percent (50%) of the reimbursement will not be subject to any regional or sub-regional cost allocation, but will be recovered by that Transmission Owner under its Attachment O transmission rate formula under this Tariff.

- e. Transmission Delivery Service Projects: Costs of Transmission Delivery Service Projects shall be assigned and recovered in accordance with Attachment N of this Tariff.

f. Market Efficiency Projects: Costs of Market Efficiency Projects shall be allocated as follows:

- i) Twenty percent (20%) of the Project Cost of the Market Efficiency Project shall be allocated on a system-wide basis to all Transmission Customers and recovered through a system-wide rate.
- ii) Eighty percent (80%) of the costs of the Market Efficiency Projects shall be allocated to all Transmission Customers in each of the Local Resource Zones, as described in Section II.B.1.a.i. The cost allocated to each Local Resource Zone shall be based on the relative benefit determined for each Local Resource Zone that has a positive present value of annual benefits over the evaluation period using the methodology for project benefit determination of Section II.B.1.
- iii) Excessive Funding or Requirements: The Transmission Provider shall seek to identify and manage the development of, as a part of the planning process for Market Efficiency Projects, portfolios of projects that tend to provide benefits throughout each Local Resource Zone, as described in Section II.B.1.a.i, over the planning horizon. The Transmission Provider shall analyze on an annual basis whether the project portfolios developed in accordance with

this goal and the criteria in Section III. A.2.f unintentionally result in unjust or unreasonable annual capital funding requirements for any Transmission Owner or rate increases for Transmission Customers in designated pricing zones; or otherwise result in undue discrimination between the Transmission Customers, Transmission Owners, or any Market Participants; any such identified consequences shall be reported to the Planning Advisory Committee and to the Organization of MISO States. After discussing such assessments with the aforementioned stakeholder bodies, and taking into consideration the cumulative experience in applying this Attachment FF, the Transmission Provider will make a determination as to whether Tariff modifications are required, and if so file such modifications.

- g. Multi Value Projects: Costs of Multi Value Projects will be allocated as follows:
 - i) One-hundred percent (100%) of the annual revenue requirements of the Multi Value Projects shall be allocated on a system-wide basis to Transmission Customers that withdraw energy, including External Transactions sinking outside the Transmission Provider's region, and recovered through an MVP Usage Charge pursuant to Attachment MM.

- h. Treatment of Projects that meet both Baseline Reliability Project Criteria and/or New Transmission Access Project Criteria, and the Market Efficiency Project Criteria: If the Transmission Provider determines that a project designated as a Market Efficiency Project also meets the criteria to be designated as a Baseline Reliability Project and/or a New Transmission Access Project, the cost of such project shall be allocated in accordance with the Market Efficiency Project allocation procedures.
- i. Other Projects: Unless otherwise agreed upon pursuant to Section III.A.2.a. of this Attachment FF, the costs of Network Upgrades that are included in the MTEP, but do not qualify as Baseline Reliability Projects, New Transmission Access Projects, Market Efficiency Projects or Multi-Value Projects, shall be eligible for recovery pursuant to Attachment O of this Tariff by the Transmission Owner(s) and/or ITC(s) paying the costs of such project, subject to the requirements of the ISO Agreement.
- j. Withdrawal from Midwest ISO: A Party that withdraws from the Midwest ISO shall remain responsible for all financial obligations incurred pursuant to this Attachment FF while a Member of the Midwest ISO and payments applicable to time periods prior to the effective date of such withdrawal shall be honored by the Midwest ISO and the withdrawing Member.
- k. New Transmission Owners: A new Transmission Owner joining

the Midwest ISO will be responsible for the following financial obligations:

- a. New Transmission Owners will not be responsible for any portion of Baseline Reliability Projects, Generator Interconnection Projects, Transmission Delivery Service Projects, or Market Efficiency Projects that were approved prior to their entry date.
- b. For Multi-Value Projects approved prior to the new Transmission Owner's entry date, the load interconnected to the Transmission Owner's Transmission System will be responsible for one-hundred percent (100%) of the MVP usage charge described in Attachment MM for the years following the Transmission Owner's entry date applied to the Monthly Net Actual Energy Withdrawals for Load interconnected to the Transmission Owner's Transmission System.
 1. Only a Transmission Owner shall be authorized to construct and/or own transmission facilities associated with a Baseline Reliability Project, Market Efficiency Project and/or Multi Value Project. For projects jointly developed between Transmission Owners and other parties the portion constructed and owned by a Transmission Owner may qualify as a Baseline Reliability Project, Market Efficiency

Project and/or Multi Value Project.

IV. [RESERVED FOR FUTURE USE]

V. Designation of Entities to Construct, Own and/or Finance MTEP Projects: For each project included in the recommended MTEP, the plan shall designate, based on the planning analysis performed by the Transmission Provider and based on other input from participants, including, but not limited to, any indications of a willingness to bear cost responsibility for the project; and applicable provisions of the ISO Agreement, one or more Transmission Owners or other entities to construct, own and/or finance the recommended project.

VI. Implementation of the MTEP:

A. If the Transmission Provider and any Transmission Owner's planning representatives, or other designated entity(ies), cannot reach agreement on any element of the MTEP, the dispute may be resolved through the dispute resolution procedures provided in the Tariff, or in any applicable joint operating agreement, or by the Commission or state regulatory authorities, where appropriate. The MTEP shall have as one of its goals the satisfaction of all regulatory requirements as specified in Appendix B or Article IV, Section I, Paragraph C of the ISO Agreement.

B. The Transmission Provider shall present the MTEP, along with a summary of relevant alternative projects that were not selected, to the Transmission Provider Board for approval on a biennial basis, or more frequently if needed. The proposed MTEP shall include specific projects already approved as a result of the Transmission Provider entering into Service Agreements with Transmission Customers where such agreements provide for identification of needed transmission construction, timetable, cost, and Transmission Owner or other parties' construction responsibilities.

C. Approval of the MTEP by the Transmission Provider Board certifies it as the Transmission Provider plan for meeting the transmission needs of all stakeholders subject to any required approvals by federal or state regulatory authorities. The Transmission Provider shall provide a copy of the MTEP to all applicable federal and state regulatory authorities. The affected Transmission Owner(s), or other designated entity(ies), shall make a good faith effort to design, certify, and build the designated facilities to fulfill the approved MTEP. However, in the event that a proposed project is being challenged through the dispute resolution procedures under this Tariff, the obligation of the Transmission Owners, or other designated entity(ies), to build that specific project (subject to required approvals) is waived until the project emerges from the dispute resolution procedures as an approved project. The Transmission Provider Board shall allow the Transmission Owners, or other designated entity(ies), to optimize the final design of specific facilities and their in-service dates if necessary to accommodate changing conditions, provided that such changes comport with the approved MTEP and provided that any such changes are accepted by the Transmission Provider. Any disagreements concerning such matters shall be subject to the dispute resolution procedures of this Tariff.

D. The Transmission Provider shall assist the affected Owner(s), or other designated entity(ies), in justifying the need for, and obtaining certification of, any facilities required by the approved MTEP by preparing and presenting testimony in any proceedings before state or federal courts, regulatory authorities, or other agencies as may be required. The Transmission Provider shall publish annually, and distribute to all Members and all appropriate state regulatory authorities, a five-to-ten-year planning report of forecasted

transmission requirements. Annual reports and planning reports shall be available to the general public upon request.

VII. Multi-Value Project Costs and Benefits Review and Reporting

A. Frequency and Reporting of Multi-Value Project Review: Every three (3) years, as provided below and in the Business Practices Manual for Transmission Planning, the Transmission Provider shall conduct a review of the cumulative costs and benefits associated with MVPs, and shall disseminate the results of such reviews to its stakeholders. The Transmission Provider shall use the review process and results to identify potential modifications to the MVP methodology and its implementation for projects to be approved at a future date.

1. Triennial Full MVP Review: Beginning with the MTEP for 2014 (“MTEP 14”), and every third year thereafter, the Transmission Provider shall conduct a full MVP review, as provided in section VII.B of this Attachment FF.
2. Annual Limited MVP Review: Beginning with the MTEP for 2015 (“MTEP 15”), and each year thereafter when there is no full MVP review, the Transmission Provider shall conduct a limited MVP review, as provided in section VII.C of this Attachment FF.
3. Calculation of Costs and Benefits: The reviews shall calculate costs and benefits on a forward-looking basis over both twenty (20)-year and forty (40)-year periods. The costs calculation shall use updated project costs and in-service dates provided in the latest MTEP quarterly status report, and the benefits calculation

shall use updated future scenarios from the latest MTEP planning cycle. The results of the costs and benefits calculation shall be provided for each Local Resource Zone as defined in Module E. If the Local Resource Zones as defined in accordance with Module E for Resource Adequacy purposes are modified, the Transmission Provider, working with stakeholders, may define different Local Resource Zones for purposes of reporting the results of the review. The definition of different Local Resource Zones in connection with reporting the results of the review will be detailed in the Business Practices Manual for Transmission Planning.

4. Dissemination of the Results of the Full and Limited MVP Reviews: Within a reasonable time after completion of each MVP review, the Transmission Provider shall disseminate the results of and supporting analysis for the MVP review through: (a) publication in the MTEP; (b) posting on the appropriate section of the Transmission Provider's public website; and (c) presentation to the appropriate stakeholder committees.

B. Scope of Full Multi-Value Project Review: Each full MVP review shall at a minimum include the following:

1. Quantitative Benefits: Analysis of the quantifiable economic benefits resulting from the addition of MVPs, including, but not limited to:
 - a. Congestion and Fuel Savings: Savings from increased access to lower cost Resources;

- b. Decreased Operating Reserves: Savings associated with lower Operating Reserve requirements;
 - c. Decreased System Planning Reserve Margin: Savings associated with deferred generation investment due to a reduction in the system-wide Planning Reserve Margin; and
 - d. Decreased Transmission Line Losses: Savings associated with deferred generation investment due to a reduction in the Capacity required to serve transmission losses during peak hours, to the extent that MVPs reduce such losses.
2. Public Policy and Other Qualitative Benefits: Analysis of the public policy and other qualitative benefits accruing from MVPs, such as newly interconnected wind units; and an increase in the percentage of the Transmission Provider's Energy needs being supplied by wind and/or other renewable resources, and wind curtailments.
3. Historical Data: Provision, beginning with the MTEP for 2017 ("MTEP 17"), and based on the historical data available to the Transmission Provider for the five (5) prior years, of information on certain additional market trend metrics including, but not limited to:
- a. Congestion costs;
 - b. Energy prices;
 - c. Fuel costs;

- d. Planning Reserve Margin requirements;
- e. Number of newly interconnected Resources, by Resource type; and
- f. The share of the Transmission Provider's Energy supplied, by Resource type.

C. Scope of Limited Multi-Value Project Review: Each limited MVP review shall at a minimum include the items described in Sections VII.B.1.a and VII.B.3 of this Attachment FF, based on the latest available data for the current year, in preparation for the next full MVP review.

ATTACHMENT FF-ATCLLC

A. For those Generator Interconnection Projects for which ATCLLC will be a signatory to the Interconnection Agreement under the terms of Attachment R or Attachment X of the Tariff or any successor provision of the Tariff executed by the parties after February 5, 2006, or Generating Interconnection Projects which achieve Commercial Operation after February 5, 2006, this Attachment FF-ATCLLC shall apply in lieu of any other provision of the Tariff.

B. Generation Interconnection Projects: Network Upgrade costs of Generation Interconnection Projects that are not determined by the Transmission Provider to be Baseline Reliability Projects, or that do not result in the advancement of a Baseline Reliability Project shall be reimbursed by ATCLLC as provided below. All Network Upgrade costs of the Generation Interconnection Projects will be initially paid for by the Interconnection Customer in accordance with the terms of the Interconnection Agreement entered into pursuant to Attachment X or Attachment R of this Tariff. To the extent the Interconnection Customer demonstrates at the time of commercial operation of the generating facility that the generating facility has been designated as a Network Resource in accordance with this Tariff, or that a contractual commitment has been entered into with a Network Customer for Capacity, or in the case of an Intermittent Resource, for Energy, from the generating facility for a period of one (1) year or longer, it will receive one hundred (100%) reimbursement of reimbursable costs.

C. For all amounts to be reimbursed by ATCLLC to Interconnection Customer in accordance with this Attachment FF – ATCLLC, ATCLLC will reimburse the sums actually received from Interconnection Customer in cash in accordance with the terms of the Interconnection Agreement together with any interest provided for under the terms of the Interconnection Agreement.

D. For all amounts that are reimbursed by ATCLLC to Interconnection Customer in accordance with this Attachment FF-ATCLLC, fifty percent (50%) of such reimbursement will be recovered by ATCLLC under its Attachment O transmission rate formula and the remaining fifty percent (50%) will be subject to the cost allocation of Attachment FF, Sections III.A.2.c.i. and III.A.2.c.ii to this Tariff.

Attachment FF – aTCLLC

Local Planning Process

I. Introduction

American Transmission Company LLC (“ATCLLC”), as a member company of the Transmission Provider, pursuant to 18 C.F. R. §37.1, *et seq.*, establishes the following as the planning requirements applicable to transmission planning activities engaged in by ATCLLC under the provisions of this Tariff effective December 7, 2007, as may from time to time thereafter be modified, changed, or amended, in accordance with the rules and requirements of the FERC or as provided in this Attachment FF-ATCLLC.

II. Applicability

The following shall apply to the transmission planning processes described below in connection with the transmission system planning required to be performed, or which in the determination of ATCLLC should be performed in fulfilling ATCLLC’s obligation to provide interconnection service and open access transmission service for the benefit of all users of its Transmission Facilities under state and federal law, and to assure the availability of reliable transmission service for the use and benefit of all users of ATCLLC’s Transmission Facilities.

III. Purpose

The purpose of this Attachment FF-ATCLLC is to identify and set forth, consistent with the requirements of 18 C.F. R. §37.1, *et seq*, the practices and procedures of ATCLLC associated with planning for the addition to, modification of, or extension of ATCLLC's Transmission Facilities.

There are several different planning functions set forth in this Attachment FF-ATCLLC the purpose of which is to identify those changes, modifications, additions or extensions of ATCLLC's Transmission Facilities that are reasonable and appropriate to meet the requests of and needs of ATCLLC's Transmission and Interconnection Customers and the owners of the Distribution Facilities and Transmission Facilities that are interconnected to ATCLLC's Transmission Facilities. Each planning function employs different processes or procedures to arrive at the appropriate electric solution, including the construction of new or modification of existing Transmission Facilities that would meet the needs of ATCLLC's Interconnection and Transmission Customers and the owners of the Distribution Facilities and Transmission Facilities that are interconnected to ATCLLC's Transmission Facilities, or which will reduce the delivered cost of electric energy in the area in which ATCLLC's Transmission Facilities are located.

IV. Definitions.

The definitions set forth below shall apply to this Attachment FF-ATCLLC. Any other capitalized term not otherwise defined shall have the meaning set forth in the Transmission Provider's Tariff.

“Best Value Planning” means the consideration of, or evaluation of, one or more alternatives to the proposed construction of new, or the modification of existing, Transmission Facilities which have been identified in a planning process to determine whether an alternative or alternatives exists that may include the construction of new, or

the modification of the existing, Distribution Facilities or Transmission Facilities owned by others that is/are less costly or which may provide greater enhancement to the reliability, capability or integrity of ATCLLC's Transmission Facilities and such interconnected Transmission or Distribution Facilities when compared to the estimated cost of the construction and capability of the proposed new, or the proposed modification of, ATCLLC's Transmission Facilities, while taking into account the environmental considerations, regulatory approvals and the ability to construct the proposed Distribution or Transmission Facilities in a timely and appropriate manner.

“Business Practices” means the practices developed by ATCLLC with the participation of its Interconnection and Transmission Customers relating to the manner in which certain requests, certain activities, including the compensation to be paid for certain construction-related activities, that affect the Distribution Facilities owned by others that are affected by Transmission Facilities construction are to be handled by ATCLLC and how the owners of Distribution Facilities may be compensated if the construction of Transmission Facilities necessitates the addition to or modification of Distribution Facilities.

“Common Facilities” means those facilities at a Distribution – Transmission, Transmission – Transmission or Generation – Transmission Interconnection that are used and useful to both ATCLLC and the owner of the interconnected Generating Facility or Distribution Facilities that are located at the Distribution Interconnection or Point of Interconnection. Common Facilities include, but are not limited to batteries, structures that house equipment, ground grids, fences, gravel areas, parking areas, landscaping,

access roads, yard lighting, shielding, and screening. Common Facilities do not include land, land rights or Interconnection Facilities.

“Distribution Customer” –means any entity whose Distribution Facilities are directly interconnected to the Transmission Facilities of ATCLLC and who has entered into a Distribution – Transmission Interconnection Agreement with ATCLLC or will, following the Distribution Interconnection Request planning analysis, be required to enter into a Distribution – Transmission Interconnection Agreement with ATCLLC.

“Distribution Interconnection” means the point at which the Transmission Facilities owned by ATCLLC that operate at 50 kV and above interconnect to the Distribution Facilities owned by others that operate at a voltage below 50 kV which serve the purpose of distributing energy to residential, commercial and or industrial end users through one or more distribution systems, or which are intended to support or otherwise enhance the other entity’s ability requesting such Distribution Interconnection to render service to one or more residential, industrial or commercial end users. Distribution Interconnection may, under certain circumstances, include the interconnection of facilities operating at greater than 50 kV if the party requesting such interconnection is a public utility, municipal utility or cooperative utility subject to the laws of the state in which such interconnection is requested, and the Distribution Interconnection is for the purpose of fulfilling their obligation to render retail transmission or distribution electric service to such residential, commercial or industrial end users under the terms of a contract or state authorized, or municipally approved retail electric service requirement.

“Distribution Facilities” –means the equipment, facilities, or associated elements, including Common Facilities, owned or operated by others that are interconnected to ATCLLC’s Transmission Facilities which are used by such other party to distribute energy to others at voltages below 50 kV, either in the form of distribution transmission service or the retail distribution of energy to residential, commercial or industrial end users.

“Distribution – Transmission Interconnection Agreement” means the agreement entered into between ATCLLC and one or more Distribution Customers, accepted by the FERC, that sets forth the terms and conditions applicable to the interconnection of one or more Distribution Systems to the Transmission Facilities of ATCLLC. A form of the Distribution – Transmission Interconnection Agreement is set forth at Appendix B to this Attachment FF-ATCLLC. The terms and conditions of the Distribution – Transmission Interconnection Agreement set forth at Appendix B may be changed, modified or revised by ATCLLC in its judgment and determination, but such change modification or revision shall be applicable to those Distribution – Transmission Interconnection Agreements entered into prior to such change, modification or revision only upon the agreement of the parties, or after approval of the FERC. All Distribution – Transmission Interconnection Agreements entered into with new entities shall be submitted for acceptance by the FERC.

“Distribution – Transmission Interconnection Request” means the request of one or more owners of Distribution Facilities to modify or change an existing Distribution Interconnection or to interconnect proposed new Distribution Facilities at one or more locations pursuant to the terms and conditions of an existing Distribution – Transmission

Interconnection Agreement or under the terms of a new Distribution – Transmission Interconnection Agreement.

“Generation – Transmission Interconnection” means the interconnection of one or more generating facilities interconnected to ATCLLC under the terms of a Generation – Transmission Interconnection Agreement, accepted by the FERC, entered into by the owner or operator of such generating facility either with ATCLLC only or in conjunction with the Transmission Provider either under the requirements of the FERC or the provisions of Attachments R or X of this Tariff.

“Generation – Transmission Interconnection Agreement” means one or more agreements entered into between ATCLLC and the owners or operators of generating facilities, or the Generator Interconnection Agreement entered into between ATCLLC, the Transmission Provider and the Interconnection Customer under the provisions of Attachment R or Attachment X of the this Tariff that set forth the terms and conditions of interconnection service relating to the interconnection of one or more generating units to ATCLLC’s Transmission Facilities. A form of the Generation – Transmission Interconnection Agreement involving ATCLLC and the Interconnection Customer only is set included at ATCLLC’s external web site at: <http://www.atc10yearplan.com/A6.shtml>. A form of the Large Generator Interconnection Agreement employed by the Transmission Provider is set forth at Attachment X of this Tariff. A form of the Small Generator Interconnection Agreement is set forth at Attachment R of this Tariff. All Generation – Transmission Interconnection Agreements to which ATCLLC is a party are or have been submitted to the FERC for acceptance.

“Generation – Transmission Interconnection Request” shall have the same meaning as set forth in this Tariff and shall apply to all requests to interconnect new or increased generating capacity to ATCLLC’s Transmission Facilities irrespective of whether the request is made pursuant to a Generation – Transmission Interconnection Agreement to which ATCLLC is only a party, or whether the request is made pursuant to Attachments R or X or the terms and conditions of a Small Generator Interconnection Agreement or Large Generation-Transmission Interconnection Agreement in which the Transmission Provider is also a party.

“Operating Capability” means the ability of a piece of equipment or any element of the ATCLLC’s Transmission Facilities to operate at any particular level, rate or capability, notwithstanding its Physical Capacity, when operated under the then existing operating conditions in conjunction with other elements of ATCLLC’s Transmission Facilities.

“Physical Capacity” means the physical ability of any piece of equipment to operate without failure based upon its physical ability or operating rating or operating limits determined by the manufacturer or otherwise calculated or determined by ATCLLC to be the physical limit of any one item or element of its Transmission Facilities and as reported by ATCLLC to the Transmission Provider in accordance with the requirements of Appendix B of the ISO Agreement.

“Regional Planning” means the planning engaged in by ATCLLC under the provisions of this Attachment FF-ATCLLC with the owners or operators of the Transmission Facilities that are interconnected with the Transmission Facilities of ATCLLC or the owners and operators of Transmission Facilities that may be affected by any modification, addition or extension of ATCLLC’s Transmission Facilities and pursuant to

the provisions of Appendix B of the Agreement of the Transmission Facilities Owners to Organize the Midwest Independent Transmission System Operator, Inc., a Delaware Non-Stock Corporation, Midwest ISO FERC Electric Tariff, First Revised Rate Schedule No. 1 and Attachment FF of this Tariff.

“Ten Year Assessment” means the report published by ATCLLC annually setting forth the planning activities engaged in by ATCLLC relating to its Network Adequacy, which incorporates the Distribution Interconnections and Generation – Transmission Interconnections requested and studied, and the Transmission Service Requests requested by Transmission Service Customers and which identifies those provisional, projected or planned Transmission Facilities construction projects that have been identified that are reasonably believed to meet the requests of ATCLLC’s Interconnection and Transmission Customers, and assure the necessary Network Adequacy of its Transmission Facilities to provide safe, reliable transmission service with sufficient Operating Capability and Physical Capacity to meet the needs of all users of its Transmission Facilities.

“Transmission Customer” shall have the meaning set forth at Section 1.317 of this Tariff.

“Transmission Service Request” shall mean a Transmission Service Request made by a Transmission Customer or prospective Transmission Service Customer made under Module B of this Tariff and shall be governed by the provisions of this Tariff.

“Transmission Service” shall have the meaning set forth in Section 1.327 of this Tariff and shall be provided in accordance with the terms of this Tariff.

“Transmission – Transmission Interconnection” means the interconnection of

Transmission Facilities owned by parties other than ATCLLC interconnected to or which are proposed to be interconnected to the Transmission Facilities of ATCLLC, and which are operated, or when constructed, will operate at a voltage greater than 50 kV or which are used by the owner to transmit bulk quantities of energy for or on behalf of itself or its customers under the terms of this Tariff or other comparable transmission service tariff, or pursuant to a contract or agreement and which have been classified by the owner or the appropriate state regulatory authority as Transmission Facilities in accordance with the applicable provisions of Order No. 888 (FERC’s “seven-factor test”)².

“Transmission – Transmission Interconnection Agreement” means the agreement entered into by ATCLLC and the owners or operators of Transmission Facilities, accepted by the FERC, that sets forth the terms and conditions relating to the interconnection of their Transmission Facilities to the Transmission Facilities owned by ATCLLC.

“Transmission Facilities” means the poles, wires, structures, substations, control devices, protection methods, and other related equipment owned by ATCLLC and operated at voltages of 50 kV and above and that are used to render Interconnection Service or Transmission Service to Interconnection and Transmission Customers under the provisions of this Tariff. The term “Transmission Facilities” also refers to like facilities owned by others which are used for the purpose of carrying bulk quantities of electric energy for others or for the ultimate distribution of such electric energy to residential, commercial or industrial end users and which have been classified by the owner or the appropriate state regulatory authority as Transmission Facilities in accordance with the applicable provisions of Order No. 888 (FERC’s “seven-factor test”)³.

V. Planning Processes. Consistent with the requirements of 18 C.F. R. §37.1, *et seq.*, ATCLLC sets forth its planning processes in detail below:

A. Planning Purpose. ATCLLC hereby identifies the various planning functions engaged in by ATCLLC. The purpose of each planning function is to either meet the requested need of one or more Interconnection Customers, Transmission Customers, or interconnected entity that owns Distribution Facilities or Transmission Facilities or which are necessary in ATCLLC's reasonable judgment to insure that ATCLLC's Transmission Facilities operate in a safe, reliable manner with sufficient Physical Capacity, Operating Capability and reliability to provide adequate transmission service to meet the needs of all users of its Transmission Facilities and to fulfill its legal obligations under state and federal law, or which reduces the cost of energy in the area in which ATCLLC's Transmission Facilities are located.

B. Planning Requests; Planning Requirements. The activities associated with each planning function, together with the processes, procedures and methods employed by ATCLLC depends on the type of request made by one or more Interconnection or Transmission Customers or the owners of the Distribution or Transmission Facilities interconnected to ATCLLC's Transmission Facilities. Additionally, for the purposes of: 1) network adequacy; 2) coordination with the owners of other Transmission Facilities; or 3) coordination with the Transmission Provider and the Pennsylvania- New Jersey- Maryland Interconnect LLC (PJM), ATCLLC engages in planning that in ATCLLC's judgment and determination is necessary to ensure the safe, reliable operation of its Transmission Facilities as a whole and to assure that there is sufficient Physical Capacity, Operating Capability and reliability to render open access, non-discriminatory Interconnection and Transmission Service to all users of its Transmission

Facilities.

C. Planning Functions. In order to assure reliable Transmission Facilities capable of rendering reliable Interconnection and Transmission Service with sufficient Physical Capacity, operating capability or reliability to meet the needs of all Transmission and Interconnection Customers, or the needs of other Distribution Facilities or Transmission Facilities Owners whose Distribution Facilities or Transmission Facilities are interconnected with ATCLLC's Transmission Facilities, ATCLLC engages in the following planning functions:

Distribution – Transmission Interconnection Planning

Generator – Transmission Interconnection Planning

Transmission – Transmission Interconnection Planning

Transmission Service Planning

Network Adequacy Planning

Regional Coordination Planning (Transmission – Transmission; Transmission Provider Region; PJM Region)

Economic Project Planning

D. Applicable Planning Criteria. In carrying out each planning function, ATCLLC shall use: (1) all applicable reliability requirements established by the North American Electric Reliability Corporation (NERC) or any successor Electric Reliability Organization certified by the FERC; (2) the criteria set forth at: <http://www.atc10yearplan.com/A6.shtml>; or (3) any reliability requirements established by the Regional Entities approved by NERC and the FERC, and with whom ATCLLC is registered, including Midwest Reliability Organization (MRO) or

ReliabilityFirst Corporation (RFC); and (4) such other criteria as ATCLLC may from time to time determine, provided that in the event that there is any conflict between the criteria developed or employed by ATCLLC and those of MRO, RFC or NERC, then the criteria established by MRO, RFC or NERC shall apply.

E. Controlling Planning Criteria; Modifications to Planning Criteria. In the event that there is any conflict between the reliability criteria established by MRO or RFC, then the criteria established by MRO shall apply. In the event that there is any conflict between the reliability criteria established by MRO, RFC or NERC, then the more conservative or more restrictive criteria shall be applied by ATCLLC in performing its planning functions. ATCLLC reserves the right to change, modify, supplement or otherwise revise the criteria employed by ATCLLC and used in connection with any planning process identified in this Attachment FF-ATCLLC so long as such changed, modified, supplemented or revised criteria are applicable only to planning functions, or to projects proposed, planned or constructed that were identified in such planning functions subsequent to such change, modification, supplement or revision to the criteria, and provided further that such change, modification, supplement or revision shall become applicable thirty (30) days following the posting by ATCLLC of such revised criteria at: <http://www.atc10yearplan.com/A6.shtml> setting forth such change, modification, supplement or revision to the reliability criteria employed in any planning function or when required by NERC, MRO or RFC (. To the extent that the criteria employed by ATCLLC are not governed by the reliability criteria of NERC, MRO, RFC, or the rules and regulations of the FERC, ATCLLC shall employ such criteria as, in ATCLLC's judgment, will provide the more effective means of planning for reliable Transmission Facilities that can be constructed in a cost effective manner, taking into account any state regulatory requirements that may be applicable, while taking into

account Best Value Planning associated with any project identified which is proposed to be constructed as a result of the study or studies or other assessment performed in connection with one or more of the planning functions.

F. Planning Assessment Tools. ATCLLC employs a number of planning assessment tools in order to properly assess the Distribution – Transmission Interconnection Requests, the Generation – Transmission Interconnection Requests, the Transmission – Transmission Interconnection Requests, the network adequacy of its Transmission Facilities, and the inter-relationship of the results of its transmission plans on adjoining Distribution Facilities or Transmission Facilities owners or the Transmission Provider Region or PJM Region as a whole, particularly in connection with the evaluation of proposed transmission projects that are based upon economic factors as well as reliability, capability and safety factors. The assessment tools employed by ATCLLC are set forth at: <http://www.atc10yearplan.com/A6.shtml>. ATCLLC reserves the right to discontinue the use of certain assessment tools, or to add additional assessment tools in its reasonable judgment.

To the extent that ATCLLC discontinues the use of assessment tool, or begins using an assessment tool in connection with any of the planning functions identified below, the use of such assessment tool or tools or the discontinuance of the use of any assessment tool shall be effective upon posting such discontinuance by ATCLLC on the web page:

<http://www.atc10yearplan.com/A6.shtml>. Any interested party may request, in writing, copies of the models developed using the assessment tools employed by ATCLLC in performing any planning function or associated analysis or assessment, and ATCLLC shall provide copies of such models under appropriate confidentiality agreements, subject to the rules and regulations of the FERC. To the extent that such models are

used in connection with any proprietary software, hardware or other process owned or distributed by parties other than ATCLLC, ATCLLC will identify the items required to run the requested models, but ATCLLC makes no representation concerning the use of or availability of any proprietary software, hardware or other process necessary to operate any model or assessment tool used or employed by ATCLLC. Any costs associated with acquiring the necessary software, hardware or other process to run or operate any model employed by ATCLLC in any planning function is the responsibility of the party requesting such model or assessment tool.

VI. Descriptions of Planning Functions. The means, methods, processes and procedures associated with each planning function are set forth below:

A. Distribution – Transmission Interconnection Planning

1. Distribution Interconnection Request. Any entity that owns or operates Distribution Facilities shall be entitled to make a request to modify any existing Distribution Interconnection or to propose a new Distribution Interconnection. To the extent that the party making such request is a party to a Distribution – Transmission Interconnection Agreement, the terms and conditions of the Distribution – Transmission Interconnection Agreement shall apply. To the extent that such entity is not yet a party to a Distribution – Transmission Interconnection Agreement, ATCLLC shall perform the study or assessment provided for in this Attachment FF-ATCLLC, provided such entity enters into such Distribution – Transmission Interconnection Agreement prior to the need on the part of ATCLLC to seek any state regulatory approval for, or to engage in, the construction of any Transmission or Interconnection Facilities that are determined to be necessary as a result of the study or assessment performed. The planning associated with any new, or modified Distribution Interconnection shall be undertaken upon receipt by ATCLLC of a written request by any entity and shall be subject to the load interconnection business practice

established by ATCLLC. ATCLLC shall post its load interconnection business practice on its external web site at:

<http://www.atc10yearplan.com/A6.shtml> for review by all interested parties. ATCLLC reserves the right to amend, modify, revise or supplement its Load Interconnection Business Practice. No amendment, modification, revision or supplement shall be effective until an amended, modified, revised or supplemented load interconnection business practice is posted on ATCLLC's external web site. All Distribution Interconnections are also subject to, and governed by, the terms and conditions of the Distribution – Transmission Interconnection Agreement between ATCLLC and the owners or operators of Distribution Facilities that are interconnected to ATCLLC's Transmission Facilities.

2. Distribution Interconnection Study Request Queue. Distribution Interconnection requests are studied or assessed by ATCLLC primarily upon a first come, first served basis. ATCLLC maintains a queue of Distribution Interconnection requests made by those entities owning Distribution Facilities that are interconnected to ATCLLC's Transmission Facilities. Each request is studied in the order in which such request was received, unless the requested date for in-service of the modification of an existing Distribution Interconnection or the establishment of a new Distribution Interconnection requires that ATCLLC study a Distribution Interconnection request prior to other earlier received requests, or the party requesting such Distribution Interconnection identifies such other circumstances, including but not limited to, loss of load, low voltage, or potential emergency circumstances that, in ATCLLC's judgment and determination, require that a later received request should be studied prior to earlier received requests, but which have a later in-service date or which do not involve any exigent circumstances.

Subject to the forgoing, upon receipt of a written load interconnection request pursuant to the load interconnection business practice from an entity with whom ATCLLC has entered into a Distribution – Transmission Interconnection Agreement, or the same or similar request from any entity not currently a party to a Distribution – Transmission Interconnection Agreement, ATCLLC shall conduct the appropriate evaluation of its Transmission Facilities employing such models and such assessment tools as are appropriate in order to determine what if any modification, addition, or extension of its existing Transmission Facilities may be required in order to accommodate the new or modified Distribution Interconnection.

3. Communication; Information. ATCLLC shall communicate with the entity making such Distribution Interconnection request consistent with the load interconnection request business practice, and consistent with the requirements of 18 C.F.R. §358.1, *et seq*. as frequently as is necessary to insure that the request of the Distribution Facilities' owner is appropriately addressed and that ATCLLC has sufficient information in order to properly assess the impact of the modification of the existing Distribution Interconnection or the proposed new Distribution Interconnection upon ATCLLC's Transmission Facilities.

The entity making the written Distribution Interconnection request, in addition to the information required under the load interconnection business practice, shall, at the request of ATCLLC, provide such other information to ATCLLC as ATCLLC reasonably believes necessary, including but not limited to any studies performed by such entity, the estimated costs determined by such entity, and such other information as ATCLLC in its reasonable judgment shall determine. To the extent that such Distribution Interconnection request is received from an entity not currently a party to a Distribution – Transmission Interconnection Agreement, ATCLLC shall commence and continue

the study of such modification or new Distribution Interconnection, provided such entity agrees to enter into a Distribution – Transmission Interconnection Agreement and enters into such agreement prior to ATCLLC being required to seek regulatory approval for the construction of any Transmission Facilities determined to be necessary as a result of such study. In the event that no regulatory approval is required prior to the construction of any Transmission Facilities determined to be necessary, then the parties shall enter into such Distribution – Transmission Interconnection Agreement prior to the commencement of construction of any Transmission Facilities.

4. Distribution Interconnection Planning Meetings. In addition to specific Distribution Interconnection requests, ATCLLC shall, at periodic intervals, hold meetings with individual owners of Distribution Facilities, either collectively, individually, or in small groups of similarly situated or electrically inter-related Distribution Facilities in order to assess the need for specific load interconnection requests and to assess whether the current load interconnection requests are appropriate to meet the needs of an owner of such Distribution Facilities. Such meetings will also provide an opportunity for ATCLLC to obtain such other information, or to validate previously received information, and to discuss with such Distribution Facility owners whether the studies or assessments then being performed or which are to be performed, are appropriate to meet their respective needs, and to determine whether the study models or assessment tools are appropriate for the particular Distribution Interconnection or Distribution Facilities owner's requirements. ATCLLC shall conduct meetings regularly and involve those owners of Distribution Facilities whose distribution systems are, or based on ATCLLC's initial assessment, may be affected by a proposed Distribution Interconnection or

which may be experiencing significant change, modification or revision. ATCLLC shall organize such meetings, and solicit information for the agenda for such meetings. Meetings may be telephonic or may be located at the offices of one of the owners in Distribution Facilities or one of the offices of ATCLLC depending on the location of the principal offices of the owner of the Distribution Facilities.

5. Study Results. Upon completion of its study or assessment, ATCLLC shall, consistent with the rules and regulations of the FERC relating to Standards of Conduct and Critical Energy Infrastructure Information (CEII), provide to the party requesting the Distribution Interconnection the results of its study or assessment, and shall identify the Transmission Facilities that, based on its study, have been determined to be necessary to permit the modification of the existing Distribution Interconnection or to interconnect the proposed new Distribution Interconnection together with a preliminary estimate of the costs associated with the regulatory approval of, if any, and the estimated cost of constructing such Transmission Facilities.

6. Best Value Planning. In addition, ATCLLC and the party requesting such Distribution Interconnection, shall engage in Best Value Planning to determine whether there are other distribution system modifications, additions or extensions that may provide the same or greater benefit to facilitate the modification to the existing Distribution Interconnection or which will support the proposed new Distribution Interconnection at a lower estimated cost, or which, for a greater estimated cost, could provide a greater benefit to both the Distribution Facilities and the Transmission Facilities. The entity requesting such Distribution Interconnection shall provide such additional information, as ATCLLC may reasonably request including the estimated cost of constructing such alternatives to the Transmission Facilities identified in

ATCLLC's study or studies or other assessment.

7. Affect on other Transmission or Distribution Systems. To the extent that a Distribution Interconnection Request is determined to have, an impact on the Distribution or Transmission Facilities owned by others, ATCLLC shall provide the information necessary or the results of its study or assessment to the owner or owners of such other Distribution or Transmission Facilities subject to the rules and regulations of the FERC relating to Standards of Conduct and CEII. To the extent appropriate, ATCLLC, the party requesting the Distribution Interconnection and the party or parties owning such affected Distribution or Transmission Facilities shall engage in such further planning and assessment, including such meetings (whether telephonic or in person), including Best Value Planning to determine what Distribution or Transmission Facilities may be required to fulfill the Distribution Interconnection request, giving consideration to the impact of such interconnection on the Transmission Facilities of ATCLLC and the impact of such Distribution Interconnection request on the Distribution or Transmission Facilities of such other party or parties.

8. Inclusion of Distribution Interconnection Request Study Results in other Planning Functions. To the extent necessary and appropriate, ATCLLC shall incorporate the results of the studies or assessments performed for any and all Distribution Interconnection requests in its network assessment. ATCLLC shall reflect such modifications to existing Distribution Interconnections or proposed new Distribution Interconnections in any Generation – Transmission Interconnection study or assessment or in any other Distribution Interconnection study or assessment that may be electrically affected by the Distribution Interconnection request, and the Transmission Facilities that are determined to be necessary as a result of such study or studies or other assessment shall be incorporated into such other planning function, including but

not limited to, other Distribution Interconnection requests, Generation Interconnection requests, Transmission Service Request, network assessment, regional plans, or the Midwest ISO Transmission Expansion Plan (“MTEP”), to the extent necessary or appropriate to reflect the affect of such request or the Transmission Facilities determined necessary to fulfill such request on the configuration or ATCLLC’s Transmission Facilities, and shall be incorporated in any models or assessment tools utilized in such other planning functions.

9. Cost Allocation of Transmission Facilities Required to Fulfill a Distribution Interconnection Request. The allocation of the costs of any Transmission Facilities constructed by ATCLLC determined to be necessary to fulfill any Distribution Interconnection request shall be handled in the following manner:

A. To the extent that such Transmission Facilities are necessary to permit ATCLLC to render adequate service under the terms of the Distribution – Transmission Interconnection Agreement, the costs associated with the construction of such Transmission Facilities shall be paid for by ATCLLC and those costs incurred shall be recovered in accordance with the provisions of Attachment O of this Tariff, or as otherwise may be recovered under the provisions of Attachment FF of this Tariff, or any successor provisions of this Tariff that permit ATCLLC to recover its capital costs and revenue requirement associated with rendering Transmission and other services.

B. To the extent that any portion of the costs associated with the Distribution – Transmission Interconnection are governed by the business practices adopted by ATCLLC, then the responsibility for the payment of such costs shall be initially allocated between the Distribution Customer and ATCLLC in accordance with such business practices.

C. To the extent that any Transmission Facilities required to meet the needs of any Distribution Interconnection Request qualifies as a Baseline Reliability Project under the provisions of Attachment FF of this Tariff, then the costs associated with such Transmission Facilities shall be allocated in accordance with the provisions of Attachment FF of this Tariff.

B. Generator – Transmission Interconnection Planning

1. Generator Interconnection Requests. Requests received to interconnect new generating facilities or to modify existing Generator – Transmission Interconnections, to the extent that such request involves new generating capacity or an increase in the generating capacity currently interconnected to ATCLLC’s Transmission Facilities at a Generation Interconnection are governed under the terms of Attachments R and X of this Tariff.

All requests to interconnect new or to increase the generating capacity of existing generating facilities shall be made to the Transmission Provider pursuant to either Attachment R or Attachment X of this Tariff. All studies required to assess the impact of such new or increased generating capacity shall be performed in accordance with Attachment R or Attachment X of this Tariff. The results of such studies, together with the Transmission Facilities that are determined to be required to interconnect such new or increased generating capacity shall be reflected in either an amendment to the existing Generation – Transmission Interconnection Agreement between ATCLLC and the Interconnection Customer, or where appropriate, between ATCLLC, the Interconnection Customer and the Transmission Provider, or a new Large Generator Interconnection Agreement or Small Generator Interconnection Agreement entered into pursuant to Attachment X or Attachment R of this Tariff.

2 Requests to Modify Existing Generation – Transmission Interconnections That

Do Not Involve an Increase in Generating Capacity. Any Interconnection Customer may request, in writing, that ATCLLC perform any necessary studies or assessment of the impact of proposed modifications, additions, or supplemental Interconnection Facilities or auxiliary facilities to be installed by the Interconnection Customer at the existing Generation Interconnection with ATCLLC's Transmission Facilities or any Common Facilities located at the Point of Interconnection. In addition to the requirements set forth in this Attachment FF-ATCLLC, the results of such studies, together with the Transmission Facilities that are determined to be required to accommodate such modifications or additions may be reflected, if necessary, in an amendment to the existing Generation – Transmission Interconnection Agreement between ATCLLC and the Interconnection Customer pursuant to Attachment X or Attachment R of this Tariff.

3. Generation – Interconnection Request. Upon receipt by the Transmission Provider of a request under either Attachments R or X of this Tariff, the studies required under this Tariff shall be performed at the direction of the Transmission Provider. If the request does not involve new generating capacity or an increase in the generating capacity at an existing Point of Interconnection, then ATCLLC shall study or assess the impact on ATCLLC's Transmission Facilities of any, modification, addition or supplement to the Interconnection Facilities, Common Facilities, or auxiliary facilities of the Interconnection Customer. ATCLLC shall perform such studies or assessment using such models or assessment tools as ATCLLC shall determine. ATCLLC shall perform such study or assessment in a reasonable period of time following receipt of such request. ATCLLC shall complete such study or assessment not more than ninety (90) days following receipt by ATCLLC of sufficient information from the Interconnection Customer to permit ATCLLC to perform the appropriate study or assessment of

the impact of such addition, modification or supplement to the Interconnection Facilities, Common Facilities, or auxiliary facilities located at the Generation – Transmission Interconnection.

4. Generation – Transmission Interconnection Information;

Communication. The Interconnection Customer shall provide ATCLLC with sufficient information in order to permit ATCLLC to perform such studies or assessments necessary to determine the impact of the addition, modification or supplement to the Interconnection Facilities, Common Facilities, or auxiliary facilities may have on ATCLLC’s Transmission Facilities. The information that the Interconnection Customer shall supply shall include, but not be limited to information consistent with Attachments R and X of this Tariff, and such other information ATCLLC reasonably determines to be required to permit ATCLLC to perform the assessment or analysis. The Interconnection Customer and ATCLLC shall communicate as frequently as necessary in order to insure that ATCLLC has sufficient information to appropriately study or assess the impact of the change, modification, addition or supplement to the Interconnection Facilities, Common Facilities, or auxiliary facilities at the Generation – Transmission Interconnection.

5. Study Results; Completion. Upon receipt of the necessary information,

ATCLLC shall, within a reasonable period of time not to exceed ninety (90) days following receipt of sufficient information from the Interconnection Customer, complete the study or studies or make such other appropriate assessment of the impact of the change, modification, addition or supplement to the Interconnection Facilities, Common Facilities or auxiliary facilities at the Generation – Transmission Interconnection. Upon completion of the study or studies or other assessment, ATCLLC shall post on ATCLLC’s external web site a copy of such study or

studies or other assessment to the Interconnection Customer which shall identify the modifications, additions or extensions of ATCLLC's Transmission Facilities, together with the preliminary estimated costs, that ATCLLC has determined are required as a result of the change, modification, addition or supplement at the Generation – Transmission Interconnection.

6. Impact on Other Systems. To the extent that the impact of the change, modification, addition or supplement of the Interconnection Facilities, Common Facilities or auxiliary facilities at the Generation – Transmission Interconnection, based on ATCLLC's study or assessment, may have an impact on the Distribution or Transmission Facilities owned by others, ATCLLC shall so advise the Interconnection Customer. To the extent permitted and authorized in writing by the Interconnection Customer, ATCLLC will make a copy of its study or studies or other assessment available to the owners of the Distribution or Transmission Facilities that may be affected by the change, modification, addition or supplement to the Generation – Transmission Interconnection. To the extent authorized, ATCLLC, the Interconnection Customer and the owner or owners of the Distribution Facilities or Transmission Facilities that are affected by the change, modification, addition or supplement at the Generation – Transmission Interconnection shall engage in Best Value Planning to determine if there are other, less costly, or more appropriate solutions, other than the changes, modifications, additions or extensions of ATCLLC's Transmission Facilities in order to meet the Interconnection Customer's request, taking into account the environmental concerns, regulatory concerns, and the estimated cost of such alternative or alternatives. Upon completion of any Best Value Planning, ATCLLC shall provide the Interconnection Customer with the results of such Best Value Planning study or assessment.

7. Inclusion of Generation Interconnection Studies in Other Planning

Functions. The results of all studies or assessment of Generation Interconnections, whether performed pursuant to Attachments R or X of this Tariff, or the provisions of this Attachment FF-ATCLLC, shall be included by ATCLLC in any other planning function, and the Transmission Facilities that are determined to be necessary as a result of such study or studies or other assessment shall be incorporated into such other planning function, including but not limited to, other Generation Interconnection requests, Network Assessment, Regional Plans, or the MTEP, to the extent necessary or appropriate to reflect the effect of such change on the configuration or ATCLLC's Transmission Facilities, and shall be incorporated in any models or assessment tools utilized in all affected planning functions.

8. Allocation of Generation – Transmission Facilities Costs. To the extent that ATCLLC constructs any Transmission Facilities to fulfill any Generation Interconnection Request, the costs associated with such Transmission Facilities shall be allocated to the extent such Generation Interconnection Request is governed by the provisions of Attachment R or Attachment X of this Tariff. Then the costs associated with the construction of any Transmission Facilities required in connection with fulfilling such Generation Interconnection Request shall be allocated in accordance with the provisions of Attachment R or Attachment X, the provisions of the Small Generator Interconnection Agreement, the provisions of the Large Generator Interconnection Agreement, or the provisions of Attachment FF of this Tariff as applicable.

C. Transmission Service Planning

1. Transmission Service Requests. Transmission Service Requests shall be governed by the terms of this Tariff. Any request for Network Integration Transmission Service,

Firm Point-to-Point Transmission Service, Interruptible Transmission Service or any other transmission-related service, including but not limited to, the change to any receipt or delivery point under any existing Transmission Service Agreement, or the receipt of any ancillary services, shall be made to the Transmission Provider and shall be governed by the provisions of this Tariff. The results of any studies or assessments performed in connection with any Transmission Service Request shall be included in any other planning function that may be affected by such Transmission Service Request, including but not limited to Distribution Interconnection Requests, Generation Interconnection Requests, Network Assessment or Regional Planning, or the MTEP, to the extent necessary or required.

2. Allocation of Transmission Facilities Costs Related to Transmission Service Requests. To the extent that the study or assessment of any Transmission Service Request results in the construction of any Transmission Facilities, the costs associated with the construction of such Transmission Facilities shall be allocated in accordance with the provisions of this Tariff and the provisions of ATCLLC's Attachment O to this Tariff. To the extent that the Transmission Facilities are determined to be a Baseline Reliability Project, or **Market Efficiency** Project, then the costs associated with the construction of such Transmission Facilities shall be allocated in accordance with Attachment FF of this Tariff.

D. Network Adequacy Planning

1. Network Assessment; Ten Year Assessment. In addition to assessments made in connection with any requests made by any Interconnection or Transmission Customers, or the owners of any Distribution or Transmission Facilities interconnected with ATCLLC's Transmission Facilities, ATCLLC performs an assessment of the need to modify, extend, or

construct new Transmission Facilities to provide, safe, reliable, Interconnection and Transmission Service and to insure that its Transmission Facilities are capable of providing and have the Physical Capacity and Operating Capability to reliably provide adequate Transmission Service to meet the needs of all users of its Transmission Facilities. Each year, ATCLLC shall perform such studies and assessments of various attributes and elements of its Transmission Facilities in order to determine whether any change, modification, extension or addition to its Transmission Facilities is required over the next ten (10) year period. The results of such studies and assessments shall be published as ATCLLC's *Ten Year Assessment (TYA)*. As described in more detail below, the TYA shall make an assessment of the Transmission Facility construction projects over a ten year planning horizon, and shall determine whether such projects are provisional, proposed or planned. For the purposes of this Attachment FF-ATCLLC and the TYA, a provisional project is one that has been identified, based on an initial assessment of one or more needs of ATCLLC's Transmission Facilities, either from a reliability, Physical Capacity, maintenance, Operating Capability or economic requirement. However, the information available to support the need determination is either not yet sufficient or warrants further evaluation before the need can be adequately determined. For the purposes of this Attachment FF-ATCLLC and the TYA, a proposed project is one for which the electrical need has been sufficiently determined from a reliability, Physical Capacity, maintenance, Operating Capability or economic requirement, but for which there are more than one electrical solutions that could result in changes, additions, modifications or extensions to one or more elements of ATCLLC's Transmission Facilities.

For the purposes of this Attachment FF-ATCLLC and the TYA, a planned project is one that is sufficiently justifiable on the basis of the electrical need to support the reliability, Operating

Capability, maintenance, Physical Capacity or economic requirements of ATCLLC's Transmission Facilities and that all other electrical solution alternatives have been considered and the planned projects determined to be the Transmission Facilities construction project that will meet the needs of ATCLLC and its Transmission and Interconnection Customers, and the needs of the owners of the Distribution and Transmission Facilities that are interconnected to ATCLLC's Transmission System.

2. Participation in and Information Gathering For the Network Assessment and the TYA. For the purposes of the TYA and the general Network Assessment, ATCLLC, not less frequently than annually, shall solicit information from all Interconnection Customers, Transmission Customers and the owners of all Distribution Facilities that are interconnected to ATCLLC's Transmission System. Each party shall be contacted by using the form letters included on ATCLLC's web page at:

<http://www.atc10yearplan.com/A6.shtmlpage>, which request the supply of certain information concerning each recipient's current and projected use of ATCLLC's Transmission Facilities or the needs of their respective Interconnection or Distribution Facilities. The information set forth in such letters shall be collected and compiled and taken into account in any models and assessment tools that ATCLLC uses to study and make its assessment of its Transmission Facilities requirements. In addition to the information solicited from all interconnected entities, ATCLLC shall contact such interconnected parties as it deems necessary or appropriate to obtain all additional information, including, but not limited to load forecasts, generation requirements, generation retirements, generation outage schedules, demand response availability, including any demand response resources available to reduce demand for any interconnected entity that is interconnected to the facilities of ATCLLC or any entity that is

interconnected to ATCLLC's facilities, and distribution construction programs. ATCLLC shall incorporate or otherwise take into account the information provided by all Distribution Facilities owners, and shall incorporate or otherwise take into account all Distribution, Generation Interconnection and Transmission Service Requests previously studied or assessed by either ATCLLC or the Transmission Provider in conducting its studies and assessment of its Transmission Facilities needs, as well as any Transmission Facilities construction that may result from any Regional Planning as set forth below.

3. Information Verification. ATCLLC shall communicate with any party supplying information to be incorporated in or otherwise taken into account in performing the studies or assessments associated with the TYA. Such communication may be individually with the entity supplying such information, or may be with more than one owner of Distribution Facilities to the extent that their respective systems are electrically interrelated or otherwise have an impact or effect on their respective use or interconnection to ATCLLC's Transmission Facilities. To obtain information, or to verify information that has been supplied, ATCLLC may:

A. Meet individually with the entity supplying the information. To the extent of such meeting, ATCLLC shall coordinate the date, time and location of such meeting or meetings, whether such meetings are to be telephonic or in person, and shall coordinate the determination of the agenda. Any such meetings shall be conducted in accordance with the requirements of ATCLLC's CDAA, the FERC's Standards of Conduct, and shall take into account the requirements of the FERC in connection with CEII.

B. Communicate telephonically or electronically with representatives of such entity supplying information requested by ATCLLC in connection with the TYA. Any

meetings or communications shall be as frequent as the party supplying the information may request or as ATCLLC may determine to assure itself that the information supplied by such entity is complete, accurate and sufficient to permit ATCLLC to incorporate such information in the studies or assessments associated with the TYA.

4. Information Review/Feedback by Stakeholders. Following the verification of the data provided by interconnection customers, Transmission Customers and the owners of all Distribution Facilities that are interconnected to ATCLLC's Transmission System, ATCLLC shall hold one or more meeting with customers and stakeholders to discuss the assumptions set forth for inclusion in the TYA and the models and assessment tools that will be used to perform the assessment. The meeting or meetings to discuss the TYA shall be held by ATCLLC at such locations and at such times as may be convenient for customers and other stakeholders. ATCLLC shall establish the date, time, and place for such meeting or meetings and ATCLLC shall post notice of such meeting or meetings on its external web site to provide notice to all parties. Information regarding assumptions and models shall be posted on ATCLLC's external web site.

Any interconnection customer, Transmission Customer, owner of Distribution Facilities or Transmission Facilities, as well as any other stakeholder, including state regulators, local, state and federal governmental officials, and members of interested community organizations shall be entitled to participate in such meeting or meetings held to discuss assumptions and models. Participants in such meetings, or thereafter, shall be entitled to comment on, provide additional information associated with, or otherwise offer suggested revisions, changes, modifications or additions to the assumptions that will be used in performing the studies required by the TYA. Stakeholders may comment on the inputs provided. Such comments, provided they are predicated on relevant facts, information not available during the

study, or evaluation of the Network requirements, shall be considered, and to the extent appropriate, included in the evaluation of the Network requirements, and may be included in the TYA analysis.

5. Studies and Assessments. ATCLLC shall perform such studies or assessments of its Network requirements employing the assessment tools set forth on ATCLLC's external web page at: <http://www.atc10yearplan.com/A6.shtml> as ATCLLC determines are appropriate or necessary, given the information supplied by the entities interconnected to its Transmission Facilities. ATCLLC reserves the right to verify the information supplied by others, or to make such additional assessments of the needs, systems or utilization of ATCLLC's Transmission Facilities as ATCLLC determines are appropriate in order to assure itself that the information utilized in any such model or assessment tool is as accurate and complete as necessary to permit ATCLLC to perform an appropriate assessment of its Network requirements. Further, ATCLLC shall, to the extent necessary, obtain from the Transmission Provider any information that the Transmission Provider may have, or employ any models developed by the Transmission Provider which will facilitate or otherwise permit ATCLLC to make an appropriate evaluation or assessment of the Network requirements for its Transmission Facilities.

6. Network Assessment Study Results. Upon the completion of its assessment of its Network requirements, ATCLLC shall publish and distribute to all parties wishing to receive a copy, its TYA. The TYA shall set forth the information obtained, the assumptions used in making such evaluation of its network requirements and shall identify the Transmission Facilities construction projects, including all Distribution Interconnections, Generation Interconnections, and other construction projects that ATCLLC has determined will meet the needs of its Interconnection Customers, Transmission Customers and the owners of the

distribution systems interconnected to ATCLLC's Transmission Facilities over the next ten (10) year period. In determining the Transmission Facilities to be included in the TYA, ATCLLC shall include those Transmission Facilities that provide the most benefit to meet the needs of its Distribution Customers, Transmission Customers and all other parties whether interconnected to ATCLLC's Transmission Facilities or not, taking into account the effect of any demand response resource on overall network requirements. ATC will determine the Transmission Facilities to be included in the TYA based upon a comparison of the reasonably estimated costs of construction of the Transmission Facilities and the reasonably estimated costs of any other transmission, generation or demand response resources proposed by others (provided the estimated costs are provided by the party proposing such other transmission, generation or demand response resource) based upon the ability of such alternatives to meet the anticipated needs of its Distribution Customers, Transmission Customers, and all other parties whether interconnected to ATCLLC's Transmission Facilities or not. The Transmission Facilities construction projects shall be identified as provisional, proposed, and planned, as defined in the TYA and this Attachment FF-ATCLLC.

7. TYA Distribution. ATCLLC shall publish the TYA annually on its external web site and shall inform all entities that are interconnected to its Transmission Facilities, all state utility regulators in the states in which ATCLLC owns Transmission Facilities of the availability of the TYA.

8. TYA Evaluation. Following the publication of the TYA on its external web site and its dissemination of the notice to interconnected parties and other stakeholders, ATCLLC shall hold one or more meeting(s) with customers and stakeholders to discuss the conclusions set forth in the TYA, and the Transmission Facilities identified as provisional, proposed or planned

solutions to meet the needs of ATCLLC's transmission system as a whole. The meeting or meetings to discuss the TYA shall be held by ATCLLC at such locations and at such times as may be convenient for customers and other stakeholders. ATCLLC shall establish the date, time, place for such meeting or meetings following the publication of the TYA and shall post notice of such meeting or meetings on its external Web site to provide notice to all parties.

Any interconnection customer, Transmission Customer, owner of Distribution Facilities or Transmission Facilities, as well as any other stakeholder, including state regulators, local, state and federal governmental officials, and members of interested community organizations shall be entitled to participate in such meeting or meetings held to discuss the TYA. Participants in such meetings, or thereafter, shall be entitled to comment on, provide additional information associated with, or otherwise offer suggested revisions, changes, modifications or additions to the conclusions reached in the TYA, and the identification of Transmission Facilities construction projects as set forth in the TYA. Such comments, provided they are predicated on relevant facts, information not available during the study or evaluation of the network requirements shall be considered, and to the extent appropriate, included in the next evaluation of the Network requirements, and may be included in succeeding TYA.

9. Customer Evaluation Committee. In accordance with the Settlement entered into in Docket No. ER04-108-000 as approved by the FERC5, ATCLLC shall, by October 1 of each year, provide information to its Interconnection and Transmission Customers concerning the Transmission Facilities construction projects that it intends to engage in during the next succeeding year, together with the estimated costs associated with such Transmission Facilities construction projects. ATCLLC shall post its proposed Revenue Requirement, including its forecasted costs to be recovered for any Transmission Facilities construction project

to be engaged in during the succeeding year on its external web site. Thereafter, Interconnection and Transmission Customers shall be entitled to comment on the planned construction projects and such revenue requirement and costs associated with any or all planned Transmission Facilities construction project to be engaged in by ATCLLC during the succeeding year.

10. Inclusion in the MTEP. ATCLLC shall, consistent with Appendix B of the ISO Agreement and in accordance with the provisions of the Attachment FF of this Tariff, upon completion of the analysis of any proposed Transmission Facilities project, or upon the completion of the evaluation of its network adequacy, identify to the Transmission Provider those provisional, proposed or planned projects that ATCLLC, in its judgment, has determined should be constructed to meet the needs of its Interconnection and Transmission Customers in order to fulfill ATCLLC's obligation to provide interconnection service and open access transmission service for the benefit of all users of its Transmission Facilities.

E. Transmission – Transmission Interconnection Planning

1. Transmission – Transmission Interconnection and System Coordination.

ATCLLC shall coordinate its Transmission Facilities assessment and any proposed Transmission Facilities construction with the owners of Transmission Facilities that are interconnected to ATCLLC's Transmission Facilities. The purpose of such coordination is to develop a coordinated assessment of the respective Transmission Facilities of the participating entities in order to identify any alternatives to any provisional, proposed or planned Transmission Facilities construction project identified in ATCLLC's TYA, or which may have been identified by one or more of the owners of those interconnected Transmission Facilities as a Transmission Facilities construction project to be engaged in by such other Transmission Facilities owner for

which one or more provisional, proposed or planned Transmission Facilities construction projects identified by ATCLLC could be an alternative, or which, in accordance with the provisions of Attachment FF of this Tariff, or Appendix B of the ISO Agreement, may be determined by the Transmission Provider, in its regional planning coordination responsibilities, be combined with the provisional, proposed or planned project of one or more other transmission owners to provide a project that produces more appropriate reliability or economic benefits or is less costly in the aggregate.

2. Transmission Coordination Meetings. To the extent not provided for under Attachment FF of this Tariff relating to sub-regional planning meetings (SPM), Meetings of the owners of Transmission Facilities that are interconnected to ATCLLC's Transmission Facilities shall be held no less frequently than annually, and may be held more frequently as the circumstances may require or as the needs of the respective Transmission systems may warrant. The meetings shall include ATCLLC and the representatives of at least one entity that owns Transmission Facilities that are interconnected to ATCLLC's Transmission Facilities. The meetings may be held in such locations, and at such time and place as ATCLLC and such owner or owners that intend to participate shall determine.

3. Information Exchange. ATCLLC and the owners of interconnected Transmission Facilities, in advance of such meeting or meetings, shall provide each other with the following information:

A. Any current Network assessment for the owners' respective Transmission Facilities.

B. The transmission or distribution construction plans of any owner of Distribution Facilities or other combined Transmission and Distribution Facilities that are

interconnected to their respective systems, to the extent that such information can be provided consistent with the confidential nature of such information, and subject to the FERC's Standards of Conduct; such other information as is necessary or appropriate in order to determine the proposed Transmission Facilities Construction plans proposed by such other entity and the information used to arrive at such conclusion or assessment.

4. Purpose. The purpose of such regional coordination of the assessment of the needs of the respective Transmission Facilities is to:

A. Identify Transmission System constraints or constrained interfaces between the respective Transmission systems.

B. Identify the problems of any load serving entity interconnected to the respective Transmission Facilities based upon the NERC mandatory planning requirements, regional requirements of the MRO or RFC, or the identified planning criteria of the respective owners of the Transmission Facilities, whichever is more conservative or restrictive.

C. Compare the respective needs of their Transmission systems and assess the provisional, proposed or planned Transmission Facilities construction projects of ATCLLC and such proposed projects identified by others to meet their respective needs, and develop such studies or assessments that will assist in determining whether there are other alternatives that could be considered that could achieve the same or greater electrical result either by alleviating one or more constraints on the respective Transmission systems or by providing greater Physical Capacity or Operating Capability or enhanced reliability at the same or lesser cost than the provisional, proposed or planned Transmission Facilities construction projects of ATCLLC or the proposed projects of such Transmission Facilities' owner or owners.

D. To the extent that the parties have made assessments of their respective Transmission Facilities and have determined that there are one or more provisional, proposed or planned Transmission Facilities construction projects that warrants further study to determine whether a coordinated solution may be more appropriate, the parties shall agree upon the model or assessment tool to be used, and shall supply sufficient information to permit both parties to perform the evaluation or assessment of their respective systems in order to determine whether there is a coordinated Transmission Facilities construction project, or one or more alternatives to one or more provisional, proposed or planned Transmission Facilities construction projects proposed in such Transmission Facilities assessment that could be constructed, either by one or the other, or jointly, that would provide the same or greater Transmission system benefit at a lower cost, or a greater benefit to both Transmission systems.

E. In connection with any assessment performed, the parties shall agree upon the criteria to be employed or otherwise incorporated in the evaluation, study or other assessment to be performed. In no event shall the criteria to be used be contrary to the mandatory reliability requirements of NERC, MRO, or RFC, but such criteria may be more restrictive or more conservative than the reliability requirements of NERC, MRO or RFC.

5. Study Results. The results of each party's assessment or the output of any model or assessment tool shall be shared with the other party or parties participating in such coordinated regional planning. To the extent that each party has performed the same or similar assessment, evaluation or analysis and have arrived at different results or different conclusions, the parties shall:

A. Determine if the results are a result of differing model

characteristics, input information, assumptions or criteria used. To the extent possible, such differences shall be removed, or minimized, and to the greatest extent possible, the differences in such information, assumptions, model characteristics or criteria shall be eliminated. The comparative results of such evaluations, assessments or analyses shall be shared with all parties participating in the Transmission – Transmission coordination.

B. The results of such comparative analyses, joint evaluations or assessment of the respective Transmission system requirements shall be included by ATCLLC in the next succeeding TYA following the conclusion of the study, assessment or other analysis performed the results of which have been jointly concurred in by all parties participating in such evaluation, assessment or analysis, and shall be incorporated, to the extent appropriate, in the Regional Plan of the Transmission Provider or PJM.

6. Transmission Facilities Construction and Cost Allocation. The costs associated with any Transmission Facilities construction project determined by such Transmission – Transmission Planning to be reasonably necessary shall be allocated in accordance with the requirements of any applicable state regulatory authority having jurisdiction over the siting of some or all of the construction, and, to the extent governed by the Transmission Provider or PJM transmission tariffs, in accordance with the provisions of the respective tariffs, or as otherwise may be agreed to by the Transmission Owners proposing the construction of such Transmission Facilities construction project.

7. Coordination with the Transmission Provider's Attachment FF SPM requirements. Upon the development by ATCLLC of any local transmission plans set forth any provisional, proposed or planned transmission projects as provided for in this Attachment FF-ATCLLC, ATCLLC shall provide such provisional, proposed or planned projects to the

Transmission Provider for consideration in accordance with the requirements of Appendix B of the ISO Agreement. ATCLLC may participate in any SPM process of the Transmission Provider in which the Transmission Provider is determining its regional planning requirements as a result of the local planning requirements determined by any other Transmission Owner under the provisions of Attachment FF of this Tariff.

F. Economic Project Planning.

1. Economic Evaluations. ATCLLC, at the request of one or more parties, irrespective of whether they are a Distribution Customer, Transmission Customer or interconnected in any manner to ATCLLC's Transmission Facilities, or upon its own determination, may make an assessment of its Transmission Facilities to determine whether the construction, modification, addition or extension of ATCLLC's Transmission Facilities **or other potential transmission, generation or demand resources identified by any other party** can provide economic benefits when compared to the cost of constructing the proposed Transmission Facilities **or other transmission, generation or demand resources (provided the estimated costs are provided by the party proposing such other transmission, generation or demand response resource).**

2. Request for Economic Evaluations. Any party, whether Interconnection Customer or Transmission Customer or not, may, by March 1 of any year, request that ATCLLC perform such study, assessment or analysis for any proposed Economic Project. By no later than April 15 of each year, ATCLLC shall determine the two proposed Economic Projects that, based on a preliminary assessment, could provide an economic benefit greater than the costs of constructing any required Transmission Facilities.

3. Economic Project Information. In order for ATCLLC to consider any proposed Economic Project, the party requesting that such evaluation, study or analysis be done, shall provide the following information:

A. Identification of the constrained element of ATCLLC's Transmission Facilities, or the designation of the node within the Transmission Provider region in which a constraint may exist.

B. A list of the elements of ATCLLC's Transmission Facilities that would be affected by such constraint.

4. Economic Project Posting. ATCLLC, by April 15 of each year, shall post on its external Web site all proposed Economic Projects, and shall post on its web site which two Economic Projects that ATCLLC has determined to perform. By no later than April 30 of each year, any Interconnection or Transmission Customer or other stakeholder, may comment on the proposed Economic Projects and on the two identified by ATCLLC for further study or evaluation. ATCLLC shall post all comments received relating to the proposed Economic Projects. In the event that ATCLLC receives comments on the two Economic Projects that it proposes to study, ATCLLC may revise its determination on the Economic Projects to be evaluated. If ATCLLC changes its determination, ATCLLC shall, by no later than May 15, post the revised Economic Projects to be studied or evaluated.

5. Economic Project Selection Criteria. Annually, ATCLLC shall select the two Economic Projects for study based on the preliminary determination that the proposed Economic Projects have the potential to provide the greatest economic value by reducing the delivered cost of energy or reducing Congestion Costs, for Interconnection and Transmission Customers, and interconnected parties when compared to the preliminarily estimated

Transmission Facilities construction cost.

6. Economic Project Selection. ATCLLC shall set forth its reasons for selecting the Economic Projects that it intends to evaluate, study or otherwise analyze in sufficient detail to permit interested parties to determine the basis upon which the selections were made.

7. Economic Project Assessment Costs. The evaluation, assessment or analysis associated with the two economic projects selected by ATCLLC shall be performed at no cost to the party recommending that such economic project be evaluated, studied or assessed.

8. Time To Perform Such Economic Assessment, Study or Analysis. To the extent possible, ATCLLC shall perform the necessary evaluation, assessment or study of such proposed economic projects within One Hundred and Eighty (180) days of the posting of the selection of the economic projects. However, ATCLLC expressly reserves the right to delay the completion of any economic project analysis in order to permit ATCLLC to conduct an appropriate analysis, evaluation or assessment. If ATCLLC is unable to provide the results of its evaluation, assessment or analysis of the economic projects within the 180-day period, ATCLLC shall post on its web site an interim report indicating the nature of the evaluation, analysis or assessment completed, and the amount of such evaluation, analysis or assessment remaining, together with an estimated date when such economic project evaluation, analysis or assessment is to be completed.

9. Economic Project Study Models and Assumptions. The Party recommending the economic project may suggest the study models or assumptions, to be used by ATCLLC. ATCLLC will use all reasonable effort to incorporate the proposed assumptions or models suggested by such parties. ATCLLC by April 15 shall post the assumptions, study

models and assessment tools on its web site and customers and stakeholders shall have until April 30, to comment on the assumptions, study models and assessment tools. However, ATCLLC reserves the right to employ such models or assessment tools as it deems appropriate to evaluate, analyze or assess such proposed economic project. The Party or other stakeholders recommending the economic project may suggest assumptions to be used by ATCLLC in the analysis; however, ATCLLC reserves the right to employ such assumptions as it deems appropriate to evaluate, analyze or assess such proposed Economic Project.

10. Additional Economic Projects. To the extent that ATCLLC has the ability to do so, ATCLLC may conduct such other economic project evaluation, analysis or assessment as possible, given the planning resources available to perform such evaluation, analysis or assessment. Any party requesting that ATCLLC perform the evaluation, analysis or assessment of any other economic project other than those identified by ATCLLC that it will perform must agree to pay the costs associated with such evaluation, analysis or assessment, which may be performed by others, but which must be performed under the control of, and at the direction of ATCLLC in order to incorporate such evaluation, analysis or assessment in ATCLLC's TYA. Any party requesting that ATCLLC perform the evaluation, analysis or assessment of any other economic project other than those identified by ATCLLC that it will perform must agree to publicly post the results of the study if ATCLLC determines this is appropriate to meet FERC Standards of Conduct or CEII regulations. For those economic studies requested by one or more Parties to be paid for by such party requesting such study or studies, ATCLLC shall estimate the time necessary to perform such study or studies and the estimated costs associated with performing such study or studies, and shall provide the estimated time and costs to the party or parties requesting such study or studies. The costs estimated shall

be paid to ATCLLC prior to ATCLLC commencing such study or studies. Upon receipt of the estimated amount, ATCLLC shall commence performance of the study or studies. In the event that the estimated time or costs are determined by ATCLLC to be insufficient to complete the study or studies, ATCLLC shall provide written notification of such additional time or increased costs to the party or parties responsible for paying for such study or studies.

Within thirty (30) days following receipt of such notice, such party or parties shall acknowledge in writing the increased time and shall, to the extent applicable, pay the revised estimated amount. However, if a party or parties dispute the revised amount of time or estimated costs, then such dispute shall be resolved in accordance with Section VI. B. below. In the event that the actual cost incurred by ATCLLC in performing any economic study or studies is (are) less than the amount estimated by ATCLLC, then ATCLLC shall refund to such party or parties any excess amount received by ATCLLC within thirty (30) days following the posting of such economic study or studies.

11. Economic Project Study Results. The results of such Economic Project evaluation, analysis or assessment shall be posted on ATCLLC's web site upon completion.

12. Transmission Facilities Construction Cost. To the extent that any Economic Project evaluation, analysis or assessment concludes that modifications, additions, expansions or extensions to ATCLLC's Transmission Facilities are appropriate and should be constructed, the costs once constructed shall be recovered pursuant to the provisions of Attachment FF of this Tariff provided such meet the definition of "Market Efficiency Project" under the provisions of Attachment FF of this Tariff.

However, ATCLLC acknowledges that all Transmission Facilities construction projects that are Economic Projects, and which may produce appropriate economic benefits when compared to

the cost of constructing such Transmission Facilities may not be entitled to treatment as **Market Efficiency** Projects under the provisions of Attachment FF of this Tariff. In such event, ATCLLC, if such Transmission Facilities are constructed and are not treated as a **Market Efficiency** Project under Attachment FF, shall collect the costs associated with the construction of such Transmission Facilities pursuant to Attachment O of this Tariff.

VI. Dispute Resolution.

In the event that a dispute arises between ATCLLC and the owner of any Distribution Facilities, Transmission Facilities, or an Interconnection Customer, Transmission Customer or other stakeholder in connection with any planning process set forth above, the following dispute resolution provisions shall apply:

A. Disputes Arising Under Any Generation Interconnection Request or Transmission Service Request. All disputes arising under any Generation Interconnection Request or Transmission Service Request shall be handled in accordance with Article 12 and Attachment HH of this Tariff, provided however, that to the extent that such Generation Interconnection dispute arises in connection with any Generation Interconnection planning associated with a Generation Interconnection request that does not involve a new generating facility or the increase in the capacity of any existing generating capacity, then such dispute shall be handled under the provisions of the applicable Generation – Transmission Interconnection Agreement.

B. Disputes Arising in Connection with the Network Assessment or Evaluation of Economic Projects. All disputes arising between ATCLLC and any interconnected entity,

Interconnection Customer, Transmission Customer or other interested stakeholder in connection with ATCLLC's Network Assessment or its TYA, shall be handled in accordance with the provisions of Appendix B of the ATCLLC Operating Agreement.

C. Disputes Arising in Connection with Distribution Interconnection Requests.

Any dispute arising between ATCLLC and any party making a Distribution Interconnection request shall be handled in accordance with the provisions of the Distribution – Transmission Interconnection Agreement entered into between ATCLLC and such party. If no Distribution – Transmission Interconnection Agreement has been entered into, then any dispute shall be resolved as if the parties had entered into a Distribution – Transmission Interconnection Agreement.

VII. Planning Costs

The costs incurred by ATCLLC in connection with performing the planning functions set forth above will be collected by ATCLLC through Attachment O of the Midwest ISO Tariff as annual operating expense. Any planning costs incurred pursuant to Generator-Transmission Interconnections are determined in accordance with Attachments R and X of this Tariff and are collected pursuant to those Attachments.

¹ Transformer voltage is defined by the voltage of the low-side of the transformer for these purposes.

² See Promoting Wholesale Competition Through Open Access Non-discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities, Order No. 888, 61 FR 21540 (May 10, 1996), FERC Stats. & Regs. ¶ 31,036 (1996) at 31,771.

³ See Order No. 888 at 31,771.

⁴ ATCLLC has entered into a number of Distribution – Transmission Interconnection Agreements with Affiliates as that term is used in 18 C.F.R. §358.1, *et seq.* Pursuant to ATCLLC's Compliance Plan, the communication between ATCLLC and its affiliates in connection with Distribution Interconnections is only with those distribution system

planners of such affiliates and is governed by the terms of the Confidential Data Access Agreement (CDAA) entered into between ATCLLC and such Affiliate. ATCLLC's Compliance Plan and the companion CDAA was reviewed by the FERC in Docket No. TS04-76-000. *See Standards of Conduct for Transmission Providers, Docket No. RM01-10-000, Order No. 2004 Compliance Filing, American Transmission Company LLC* (Docket No. TS04-76-000) (February 9, 2004). Also see *Request of American Transmission Company LLC for Limited Waiver and Clarification of the Standards of Conduct* (Docket No. TS04-76-001) (July 8, 2004).

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American Transmission Company LLC, 107 FERC ¶61,117 (2004).

**ATTACHMENT FF – MIDAMERICAN
LOCAL TRANSMISSION PLANNING PROCESS**

I. Introduction

MidAmerican Energy Company (“MidAmerican”), as a member company of the Transmission Provider, pursuant to 18 C.F. R. §37.1, *et seq.*, engages in local system planning in order to carry out its responsibilities for meeting its respective transmission needs in collaboration with the Transmission Provider subject to the requirements of applicable state law or regulatory authority. In meeting its responsibilities under the ISO Agreement, MidAmerican may, as appropriate, develop and propose plans involving modifications to any of MidAmerican’s transmission facilities which are part of the Transmission System.

The following provides the planning requirements applicable to MidAmerican’s local system planning process engaged in by MidAmerican under the provisions of this Tariff, as may from time to time thereafter be modified, changed, or amended, in accordance with the rules and requirements of the FERC or as provided in this Attachment FF-MidAmerican. MidAmerican sets forth its local transmission planning processes in detail below to meet the nine planning principles set forth in FERC Order No. 890.

II. Definitions

The definitions set forth below shall apply to this Attachment FF-MidAmerican. Any other capitalized term not otherwise defined shall have the meaning set forth in the Transmission Provider’s Tariff or in FERC’s rules and regulations.

“MidAmerican Local Transmission Planning Process” means the process conducted by MidAmerican for Local Transmission Planning as described in the Transmission Provider’s Tariff.

“MidAmerican” means MidAmerican Energy Company.

“Registered Stakeholder” means a stakeholder which has registered its intent to participate in the MidAmerican Local Transmission Planning Process with the MidAmerican Transmission Planning Process Technical Contact or a stakeholder that MidAmerican transmission planners have registered as representatives of the stakeholders listed in Section V that follows.

III. Scope

The MidAmerican Local Transmission Planning Process described in this Attachment FF-MidAmerican covers MidAmerican’s portion of the Transmission System under the Tariff. The purpose of the MidAmerican Local Transmission Planning Process is to conduct local long-term planning for transmission facilities consistent with the Transmission Provider’s planning cycle with assessments to serve MidAmerican’s native end-use load and the Transmission Provider’s firm transmission commitments. The MidAmerican Local Transmission Planning Process does not extend to specific retail or wholesale customer service requests. The process provides comparable long-term transmission system planning for similarly-situated wholesale customers.

The process provides long-term reliability and economic planning of transmission facilities for MidAmerican’s portion of the Transmission System for firm commitments (e.g., point-to-point service of five years duration or longer with rollover rights) and Network Customers under the Tariff which are served from MidAmerican’s portion of the Transmission System, which includes MidAmerican’s native end-use load. The process provides long-term economic

planning of facilities on MidAmerican's portion of the Transmission System for third-party generators connected to MidAmerican's portion of the Transmission System that is comparable to the long-term economic planning for MidAmerican generators connected to MidAmerican's portion of the Transmission System as detailed in Section XI.8 of the Tariff. This is done by modeling from the generation to the Transmission Provider's Network Load on the MidAmerican portion of the Transmission System.

IV. Responsibilities

MidAmerican will be responsible for the development of the transmission plans that result from the MidAmerican Local Transmission Planning Process. The MidAmerican Local Transmission Planning Process will allow timely and meaningful stakeholder input and participation in the development of these transmission plans. The MidAmerican Local Transmission Planning Process will follow regional planning procedures provided in this Attachment FF-MidAmerican. The transmission plans and studies resulting from the MidAmerican Local Transmission Planning Process which are to be included in the Transmission Provider's Transmission Expansion Plan will be submitted to the Transmission Provider in accordance with the regional planning process as established by the Transmission Provider consistent with this Attachment FF, and the Transmission Planning Business Practices of the Transmission Provider.

In addition to developing transmission plans to be provided to the Transmission Provider for regional coordinated planning, the MidAmerican Local Transmission Planning Process will develop plans to address local MidAmerican transmission issues, such as transmission facility upgrades that do not significantly change network system flows. The plans will be provided in reports with executive summaries that are brief and designed to be understandable to

stakeholders.

The MidAmerican Local Transmission Planning Process does not apply to System Impact Studies or Facilities Studies associated with specific Generator Interconnection Requests or Transmission Service Requests.

With the limited exception of certain transitional studies completed by MidAmerican with Transmission Provider oversight, such studies are performed by the Transmission Provider under the terms of the Tariff. In the event of a conflict between this MidAmerican Local Transmission Planning Process and the Transmission Provider's Tariff, the Transmission Provider's Tariff shall control.

V. Openness and Coordination

- 1.) MidAmerican will hold at least two face-to-face stakeholder meetings per year to discuss local transmission planning, including local transmission issues. Additional meetings will be held as needed.

The stakeholder meetings will be open to the Transmission Provider's transmission service customers, MidAmerican's marketing and energy affiliates, generation interconnection customers, neighboring transmission owners, neighboring transmission providers, the Transmission Provider affected state and federal authorities, regional planning groups, and any other interested entities.

- 2.) MidAmerican will hold an additional stakeholder meeting within 60 days after receipt of a written request from registered stakeholders from ten or more different organizations, companies, Eligible Customers, regulatory agencies, municipal utility associations or wind generator associations to hold such a meeting; however, MidAmerican is not required to hold more than two additional stakeholder meetings

- per year as a result of such registered stakeholder requests.
- 3.) MidAmerican will invite representatives from affected and interested stakeholders, including the Midwest Independent Transmission System Operator, Inc., to stakeholder meetings.
 - 4.) A meeting notice with a draft meeting agenda will be sent out by email to stakeholders and posted at least thirty days in advance of each meeting unless exception or emergency situations require less notice, such as resolution of imminent unreliable conditions or customer needs, or to meet required regulatory or statutory requirements.
 - 5.) To ensure meaningful dialogue at the stakeholder meeting, available information related to the proposed draft agenda will be distributed with meeting notices. This information may include, for example, identified system constraints, significant and recurring congestion, and proposed solutions or new projects. Stakeholders may submit questions or comments, including other suggested system constraints or problems and suggested solutions thereto, in advance of, at, or up to 30 days after the semi-annual meeting.
 - 6.) MidAmerican will develop and maintain an updated email list of registered stakeholders that have attended prior meetings, as well as key participants that should be invited regardless of attendance at prior meetings, for example, affected state authorities will be included on the registered stakeholder list regardless of attendance at prior meetings. Stakeholders will be provided the opportunity to register at any of the stakeholder meetings. Stakeholders may also register by providing an email or written notification to the MidAmerican Local Transmission Planning Process

Technical Contact listed in Section XIII of this Attachment FF - MidAmerican.

Registered stakeholders wishing to be removed from the registered stakeholder list may do so through email or written notification to the MidAmerican Local Transmission Planning Process Technical Contact.

- 7.) MidAmerican Local Transmission Planning Process meetings may include activities such as discussion of new proposed facilities for MidAmerican's portion of the Transmission System; review of constrained facilities on MidAmerican's portion of the Transmission System; discussion of recently completed and ongoing studies of MidAmerican's Transmission System upgrades to meet MidAmerican, regional, and NERC planning criteria and/or reliability standards; discussion of completed and ongoing studies of upgrades to MidAmerican's portion of the Transmission System to meet reliability standards and economic benefit criteria; discussion of NERC, regional, and MidAmerican transmission planning criteria, criteria application, and comparability; discussion of operating guides, operating guide application, and comparability on MidAmerican's portion of the Transmission System; open forum for discussion of proposed upgrades of MidAmerican's portion of the Transmission System from transmission service users and neighboring transmission systems; discussion of the MidAmerican Local Transmission Planning Process including process issues and other stakeholder issues related to the process or the results of the process; and comments from affected state authorities.
- 8.) MidAmerican will retain ultimate responsibility for the transmission studies and transmission plans developed under the MidAmerican Local Transmission Planning Process. MidAmerican will request and consider stakeholder input provided during

the stakeholder process. The MidAmerican Local Transmission Planning stakeholder process will not be a voting forum.

- 9.) Milestones of MidAmerican's planning cycle are expected to be set so as to coordinate with the Transmission Provider's planning cycle.

Milestones to MidAmerican's planning cycle typically will include the following:

- a. Request for model and other data from customers, as described in Section VII.1 below;
- b. Information on significant and recurring congestion provided to customers;
- c. Initial stakeholder meeting per Section V.1;
- d. Submit regional model data information to the region;
- e. Begin work on planning studies initiated as part of the MidAmerican Local Transmission Planning Process;
- f. New regional models available;
- g. Second stakeholder meeting per Section V.1; and
- h. Complete planning studies initiated as part of the MidAmerican Local Transmission Planning Process.

- 10.) MidAmerican will provide non-disclosure agreements, password-protected access to information, and other procedures in order to maintain the confidentiality of information and to protect Critical Energy Infrastructure Information ("CEII"). The procedures for protection of and access to CEII are to be posted on the MidAmerican's Open Access Same Time Information System ("OASIS") page. Definitions for CEII are provided in 18 C.F.R. §388.113(c).

- 11.) Information containing confidential/CEII may include but is not limited to physical maps of electric facilities that do not just give the general location; system electric diagrams or switching diagrams and data bases that provide facility locations, ratings, and/or system connectivity; power flow cases; and evaluations of electric system performance. Confidential information supplied by stakeholders as part of the MidAmerican Local Transmission Planning Process will be treated confidentially and comparably to MidAmerican confidential information.
- 12.) A working group is established to receive information and provide comment on planning issues that are the subject of the MidAmerican Local Transmission Planning Process that arise between stakeholder meetings. MidAmerican will provide (subject to confidentiality, CEII and Standards of Conduct requirements):
 - a. the initial assumptions used in developing the annual local planning process transmission assessment and will provide an opportunity for feedback.
 - b. the models used for local planning process transmission planning.
 - c. information regarding the status of local planning process transmission upgrades and how such upgrades are reflected in future local planning process transmission plan development.
 - d. the draft study scope for those studies conducted by the working group as part of the local planning process, which will include or provide references to the basic assumptions for the study, the model or models used in the working group study including information regarding significant changes in the model.

- e. the draft transmission report for those studies conducted by the working group as part of the local planning process, as prepared by MidAmerican or MidAmerican's designate.

Stakeholders who do not participate on the working group will be given the opportunity to comment on the draft report after MidAmerican has considered the comments of the working group. The report will include an executive summary that is brief and is designed to be understandable to stakeholders.
- f. draft transmission plans that result from the MidAmerican Local Transmission Planning Process before they are distributed to stakeholders pursuant to the stakeholder meeting process described in Section V above.
- g. Ad hoc study groups will be formed by MidAmerican if a need is determined by MidAmerican Transmission or due to significant registered stakeholder interest in the details of a local problem requiring a planning study as indicated by registered stakeholders at ten or more different organizations, companies, Eligible Customers, regulatory agencies, municipal utility associations or wind generator associations. However, no more than two ad hoc study groups are required at any given time. In addition, if no more than three registered stakeholders from the requesting organizations or companies attend an ad hoc study group meeting, MidAmerican retains the right to discontinue the activities of an ad hoc study group.
 - i. An email notice of MidAmerican intent to form an ad hoc

study group will be distributed to the registered stakeholders prior to MidAmerican forming an ad hoc study group.

- ii. The ad hoc study group will be formed considering the responses to the email notification and a separate mailing list will be established for that ad hoc group. Additional participants will be allowed throughout the ad hoc group study process; however, the addition of new participants shall not impede progress already completed by the ad hoc group.
- iii. In order to facilitate the efficient collection of input from stakeholders on transmission studies and plans, MidAmerican may combine multiple transmission problems and/or studies for consultation with a single ad hoc study group; or may separate problems and/or studies for consultation with multiple ad hoc study groups.
- iv. MidAmerican will determine when each ad hoc study group process is complete which typically will follow completion of the final report. The final report will be distributed to the registered stakeholders, subject to CEII and Standards of Conduct requirements. The report will include an executive summary that is brief and is designed to be understandable to stakeholders.
- h. Working group and ad hoc study group meetings will be established by

MidAmerican on an as needed basis. Working group meetings will also be established if need is expressed by 10 members of the respective working group; however, MidAmerican will not be required to hold meetings of the working group more than on a semi-annual basis. Meetings will typically be conference calls and/or web casts, but face-to-face meetings may be called if necessary. Meeting notices will be distributed via email to the respective study group mailing list. Meeting materials may be distributed via email respecting email size limitations and CEII and Standards of Conduct requirements. A password protected FTP site or internet may be used to transmit study models or large amounts of data.

- i. MidAmerican will chair and provide leadership to the working group and ad hoc groups, including facilitating the group meetings.
- j. Input from the working group and ad hoc study group members will be considered in the local planning process. Comments will generally be expected via email or during working group or ad hoc study group meetings. Comments will be solicited within the defined comment periods of the study group process.

VI. Transparency

In addition, the MidAmerican Local Transmission Planning Process will be open and transparent to facilitate comment and exchange of information (subject to CEII and Standards of Conduct requirements) as described below:

- 1.) MidAmerican will make available the basic criteria that underlie its transmission system plans by posting MidAmerican's transmission planning criteria for facilities covered by this Attachment FF-MidAmerican on MidAmerican's OASIS page on the Transmission Provider's OASIS node.
- 2.) MidAmerican will make available to Registered Stakeholders the basic criteria, assumptions, and data that underlie its transmission system plans. For this purpose, MidAmerican will make its FERC Form 715 available in a way that maintains confidentiality and complies with CEII requirements.
- 3.) MidAmerican will provide information on the location of applicable NERC/Midwest ISO/Midwest Reliability Organization ("MRO") planning criteria, reliability standards, regional power flow models, or other pertinent information, as available.
- 4.) MidAmerican will provide its regional planning model submittal in accordance with Section V of this Attachment FF-MidAmerican.
- 5.) MidAmerican will set the planning study horizons and study frequencies considering NERC and or regional entity standards and the Transmission Provider's planning cycle.
- 6.) MidAmerican will simultaneously disclose transmission planning information where appropriate in order to alleviate concerns regarding the disclosure of information with respect to the FERC Standards of Conduct.
- 7.) MidAmerican will consider customer demand response resources in the MidAmerican Local Transmission Planning Process on a comparable basis with generation resources in developing transmission plans provided that 1) such resources are capable of providing measurable transmission system support needed to correct

transmission system problems assessed in the MidAmerican Local Transmission Planning Process, 2) such resources can be relied upon on a long-term basis, 3) such resources meet NERC Reliability Standards and applicable laws, rules, and regulations, and 4) the inclusion of such resources in corrective action plans are permitted by the NERC Reliability Standards.

VII. Information Exchange

Certain information exchanges associated with the stakeholder process and the local study group process are described in Sections V and VI in this Attachment FF-MidAmerican. In addition, information exchange for base regional model development will take place as follows:

- 1.) MidAmerican participates in the annual development of the regional base case power flow and stability models currently for the PSS^{TME} computer application. These regional models provide the basis for studies of transmission service requests, generator interconnection requests, local planning studies and regional planning studies. To assist in the development of accurate base case regional models and thereby develop appropriate local transmission plans for the MidAmerican system, MidAmerican will request at a minimum the following data of the Transmission Provider's Transmission Customers connected to MidAmerican's portion of the transmission system:
 - a. Existing loads and future loads for the horizon of the regional base case models for each of its load points. Information for firm loads will be separated from information for interruptible loads.
 - b. A list of all existing and proposed new demand response resources including behind the meter generation or load curtailment;

- c. the MW impacts on peak load.
- d. the historical and expected future operating practice of the demand response resources such as the conditions under which the customer intends to initiate each resource, and whether each resource is available for use in providing measurable transmission system support to correct problems assessed in the MidAmerican Local Transmission System Planning Process, as well as, other information required to consider such resources as provided in Section VI.7. The Transmission Provider's Transmission Customers will be requested to provide updates of this information when substantive changes occur.
- e. A list of existing and proposed new generation resources and historical and expected future dispatch practices such as the load level at which the customer plans to start each generating unit and plant, and whether each generation resource is available for use in providing measurable transmission system support to correct problems assessed in the MidAmerican Local Transmission System Planning Process, as well as, other information required to consider such resources as provided in Section VI.7. The Transmission Provider's Transmission Customers will be requested to provide updates of this information when substantive changes occur.
- f. Projections of quantifiable transmission service needs over the planning horizon, including applicable receipt and delivery points and the transmission service reservations anticipated to be scheduled.
- g. Sponsors of all types of resources, including transmission, generation, and

demand resources, can provide information to MidAmerican for use in developing the base-line assumptions and models used in the MidAmerican Local Transmission Planning Process.

- h. Additional modeling data will be requested as necessary to conform to the requirements of FERC, NERC, Transmission Provider and the regional entity.
 - 2.) The data submitted by the Transmission Provider's Transmission Customers will be included to the extent appropriate in the base case model.
 - 3.) The MidAmerican data request will be sent annually in coordination with the regional data request. MidAmerican will send a data request to the Transmission Provider's Transmission Customers located in MidAmerican's Load Balancing Area typically prior to expected transmittal of the regional data request.
 - 4.) Responses to the data request will be accepted in forms such as PSS^{TME} raw data format or in spreadsheet format with appropriately labeled headings.
 - 5.) Each of the Transmission Provider's Transmission Customers within the MidAmerican Local Balancing Authority Area will be responsible for providing MidAmerican with an email address of its data modeling contact. MidAmerican will send the annual data request to these contacts via email.
- The MidAmerican data response will be made available subject to CEII and Standards of Conduct restrictions upon request to Registered Stakeholders.

VIII. Comparability

- 1.) MidAmerican will plan its portion of the Transmission System to treat similarly-situated customers comparably in the MidAmerican Local Transmission Planning Process.
- 2.) MidAmerican will consider alternative proposed solutions to identified system needs

- in the MidAmerican Local Transmission Planning Process. Such alternatives may include transmission, generation and demand-side resources. MidAmerican will review and evaluate such alternatives on a comparable basis in developing transmission plans, provided that:
- a. such resources are capable of providing the measurable transmission system support needed to correct transmission system problems assessed in the MidAmerican Local Transmission Planning Process,
 - b. such resources can be relied upon on a long-term basis,
 - c. such resources meet applicable NERC Reliability Standards and applicable laws, rules, and regulations, and
 - d. the inclusion of such resources in corrective action plans are permitted by the NERC Reliability Standards.
- 3.) MidAmerican will use a combination of technical analysis and engineering judgment to determine the preferred solution when competing solutions are proposed to meet system needs. Technical analysis can include, but is not limited to, power flow studies, dynamic stability studies and voltage stability studies, while engineering judgment can take into account such factors as the extent to which proposed alternative solutions meet applicable planning criteria and other regulatory requirements, estimated project costs and projected environmental impacts.
- 4.) MidAmerican shall select proposed project(s) for inclusion in MidAmerican's transmission plan.

IX. Dispute Resolution

Consistent with Attachment HH of this Tariff and Appendix D to the ISO Agreement, the

Transmission Provider shall resolve disputes concerning MidAmerican Local Transmission Planning issues. The first step will be for designated representatives of MidAmerican and other affected parties to work together to resolve the relevant issues in a manner that is acceptable to all parties.

If the first step is unsuccessful, each affected party shall designate an officer who shall review disputes involving them that their designated representatives are unable to resolve. The applicable officers of the parties involved in such dispute shall work together to resolve the disputes so referred in a manner that meets the interests of such parties, either until such agreement is reached, or until an impasse is declared by any party to such dispute.

If such officers are unable to satisfactorily resolve the issues, the matter shall be referred to mediation, in accordance with the procedures described in Appendix D to the ISO Agreement. Parties that are not satisfied with the dispute resolution procedures may only file a complaint with the Commission during the negotiation or mediation steps. If a matter remains unresolved, the affected parties may pursue arbitration pursuant to Appendix D of the ISO Agreement.

X. Regional Participation

Consistent with Sections I and II of Attachment FF to the Tariff, MidAmerican will participate in the Transmission Provider's regional transmission planning process as a Transmission Owner member. Such participation shall include participation in the development of the Transmission Owner's Transmission Expansion Plan and participation on the Planning Advisory Committee, the Planning Subcommittee, Sub-regional Planning Meetings and focus study groups, as appropriate. Such participation shall be carried out to the extent that such activities apply to the planning of MidAmerican's portion of the Transmission System.

XI. Economic Planning Studies

As part of the MidAmerican Local Transmission Planning Process, MidAmerican will implement an Economic Planning Study Procedure. This procedure will include the following:

- 1.) Each year, during the notice period prior to the first stakeholder meeting of the year and at the first stakeholder meeting, stakeholders may request MidAmerican to perform Economic Planning Studies to evaluate potential upgrades or other improvements to MidAmerican's portion of the Transmission System that could reduce congestion or integrate new resources and loads on an aggregated basis.
- 2.) The scope of such studies will primarily include studies to resolve continuing congestion on MidAmerican transmission facilities and/or to review the integration of large levels of proposed generation facilities to MidAmerican's portion of the Transmission System without identification of generation ownership.
- 3.) Stakeholders may submit requests for MidAmerican to study potential upgrades or other investments necessary to integrate any resource, whether transmission, generation or demand resources, identified by the stakeholder. MidAmerican will either determine which facilities on the MidAmerican Transmission System have experienced significant and recurring congestion or which facilities on the MidAmerican Transmission System are expected to experience significant and recurring congestion. Pursuant to Section V.5 above, such information shall be provided to registered stakeholders prior or with the notice of the first stakeholder meeting subject to CEII and Standards of Conduct restrictions.

- 4.) Based upon Registered Stakeholder input, MidAmerican will determine the high priority studies to be started that year based upon a ranking in order of priority from indications of Registered Stakeholder support. MidAmerican will facilitate a registered stakeholder discussion of proposed Economic Planning Studies to determine which stakeholder study requests provide the greatest value to stakeholders. Based on this discussion, MidAmerican will determine the high priority studies to be conducted that year. The studies will be ranked in order of priority based upon indications of registered stakeholder support. The method of ranking study priority will be based upon registered stakeholder input.
- 5.) MidAmerican may propose Economic Planning Studies to be conducted, but MidAmerican will be a facilitator and not a participant in ranking the priority of requested studies. Registered Stakeholders, including the MidAmerican marketing and energy affiliates, may be participants in ranking the priority of requested studies.
- 6.) MidAmerican, in consultation with its registered stakeholders, will be allowed to cluster or batch requests for Economic Planning Studies, or if a particular request is excessively broad in scope it may be appropriate to separate the request into two or more studies so that MidAmerican can perform the studies in the most efficient manner.
- 7.) Generally, Economic Planning Studies are not to be the subject of an ongoing local or regional study, an ongoing System Impact Study or Facilities Study, or an ongoing joint study. Each Economic Planning

Study is to be scoped broadly enough to represent the interests of a number of stakeholders.

- 8.) MidAmerican will study the cost of congestion only to the extent it has the information required to perform such study. If stakeholders request a particular congested area be studied, the requesting stakeholders must supply relevant data for calculations of the level of congestion costs occurring, or likely to occur in the near future. MidAmerican will make reasonable efforts to assist stakeholders in obtaining the information to the extent it is not readily available.
- 9.) Economic Planning Studies performed by MidAmerican will include sensitivity analyses as appropriate; however, MidAmerican shall conduct such sensitivity analyses only to the extent it has information to conduct such analyses. MidAmerican will make reasonable efforts in obtaining the information to the extent it is not readily available.
- 10.) Economic Planning Studies performed by MidAmerican will identify the projected benefits of proposed facility upgrades by typically comparing one or more of the following factors: Control Area generation production costs, redispatch costs and the costs of transmission losses with and without the proposed facility upgrades.
- 11.) MidAmerican shall select the project(s), if any, proposed as a result of Economic Planning Studies performed by MidAmerican for inclusion in MidAmerican's transmission plan.

XII. Cost Allocation for New Projects

The Transmission Provider will designate and assign cost responsibility for identified Network Upgrades within MidAmerican's portion of the Transmission System according to the terms and provisions of Section III of Attachment FF to the Tariff. The cost allocation methodology set forth in Section III of Attachment FF to the Tariff shall not supersede joint-investment obligations to which MidAmerican may be subject.

XIII. Technical Contact

The technical contact for the MidAmerican Local Transmission Planning Process shall be:

Manager - Electric System Planning
MidAmerican Energy Company
One RiverCenter Place
106 East Second Street
P. O. Box 4350
Davenport, Iowa 52808

ATTACHMENT FF-1 List of Planned Projects to be Excluded from Cost Allocation Version: 0.0.0 Effective: 7/28/2010

**ATTACHMENT FF – 1
List of Planned Projects to be Excluded from Regional Cost Allocation**

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ALT	90	Emery - Lime Creek 161 ckt 2, Sum rate 326	189	Emery	Lime Creek	2	161		1-Jun-06	\$8,000,000	Planned
ALT	93	Poweshiek - Reasnor 161 ckt 1, Sum rate 326	187	Poweshiek	Reasnor	1	161		1-Jun-05	\$6,200,000	Planned
ALT	588	Asbury - Lore 161 kV line	660	Asbury	Lore	1	161		1-Jun-05	\$411,940	Planned
Ameren	77	Callaway - Franks 345 kV line	46	Callaway	Franks	1	345		1-Dec-06	\$28,776,100	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
Ameren	78	Jefferson City Area Development (Moreau - Apache Flats 161, Loose Creek - Jefferson City 345, Jefferson City 345/161 tx)	50	Moreau	Apache Flats	1	161		1-Jun-07	\$13,297,900	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
Ameren	78	Jefferson City Area Development (Moreau - Apache Flats 161, Loose Creek - Jefferson City 345, Jefferson City 345/161 tx)	59	Loose Creek	Jefferson City	1	345		1-Jun-07	\$7,242,200	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
Ameren	78	Jefferson City Area Development (Moreau - Apache Flats 161, Loose Creek - Jefferson City 345, Jefferson City 345/161 tx)	65	Jefferson City 345/161	transformer	1	345	161	1-Jun-07	\$4,677,200	Planned
Ameren	87	St. Francois - Rivermines 138 ckt 3, Sum rate 418	53	St. Francois	Rivermines	3	138		1-Jun-05	\$12,102,400	Planned
Ameren	88	Tazewell - E. Springfield 138 kV line rebuild	42	Tazewell	E. Springfield	1	138		28-Feb-05	\$8,468,800	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
Ameren	126	Rivermines - Clark 138 ckt 1, Sum rate 418	29	Rivermines	Clark	1	138		1-Jun-05	\$2,581,200	Planned
Ameren	127	Newton Plant - Breaker Replacements (2) 138 ckt , Sum rate	41	Newton Plant	Breaker Replacements (2)		138		1-Jun-05	\$447,500	Planned
Ameren	128	California - Barnett 161 ckt 1, Sum rate 180	45	California	Barnett	1	161		1-Jun-05	\$289,300	Planned
Ameren	129	Conway - Breaker Additions 138 ckt , Sum rate	49	Conway	Breaker Additions		138		1-Jun-06	\$635,300	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
Ameren	130	Warson - Breaker Additions 138 ckt , Sum rate	54	Warson	Breaker Additions		138		1-Jun-06	\$618,300	Planned
Ameren	131	Kansas West - Sidney (breaker addition at Kansas) 345 ckt 1, Sum rate	387	Kansas West	Sidney (breaker addition at Sidney)	1	345		1-Jun-05	\$904,600	Planned
Ameren	132	Paxton - Paxton East (reconductor) 138 ckt 1, Sum rate	389	Paxton	Paxton East (reconductor)	1	138		1-Jun-05	\$540,300	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
Ameren	133	Cahokia - Meramec (reconductor) 138 ckts 1 & 2, Sum rate 473	43	Cahokia	Meramec (Reconductor)	1	138		1-Jun-06	\$1,287,200	Planned
Ameren	133	Cahokia - Meramec (reconductor) 138 ckts 1 & 2, Sum rate 473	44	Cahokia	Meramec (Reconductor)	2	138		1-Jun-06	\$1,287,200	Planned
Ameren	135	Campbell - Maline (reconductor) 138 ckts 1 & 2, Sum rate 478	47	Campbell	Maline (reconductor)	1	138		1-Jun-06	\$712,150	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
Ameren	135	Campbell - Maline (reconductor) 138 ckts 1 & 2, Sum rate 478	48	Campbell	Maline (reconductor)	2	138		1-Jun-06	\$712,150	Planned
Ameren	138	Roxford - Mississippi Tap (reconductor) 138 ckts 1 & 2, Sum rate 418	63	Roxford	Mississippi Tap (reconductor)	1	138		1-Jun-06	\$762,650	Planned
Ameren	138	Roxford - Mississippi Tap (reconductor) 138 ckts 1 & 2, Sum rate 418	64	Roxford	Mississippi Tap (reconductor)	2	138		1-Jun-06	\$762,650	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
Ameren	140	Newton - Effingham (reconductor) 138 ckt 1, Sum rate 351	390	Newton	Effingham (reconductor)	1	138		1-Jun-06	\$5,461,700	Planned
Ameren	143	Cahokia - N. Coulterville 230 ckt 1, Sum rate 353	56	Cahokia	N. Coulterville	1	230		1-Jun-07	\$427,200	Planned
Ameren	144	Crab Orchard - Marion South (reconductor) 138 ckt 1, Sum rate 351	392	Crab Orchard	Marion South (reconductor)	1	138		1-Jun-07	\$2,466,500	Planned
Ameren	145	Havana - Ipava (reconductor) 138 ckt 1, Sum rate 212	393	Havana	Ipava (reconductor)	1	138		1-Jun-06	\$3,282,100	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
Ameren	149	Mason - Sioux (breaker addition at Mason) 345 ckt 1, Sum rate	397	Mason	Sioux (breaker addition at Mason)	1	345		1-Jun-07	\$502,900	Planned
Ameren	155	Joachim 345/138 ckt 1, Sum rate 560	401	Joachim 345/138 kV	transformer	1	345	138	1-Jun-07	\$12,597,700	Planned
Ameren	704	Grand Tower - Carbondale, Northwest 138 ckt # 1	1395	Grand Tower	Carbondale, Northwest	1	138		1-Jun-05	\$413,500	Planned
Ameren	705	Kinmundy - Louisville (Increase ground clearance) 138 ckt # 1	1396	Kinmundy	Louisville (Increase ground clearance)	1	138		1-Jun-05	\$1,316,600	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
Ameren	707	Adair (Install Breaker for Thomas Hill Line) - Install 161 kV Breaker at Adair 161	1398	Adair (Install Breaker for Thomas Hill Line)	Install 161 kV Breaker at Adair		161		1-Jun-06	\$167,400	Planned
Ameren	708	Casey - Breed (reconductor riv. Crossing) 345 ckt # 1	1399	Casey	Breed (reconductor riv. Crossing)	1	345		1-Jun-06	\$350,100	Planned
Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
Ameren	709	Frederick - Meredosia (Increase ground clearance) 138 ckt # 1	1400	Frederick	Meredosia (Increase ground clearance)	1	138		1-Jun-06	\$704,600	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
Ameren	710	Kinmundy - Salem (Increase ground clearance) 138 ckt # 1	1401	Kinmundy	Salem (Increase ground clearance)	1	138		1-Jun-06	\$604,200	Planned
Ameren	711	Wood River - Gillespie (reconductor) 138 ckt # 1	1402	Wood River	Gillespie (reconductor)	1	138		1-Jun-07	\$800,000	Planned
Ameren	712	Mason - Labadie-Mason-3 Term. Equipment replacement 345 ckt # 1	1403	Mason	Labadie-Mason-3 Term. Equipment replacement	1	345		1-Jun-07	\$177,500	Planned
Ameren	713	Meramec Plant - Replace 4-138 kV Breakers	1404	Meramec Plant	Replace 4-138 kV Breakers		138		1-Jun-07	\$947,600	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
Ameren	715	Wildwood - Gray Summit (reconductor) 138 ckt # 1	1406	Wildwood	Gray Summit (reconductor)	1	138		1-Jun-07	\$62,050	Planned
Ameren	716	Wildwood - Gray Summit (reconductor) 138 ckt # 2	1407	Wildwood	Gray Summit (reconductor)	2	138		1-Jun-07	\$62,050	Planned
Ameren	717	Conway - Orchard Gardens (increase ground clearance) 138 ckt # 1	1408	Conway	Orchard Gardens (increase ground clearance)	1	138		1-Jun-08	\$5,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
Ameren	718	Conway - Orchard Gardens (increase ground clearance) 138 ckt # 2	1409	Conway	Orchard Gardens (increase ground clearance)	2	138		1-Jun-08	\$5,000	Planned
Ameren	720	Page Substation - Replace 3-138 kV Breakers	1411	Page Substation	Replace 3-138 kV Breakers		138		1-Jun-08	\$576,900	Planned
AmerenIP	542	South Street sub 138 kV 50 MVAR capacitor	3096	Kewanee South St	Capacitor		138		1-Jun-05	\$500,000	Planned
AmerenIP	724	Rising (138 kV breaker addition) - Bondville Rt. 10 138 ckt # 1	1417	Rising (138 kV breaker addition)	Bondville Rt. 10	1	138		1-Jun-06	\$1,900,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
AmerenIP	725	N. LaSalle (138 kV breaker addition) - N. Ottawa (new 3 terminal ring bus) 138 ckt # 1	1418	N. LaSalle (138 kV breaker addition)	N. Ottawa (new 3 terminal ring bus)	1	138		1-Jun-07	\$13,300,000	Planned
AmerenIP	726	N. Ottawa - Ottawa (2 new 138 kV breakers) 138 ckt # 1	1419	N. Ottawa	Ottawa (2 new 138 kV breakers)	1	138		1-Jun-07	\$2,000,000	Planned
Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
AmerenIP	727	N. Ottawa - Wedron 138 ckt # 1	1420	N. Ottawa	Wedron	1	138		1-Jun-07	\$4,000,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
AmerenIP	733	Cuba Switching Station - Galesburg Monmouth Blvd (install breaker between taps to tfr #1 & tfr #5) 138 ckt # 1	1426	Cuba Switching Station	Galesburg Monmouth Blvd (install breaker between taps to tfr #1 & tfr #5)	1	138		1-Jun-05	\$424,000	Planned
AmerenIP	738	Line 1342C tap - Line 1342A (structure 423 to 467A reconductor) 138 ckt # 1	1431	Line 1342C tap	Line 1342A (structure 423 to 467A reconductor)	1	138		1-Jun-06	\$1,500,000	Planned
AmerenIP	785	Oglesby 138 kV 54 MVAR Capacitor	3097	Oglesby	Capacitor		138		1-Jun-05	\$500,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
AmerenIP	786	South Ottawa 138 kV 30 MVAR Capacitor	3098	South Ottawa	Capacitor		138		1-Jun-05	\$400,000	Planned
ATC LLC	1	Arrowhead - Gardner Park 345 kV line	121	Dewey Tap	Weston		115		1-Jun-06	\$2,300,000	Planned
ATC LLC	1	Arrowhead - Gardner Park 345 kV line	127	Northpoint	Dewey Tap		115		1-Jun-06	\$1,100,000	Planned
ATC LLC	1	Arrowhead - Gardner Park 345 kV line	135	Arrowhead	Gardner Park	1	345		30-Jun-08	\$364,645,7 23	Planned
ATC LLC	1	Arrowhead - Gardner Park 345 kV line	136	Gardner Park (was Weston) 345-115	transformer	1	345	115	1-Jun-06	\$12,992,00 0	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ATC LLC	1	Arrowhead - Gardner Park 345 kV line	137	Gardner Park (was Weston) 345-115	transformer	2	345	115	1-Jun-06	\$12,992,000	Planned
ATC LLC	1	Arrowhead - Gardner Park 345 kV line	318	Arrowhead 230-230 kV	Phase-Shifter	1	230	230	30-Jun-08	\$13,741,773	Planned
ATC LLC	1	Arrowhead - Gardner Park 345 kV line	319	Arrowhead 345/230 kV	transformer	1	345	230	30-Jun-08	\$10,400,000	Planned
ATC LLC	1	Arrowhead - Gardner Park 345 kV line	472	Gardner Park (new Weston)	Weston	1	115		1-Jun-06	\$0	Planned
ATC LLC	1	Arrowhead - Gardner Park 345 kV line	473	Gardner Park (new Weston)	Weston	2	115		1-Jun-06	\$0	Planned
ATC LLC	1	Arrowhead - Gardner Park 345 kV line	1454	Highway V (5 ohm reactor)	Preble		138		1-Dec-05	\$0	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ATC LLC	1	Arrowhead - Gardner Park 345 kV line	2039	Arrowhead	Capacitor		230		30-Jun-08	\$1,858,227	Planned
ATC LLC	1	Arrowhead - Gardner Park 345 kV line	2042	Gardner Park (was Weston)	Capacitor bank		115		30-Jun-08	\$882,714	Planned
ATC LLC	11	Rhineland 115 kV Loop Short-Term Solution	97	Skanawan	Highway 8	2	115		1-Jun-05	\$8,900,000	Planned
ATC LLC	12	West Marinette - Menominee - Rosebush - Amberg 138 ckt, (convert/rebuild) Sum rate 477	599	West Marinette (double ckt 69/138)	Menominee	1	138		1-Jun-05	\$6,900,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ATC LLC	12	West Marinette - Menominee - Rosebush - Amberg 138 ckt, (convert/rebuild) Sum rate 477	600	Menominee	Rosebush (convert)		138		1-Jun-05	\$11,400,000	Planned
ATC LLC	12	West Marinette - Menominee - Rosebush - Amberg 138 ckt, (convert/rebuild) Sum rate 477	601	Rosebush	Amberg (rebuild)		138		1-Jun-05	\$6,800,000	Planned
ATC LLC	15	Plains - Amberg - Stiles 138 kV line rebuild	116	Amberg	Plains (rebuild)		138		1-Aug-05	\$7,500,000	Planned
ATC LLC	15	Plains - Amberg - Stiles 138 kV line rebuild	117	Amberg	Crivitz (rebuild)		138		1-Jun-06	\$7,500,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ATC LLC	15	Plains - Amberg - Stiles 138 kV line rebuild	120	Crivitz	Stiles (rebuild)		138		1-Jun-06	\$7,500,000	Planned
ATC LLC	15	Plains - Amberg - Stiles 138 kV line rebuild	128	NOW	Amberg (rebuild)		138		1-Jun-06	\$7,500,000	Planned
ATC LLC	15	Plains - Amberg - Stiles 138 kV line rebuild	129	Plains	NOW (rebuild)		138		1-Jun-06	\$7,500,000	Planned
ATC LLC	15	Plains - Amberg - Stiles 138 kV line rebuild	133	Stiles	Amberg (rebuild)		138		1-Jun-06	\$7,500,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ATC LLC	22	Femrite - Sprecher 138 (new), Sprecher - Reiner 138 (conversion), Reiner - Sycamore 138 (conversion),	123	Femrite	Sprecher (new 138 kV)	1	138		1-Jun-07	\$7,420,000	Planned
ATC LLC	22	Femrite - Sprecher 138 (new), Sprecher - Reiner 138 (conversion), Reiner - Sycamore 138 (conversion),	131	Reiner	Sycamore (conversion to 138 kV)		138		1-Jun-07	\$1,250,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ATC LLC	22	Femrite - Sprecher 138 (new), Sprecher - Reiner 138 (conversion), Reiner - Sycamore 138 (conversion),	132	Sprecher	Reiner (conversion to 138 kV)		138		1-Jun-07	\$1,250,000	Planned
ATC LLC	62	Wien - Stratford - McMillan 115 ckt , Sum rate 202	108	Stratford	McMillan		115		1-May-05	\$1,500,000	Planned
ATC LLC	62	Wien - Stratford - McMillan 115 ckt , Sum rate 202	110	Wien	Stratford		115		1-May-05	\$1,500,000	Planned
Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ATC LLC	64	Kegonsa - McFarland - Femrite conversion to 138 kV	86	Kegonsa	McFarland (conversion to 138 kV)		138		1-Jun-07	\$2,410,000	Planned
ATC LLC	64	Kegonsa - McFarland - Femrite conversion to 138 kV	87	McFarland	Femrite (conversion to 138 kV)		138		1-Jun-07	\$1,000,000	Planned
ATC LLC	66	Morgan - Falls - Pioneer -Stiles 138 ckt , Sum rate 290	98	Falls	Pioneer		138		1-Jun-05	\$2,093,333	Planned
ATC LLC	66	Morgan - Falls - Pioneer -Stiles 138 ckt , Sum rate 290	99	Morgan	Falls		138		1-Jun-05	\$2,093,333	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ATC LLC	66	Morgan - Falls - Pioneer -Stiles 138 ckt , Sum rate 290	100	Pioneer	Stiles		138		1-Jun-05	\$2,093,333	Planned
ATC LLC	69	Waukesha - Duplainville - Sussex 138 kV line	102	Duplainville	Sussex		138		1-Oct-05	\$5,650,000	Planned
ATC LLC	69	Waukesha - Duplainville - Sussex 138 kV line	109	Waukesha	Duplainville		138		1-Oct-05	\$5,650,000	Planned
ATC LLC	101	Kelly - Whitcomb 115 ckt, Sum rate 241	125	Kelly	Whitcomb		115		30-Jun-08	\$4,160,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ATC LLC	112	Columbia - North Madison 345 line and North Madison 345/138 tx replacement	333	Columbia	North Madison (convert)		345		1-Jun-06	\$6,000,000	Planned
ATC LLC	112	Columbia - North Madison 345 line and North Madison 345/138 tx replacement	334	North Madison	transformer 345-138 (replace)	1	345	138	1-Jun-06	\$9,500,000	Planned
ATC LLC	112	Columbia - North Madison 345 line and North Madison 345/138 tx replacement	438	North Madison	transformer 345-138 (replace)	2	345	138	1-Jun-06	\$9,500,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ATC LLC	159	Bell Plaine - Badger/Caroline 115 ckt, Sum rate 120	602	Bell Plaine	Badger/Caroline		115		1-Jun-04	\$1,100,000	Planned
ATC LLC	160	Wempletown - Paddock 345 ckt 2, Sum rate 1200	344	Wempletown	Paddock	2	345		1-Jun-05	\$5,600,000	Planned
ATC LLC	161	Bunker Hill - Pine 115 ckt , Sum rate 242	424	Bunker Hill	Pine		115		1-Jun-05	\$480,000	Planned
ATC LLC	162	Edgewater transformer - 345/138 ckt 2, Sum rate 500	427	Edgewater	transformer 345/138	2	345	138	1-Jun-05	\$3,460,000	Planned
Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ATC LLC	163	Kegonsa - Christiana (reconductor and reconfigure double ckt at Kegonsa) 138 ckt 2, Sum rate 478	428	Kegonsa	Christiana (reconductor and reconfigure double ckt at Kegonsa)	2	138		1-Jun-05	\$6,500,000	Planned
ATC LLC	164	Morgan - White Clay (uprate) 138 ckt, Sum rate 345	437	Morgan	White Clay (uprate)		138		1-Jun-05	\$1,067,000	Planned
ATC LLC	167	Lewiston - Kilbourn (uprate) 138 ckt, Sum rate 286	605	Lewiston	Kilbourn (uprate)		138		1-Jun-05	\$100,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ATC LLC	169	Forest Junction/Cedarsauk Tap - Howard's Grove 138 ckt , Sum rate 290	590	Forest Junction/Cedarsauk Tap	Howard's Grove		138		1-Jun-05	\$8,200,000	Planned
ATC LLC	171	Weston - Kelly 115 ckt , Sum rate 239	439	Weston	Kelly		115		1-Jun-06	\$1,700,000	Planned
ATC LLC	327	Boxelder - Rockdale - Lakehead Cambridge - Jefferson 138 kV line, 383 MVA	429	Lakehead Cambridge	Jefferson		138		1-Jun-07	\$150,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ATC LLC	327	Boxelder - Rockdale Lakehead Cambridge - Jefferson 138 kV line, 383 MVA	433	Rockdale	Lakehead Cambridge		138		1-Jun-07	\$150,000	Planned
ATC LLC	327	Boxelder - Rockdale Lakehead Cambridge - Jefferson 138 kV line, 383 MVA	434	Rockdale	Boxelder	1	138		1-Jun-07	\$300,000	Planned
ATC LLC	333	Straits - Pine River - Hiawatha - Indian Lake 138 kV line	474	Hiawatha	Indian Lake (rebuild in 2004/2005 and convert in 2009)	1	138		1-May-09	\$2,100,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ATC LLC	333	Straits - Pine River - Hiawatha - Indian Lake 138 kV line	596	Hiawatha	Indian Lake (string second 138 kV circuit)	2	138		1-May-09	\$200,000	Planned
ATC LLC	339	Jefferson - Lake Mills - Stonybrook 138 kV line, 386 MVA	449	Jefferson	Lake Mills		138		1-Jun-07	\$5,630,000	Planned
ATC LLC	343	Columbia - Portage 138 kV lines 1 & 2, 386 MVA	422	Columbia	Portage	2	138		1-May-05	\$200,000	Planned
ATC LLC	343	Columbia - Portage 138 kV lines 1 & 2, 386 MVA	423	Columbia	Portage	1	138		1-May-05	\$200,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ATC LLC	350	Weston - Sherman Street - Hilltop 115 kV line rebuild as double circuit	451	Morrison Ave	Sherman St		115		1-Jun-07	\$250,000	Planned
ATC LLC	350	Weston - Sherman Street - Hilltop 115 kV line rebuild as double circuit	458	Weston	Morrison Ave		115		1-Jun-07	\$250,000	Planned
ATC LLC	350	Weston - Sherman Street - Hilltop 115 kV line rebuild as double circuit	459	Weston	Sherman St		115		1-Jun-07	\$3,750,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ATC LLC	350	Weston - Sherman Street - Hilltop 115 kV line rebuild as double circuit	1247	Weston	Hilltop		115		1-Jun-07	\$3,750,000	Planned
ATC LLC	408	Hodag 115, 10 MVAR (addition) Capacitor bank	2015	Hodag	Capacitor bank		115		1-May-05	\$810,984	Planned
ATC LLC	429	Council Creek 138, 16.4 MVAR Capacitor Bank	2058	Council Creek	Capacitor Bank		138		1-May-05	\$688,415	Planned
ATC LLC	551	Stone Lake 345/161 tap of Arrowhead-Gardner Park 345 kV line	1242	Stone Lake 345-161kV	transformer	1	345	161	1-Jun-06	\$8,100,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ATC LLC	564	Paris-St. Martins 138 kV line rebuilding with 477 T2-ACSR conductor	1241	Paris	St. Martins	1	138		1-Jun-05	\$5,000,000	Planned
ATC LLC	566	Forest Junction / Charter Steel to Plymouth 138 kV line and T-D substation. Construct 1.3 mile double circuit from Plymouth municipal utility to existing line.	1244	Plymouth	Forest Junction/Charter Steel	1	138		1-Jun-07	\$3,500,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ATC LLC	567	North Appleton - Lawn Road - White Clay 138 kV line upgrade. This project increases line clearance on the 30 mile line.	1245	North Appleton	Lawn Road	1	138		1-Jun-07	\$250,000	Planned
ATC LLC	567	North Appleton - Lawn Road - White Clay 138 kV line upgrade. This project increases line clearance on the 30 mile line.	1246	Lawn Road	White Clay	1	138		1-Jun-07	\$250,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ATC LLC	568	North Lake Geneva - White River 138 kV line	1249	North Lake Geneva	White River	1	138		1-Jun-08	\$1,250,000	Planned
ATC LLC	570	Rock River - Bristol - Elkhorn conversion to 138 kV	1252	Rock River	Turtle	1	138		1-Jun-08	\$1,610,612	Planned
ATC LLC	570	Rock River - Bristol - Elkhorn conversion to 138 kV	1253	Turtle	Sunrise	1	138		1-Jun-08	\$1,610,612	Planned
Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ATC LLC	570	Rock River - Bristol - Elkhorn conversion to 138 kV	1254	Turtle	La Prairie RCEC	1	138		1-Jun-08	\$1,610,612	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ATC LLC	570	Rock River - Bristol - Elkhorn conversion to 138 kV	1255	La Prairie RCEC	Bradford RCEC	1	138		1-Jun-08	\$1,610,612	Planned
ATC LLC	570	Rock River - Bristol - Elkhorn conversion to 138 kV	1256	Bradford RCEC	West Darien	1	138		1-Jun-08	\$3,410,708	Planned
ATC LLC	570	Rock River - Bristol - Elkhorn conversion to 138 kV	1257	West Darien	Southwest Delavan	1	138		1-Jun-08	\$1,610,612	Planned
ATC LLC	570	Rock River - Bristol - Elkhorn conversion to 138 kV	1258	Southwest Delavan	North Shore	1	138		1-Jun-08	\$3,410,708	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ATC LLC	570	Rock River - Bristol - Elkhorn conversion to 138 kV	1259	North Shore	Bristol	1	138		1-Jun-08	\$1,610,612	Planned
ATC LLC	570	Rock River - Bristol - Elkhorn conversion to 138 kV	1260	Bristol	Elkhorn	1	138		1-Jun-08	\$3,410,708	Planned
ATC LLC	571	North Madison - Waunakee 138 kV line and expansion at Waunakee to accommodate new 138 kV facilities	1261	North Madison	Waunakee	1	138		1-Jun-08	\$6,500,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ATC LLC	572	Loop West Marinette - Bay de Noc 138 kV line into Menomonie. Total project cost \$3,000,000.	1262	West Marinette	Menominee	2	138		1-Jun-08	\$3,721,083	Planned
ATC LLC	572	Loop West Marinette - Bay de Noc 138 kV line into Menomonie. Total project cost \$3,000,000.	1263	Menominee	Bay de Noc	1	138		1-Jun-08	\$1,793,938	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ATC LLC	576	Southeast Fitchburg - Sugar River 138 kV line with Sugar River 138/69 kV substation	1273	Southeast Fitchburg	Sugar River	1	138		1-Jun-09	\$5,100,000	Planned
ATC LLC	803	Paris - Albers 138 kV line upgrade	1455	Paris	Albers		138		1-Jun-05	\$500,000	Planned
CILCO	125	Hines - Pioneer (convert UG to OH) 138 ckt 1, Sum rate	384	Hines	Pioneer (convert UG to OH)	1	138		1-Jun-04	\$417,200	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
CILCO	141	Duck Creek - Tazewell (convert bus duct to OH) 345 ckt 1, Sum rate	386	Duck Creek	Tazewell (convert bus duct to OH)	1	345		1-Jun-06	\$361,800	Planned
CIN	42	Bedford - Shawswick - Pleasant Grove - Airport Road Jct - Seymour 138 ckt 1, Sum rate 304	181	Airport Road Jct	Seymour	1	138		1-Jun-09	\$752,906	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
CIN	42	Bedford - Shawswick - Pleasant Grove - Airport Road Jct - Seymour 138 ckt 1, Sum rate 304	182	Bedford	Shawswick	1	138		1-Jun-07	\$2,110,106	Planned
Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
CIN	42	Bedford - Shawswick - Pleasant Grove - Airport Road Jct - Seymour 138 ckt 1, Sum rate 304	183	Pleasant Grove	Airport Road Jct	1	138		1-Jun-09	\$3,388,077	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
CIN	42	Bedford - Shawswick - Pleasant Grove - Airport Road Jct - Seymour 138 ckt 1, Sum rate 304	184	Shawswick	Pleasant Grove	1	138		1-Jun-09	\$4,719,516	Planned
CIN	115	New London - Webster 230 ckt 1, Sum rate 800	366	New London	Webster	1	230		1-Jun-07	\$9,455,194	Planned
CIN	116	Westwood - Dequine 345 kV line and Westwood 345/138 TX 2	357	Westwood	transformer 345/138	2	345	138	1-Jun-07	\$6,093,584	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
CIN	116	Westwood - Dequine 345 kV line and Westwood 345/138 TX 2	367	Westwood	Dequine	1	345		1-Jun-07	\$588,366	Planned
CIN	190	Cayuga - Nucor 345 ckt 1, Sum rate 1386	612	Cayuga	Nucor	1	345		1-May-05	\$46,532	Planned
CIN	191	Buffington - 345/138 ckt 2, Sum rate 499	359	Buffington 345/138	transformer	2	345	138	1-Jun-05	\$4,638,538	Planned
CIN	192	Warren - Todhunter 138 ckt 1, Sum rate 309	361	Warren	Todhunter	1	138		1-Jun-05	\$1,044,596	Planned
CIN	193	Beckjord - Feldman 138 ckt 1, Sum rate 308	363	Beckjord	Feldman	1	138		1-Jun-05	\$1,355,424	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
CIN	195	Beckjord - Silver Grove 138 ckt 1, Sum rate 304	365	Beckjord	Silver Grove	1	138		1-Jun-05	\$2,029,712	Planned
CIN	196	Madison West - Scottsburg 138 ckt 1, Sum rate 215	516	Madison West	Scottsburg	1	138		1-Jun-05	\$9,609,813	Planned
CIN	197	Louisville Cement Jct - Louisville Cement 138 ckt 1, Sum rate 130	520	Louisville Cement Jct	Louisville Cement	1	138		1-Dec-05	\$66,400	Planned
CIN	198	Port Union - Hall 138 ckt 1, Sum rate 300	594	Port Union	Hall	1	138		1-Jun-06	\$510,706	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
CIN	199	Kokomo - 230/138 ckt 1, Sum rate 200	356	Kokomo 230/138	transformer	2	230	138	1-Jun-07	\$3,278,756	Planned
CIN	200	West Lafayette Purdue - Purdue NW Tap 138 ckt 1, Sum rate 179	618	West Lafayette Purdue	Purdue NW Tap	1	138		1-Jun-07	\$9,878	Planned
CIN	201	NW Tap - West Lafayette 138 ckt 1, Sum rate 240	536	NW Tap	West Lafayette	1	138		1-Jun-08	\$100,000	Planned
CIN	302	Shawswick - Pleasant Grove - Airport Road Jct 138 kV line	614	Shawswick	Pleasant Grove	1	138		1-May-05	\$97,595	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
CIN	302	Shawswick - Pleasant Grove - Airport Road Jct 138 kV line	615	Pleasant Grove (terminal)	Airport Road Jct (terminal)	1	138		1-May-05	\$97,595	Planned
CIN	304	Gibson - Duff 345 ckt 1, Sum rate 1386	619	Gibson	Duff	1	345		1-Jun-05	\$100,000	Planned
CIN	426	Lafayette 138, 86.4 MVAR Capacitor	2051	Lafayette	Capacitor		138		1-Jun-05	\$391,514	Planned
Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
CIN	445	Buffington-Florence 138, 337 MVA Reactor (change Impedance from 5% to 3%)	2081	Buffington (Buff-Florence 138)	Reactor (change Impedance from 5% to 3%)		138		1-Jun-05	\$0	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
CIN	449	Batesville 138, 86.4 MVAR Capacitor	2085	Batesville	Capacitor		138		1-Jun-05	\$721,909	Planned
CIN	619	IPL Petersburg 345	1292	IPL Petersburg			345		1-Jun-06	\$200,000	Planned
CIN	620	Trenton - Todhunter 138	1294	Trenton	Todhunter		138		1-Jun-06	\$1,150,000	Planned
CIN	621	Veedersburg West - Cayuga 230 kV (wavetrap)	1296	Veedersburg West	Cayuga	1	230		1-Jun-06	\$60,760	Planned
CIN	622	Walton - Kokomo Webster St 230 ckt # 1	1297	Walton	Kokomo Webster St	1	230		1-Jun-06	\$60,760	Planned
CIN	623	Warren - Hillsboro 138 kV	1298	Warren	Hillsboro		138		1-Jun-06	\$1,350,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
CIN	624	Cloverdale - Plainfield South 138 ckt # 1	1300	Cloverdale	Plainfield South	1	138		1-Dec-06	\$4,54 5,972	Planned
CIN	626	Buffington - Hands 138 ckt # 1	1303	Buffington	Hands	1	138		1-Jun-07	\$1,00 0,134	Planned
CIN	627	Kenton - West End 138 ckt # 1	1304	Kenton	West End	1	138		1-Jun-07	\$1,98 0,041	Planned
CIN	628	Kokomo Delco - Kokomo Highland Park - Kokomo Chrysler 138 ckt # 1	1305	Kokomo Highland Park	Kokomo Chrysler	1	138		1-Jun-07	\$100, 000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
CIN	628	Kokomo Delco - Kokomo Highland Park - Kokomo Chrysler 138 ckt # 1	1306	Kokomo Highland Park	Kokomo Delco	1	138		1-Jun-07	\$100, 000	Planned
CIN	630	West Lafayette - Cumberland 138 ckt # 1	1307	West Lafayette	Cumberland	1	138		1-Jun-07	\$154, 757	Planned
CIN	631	Columbus - Seymour 138 ckt # 1	1308	Columbus	Seymour	1	138		1-Jun-09	\$100, 000	Planned
CIN	632	Gallagher - HE Georgetown 138 ckt # 1	1309	Gallagher	HE Georgetown	1	138		1-Jun-09	\$300, 000	Planned
CIN	764	Staunton 138 kV 43 MVAR Capacitor	3054	Staunton	Capacitor		138		1-Jun-06	\$500, 000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
CIN	765	Cloverdale 138 kV 43.2 MVAR Capacitor	3058	Cloverdale	Capacitor		138		1-Dec-06	\$524,860	Planned
CIN	766	Clarksville 138 kV 57.6 MVAR Capacitor	3060	Clarksville	Capacitor		138		1-Jun-07	\$500,000	Planned
CIN	767	Greenfield Hastings Park 138 kV 57.6 MVAR Capacitor	3062	Greenfield Hastings Park	Capacitor		138		1-Jun-07	\$500,000	Planned
FE	203	Beaver - Greenfield 138 ckt 1, Sum rate	375	Beaver	Greenfield	1	138		1-Jun-04	\$4,500,000	Planned
FE	428	Fowels 138, 212 MVAR Capacitor Bank (4 units)	2054	Fowels	Capacitor Bank (4 units)		138		1-Jun-04	\$4,301,069	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
FE	614	Star 345/138 kV transformer prep	1282	Star 345kV TX Prep.	Star 138kV TX Prep		345	138	1-Dec-05	\$4,486,000	Planned
Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
FE	615	Galion 345/138 kV transformer prep	1283	Galion 345kV TX Prep.	Galion 138kV TX Prep		345	138	1-Dec-06	\$1,000,000	Planned
FE	616	Crissinger - Tangy 138 kV line	1284	Crissinger	Tangy	1	138		1-Jun-06	\$4,750,000	Planned
FE	759	Eastlake 138 kV 2 x 52.8 MVAR Capacitors	3036	Eastlake	Two 52.8 MVAR capacitors		138		1-Jun-05	\$1,039,000	Planned
FE	760	Allen Junction 138 kV 2 x 52.8 MVAR Capacitors	3037	Allen Junction	Two 52.8 MVAR capacitors		138		1-Jun-05	\$958,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
FE	761	Wauseon 138 kV 53 MVAR One 52.8 MVAR capacitors	3038	Wauseon	One 52.8 MVAR capacitors		138		1-Jun-05	\$484,000	Planned
FE	762	Chamberlin 138 kV 53 MVAR One 52.8 MVAR capacitors	3039	Chamberlin	One 52.8 MVAR capacitors		138		1-Jun-05	\$1,229,000	Planned
FE	763	Carlisle 138 kV 2 x 52.8 MVAR Capacitors	3040	Carlisle	Two 52.8 MVAR capacitors		138		1-Jun-05	\$1,965,000	Planned
GRE	596	Vermillion River - Empire 115 kV line	1076	Vermillion River	Empire	1	115		1-May-07	\$2,750,000	Planned
GRE	597	Parkers Lake - Plymouth - Elm Creek 115 kV line	1081	Parkers Lake	Plymouth	1	115		1-May-06	\$3,660,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
GRE	597	Parkers Lake - Plymouth - Elm Creek 115 kV line	1082	Plymouth	Elm Creek	1	115		1-May-06	\$9,000,000	Planned
GRE	599	Crooked Lake - Enterprise Park 115 kV line	753	Crooked Lake	Enterprise Park	1	115		1-Jun-09	\$3,600,000	Planned
GRE	600	Baxter - Southdale 115 kV line	1078	Baxter	Southdale	1	115		31-Dec-06	\$3,500,000	Planned
GRE	601	Mud Lake - Wilson Lake 115 kV line	641	Mud Lake	Wilson Lake	1	115		1-Jun-08	\$6,000,000	Planned
GRE	753	Hubbard 115 kV 27 MVAR Capacitor	3022	Hubbard	Capacitor		115		1-Jun-05	\$594,661	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
IPL	40	Indian Creek - Julietta - Cumberland 138 ckt 1, Sum rate 286	177	Indian Creek	Julietta	1	138		1-Dec-06	\$951, 838	Planned
IPL	40	Indian Creek - Julietta - Cumberland 138 ckt 1, Sum rate 286	178	Julietta	Cumberland	1	138		1-Dec-06	\$866, 173	Planned
ITC	213	Arizona - Dayton - Collins 120 kV line	508	Arizona 120	Dayton 120	1	120		31-Dec-05	\$1,10, 0,000	Planned
Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ITC	213	Arizona - Dayton - Collins 120 kV line	509	Collins 120	Dayton 120	1	120		31-Dec-05	\$1,400,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ITC	215	Thumb Loop Rebuild: Rebuild Bergen - Tuscola 120 kV to double circuit creating Hunters Creek-Lapeer- BergenTP- Tuscola 120 and Hunters Creek- Fawn-Rush TP- Tuscola 120 kV	528	Hunters Creek 120	Lapeer 120	1	120		1-Jan-06	\$5,000,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ITC	215	Thumb Loop Rebuild: Rebuild Bergen - Tuscola 120 kV to double circuit creating Hunters Creek-Lapeer- BergenTP- Tuscola 120 and Hunters Creek- Fawn-Rush TP- Tuscola 120 kV	529	Lapeer 120	BergenTP 120	1	120		1-Jan-06	\$4,400,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ITC	215	Thumb Loop Rebuild: Rebuild Bergen - Tuscola 120 kV to double circuit creating Hunters Creek-Lapeer- BergenTP- Tuscola 120 and Hunters Creek- Fawn-Rush TP- Tuscola 120 kV	530	BergenTP 120	Tuscola 120	1	120		1-Jan-06	\$3,500,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ITC	215	Thumb Loop Rebuild: Rebuild Bergen - Tuscola 120 kV to double circuit creating Hunters Creek-Lapeer- BergenTP- Tuscola 120 and Hunters Creek- Fawn-Rush TP- Tuscola 120 kV	531	Hunters Creek 120	Fawn 120	1	120		1-Jan-06	\$4,800,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ITC	215	Thumb Loop Rebuild: Rebuild Bergen - Tuscola 120 kV to double circuit creating Hunters Creek-Lapeer-BergenTP-Tuscola 120 and Hunters Creek-Fawn-Rush TP-Tuscola 120 kV	532	Fawn 120	RushTP 120	1	120		1-Jan-06	\$3,300,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ITC	215	Thumb Loop Rebuild: Rebuild Bergen - Tuscola 120 kV to double circuit creating Hunters Creek-Lapeer- BergenTP- Tuscola 120 and Hunters Creek- Fawn-Rush TP- Tuscola 120 kV	533	RushTP 120	Tuscola 120	1	120		1-Jan-06	\$6,400,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ITC	322	Milan 345/120 substation, Milan-Lulu 345, Milan to Dorset, Kentucky, Majestic, Pioneer 120 kV lines	521	Dorset 120	Spruce 120	1	120		30-Dec-05	\$1,100,000	Planned
ITC	322	Milan 345/120 substation, Milan-Lulu 345, Milan to Dorset, Kentucky, Majestic, Pioneer 120 kV lines	522	Dorset 120	Noble 120	1	120		30-Dec-05	\$750,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ITC	322	Milan 345/120 substation, Milan-Lulu 345, Milan to Dorset, Kentucky, Majestic, Pioneer 120 kV lines	523	Dorset 120	Milan 120	1	120		30-Dec-05	\$2,300,000	Planned
Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ITC	322	Milan 345/120 substation, Milan-Lulu 345, Milan to Dorset, Kentucky, Majestic, Pioneer 120 kV lines	524	Kentucky 120	Milan 120	1	120		30-Dec-05	\$450,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ITC	322	Milan 345/120 substation, Milan-Lulu 345, Milan to Dorset, Kentucky, Majestic, Pioneer 120 kV lines	527	Milan 120	Pioneer 120	1	120		30-Dec-05	\$1,100,000	Planned
ITC	396	Wixom Station - Expansion: Split existing Placid-Wayne 345 kV circuit into Placid - Wixom and Wixom - Wayne 345 kV lines	506	Placid 345	Wixom 345	1	345		31-Dec-05	\$2,200,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ITC	396	Wixom Station - Expansion: Split existing Placid-Wayne 345 kV circuit into Placid - Wixom and Wixom - Wayne 345 kV lines	507	Wixom 345	Wayne 345	1	345		31-Dec-05	\$3,300,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ITC	503	Quaker project (conceptual): converting Wixom-Quaker 120 kV line to 230 kV, Wixom 345/230 TX, Quaker 230/120 TX, Quaker-Southfield 120 kV line.	757	Wixom 230	Quaker 230	1	230		30-Dec-07	\$2,300,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ITC	503	Quaker project (conceptual): converting Wixom-Quaker 120 kV line to 230 kV, Wixom 345/230 TX, Quaker 230/120 TX, Quaker-Southfield 120 kV line.	758	Wixom 345/230	transformer	1	345	230	30-Dec-07	\$5,000,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ITC	503	Quaker project (conceptual): converting Wixom-Quaker 120 kV line to 230 kV, Wixom 345/230 TX, Quaker 230/120 TX, Quaker-Southfield 120 kV line.	759	Quaker 230-120 kV	transformer	1	230	120	30-Dec-07	\$1,500,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ITC	503	Quaker project (conceptual): converting Wixom-Quaker 120 kV line to 230 kV, Wixom 345/230 TX, Quaker 230/120 TX, Quaker-Southfield 120 kV line.	760	Hancock 120	Southfield 120	1	120		30-May-07	\$1,200,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ITC	509	<p>Lenox Station: Lenox-Jewel 345 kV line, Lenox 345/120 kV station, a 120 kV bus that ties together several 120 kV lines in the area. (Jewel, Belle River, St Clair, Victor, Augusta tap, Grayling). Was New Haven, named changed to Lenox.</p>	761	Lenox 345	Jewel 345	1	345		30-May-07	\$1,750,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ITC	509	<p>Lenox Station: Lenox-Jewel 345 kV line, Lenox 345/120 kV station, a 120 kV bus that ties together several 120 kV lines in the area. (Jewel, Belle River, St Clair, Victor, Augusta tap, Grayling). Was New Haven, named changed to Lenox.</p>	762	Lenox 345	Belle River 345	1	345		30-May-07	\$1,750,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ITC	509	<p>Lenox Station: Lenox-Jewel 345 kV line, Lenox 345/120 kV station, a 120 kV bus that ties together several 120 kV lines in the area. (Jewel, Belle River, St Clair, Victor, Augusta tap, Grayling). Was New Haven, named changed to Lenox.</p>	763	Lenox 345-120 kV	transformer	1	345	120	30-May-07	\$5,000,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ITC	509	<p>Lenox Station: Lenox-Jewel 345 kV line, Lenox 345/120 kV station, a 120 kV bus that ties together several 120 kV lines in the area. (Jewel, Belle River, St Clair, Victor, Augusta tap, Grayling). Was New Haven, named changed to Lenox.</p>	764	Lenox 120	St Clair 120	1	120		30-May-07	\$1,300,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ITC	509	<p>Lenox Station: Lenox-Jewel 345 kV line, Lenox 345/120 kV station, a 120 kV bus that ties together several 120 kV lines in the area. (Jewel, Belle River, St Clair, Victor, Augusta tap, Grayling). Was New Haven, named changed to Lenox.</p>	765	Lenox 120	Victor 120	1	120		30-May-07	\$1,300,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ITC	509	<p>Lenox Station: Lenox-Jewel 345 kV line, Lenox 345/120 kV station, a 120 kV bus that ties together several 120 kV lines in the area. (Jewel, Belle River, St Clair, Victor, Augusta tap, Grayling). Was New Haven, named changed to Lenox.</p>	766	Lenox 120	Augusta Tap 120	1	120		30-May-07	\$1,300,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ITC	509	<p>Lenox Station: Lenox-Jewel 345 kV line, Lenox 345/120 kV station, a 120 kV bus that ties together several 120 kV lines in the area. (Jewel, Belle River, St Clair, Victor, Augusta tap, Grayling). Was New Haven, named changed to Lenox.</p>	767	Lenox 120	Grayling 2 120	1	120		30-May-07	\$1,300,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ITC	509	<p>Lenox Station: Lenox-Jewel 345 kV line, Lenox 345/120 kV station, a 120 kV bus that ties together several 120 kV lines in the area. (Jewel, Belle River, St Clair, Victor, Augusta tap, Grayling). Was New Haven, named changed to Lenox.</p>	768	Lenox 120	Grayling 1 120	1	120		30-May-07	\$1,300,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ITC	518	Bismark-Golf 120 kV line: create a 120 kV bus group at Golf and building a new 120 kV line from Bismarck to Golf.	769	Golf 120	Bismark 120	1	120		31-Dec-05	\$2,500,000	Planned
ITC	518	Bismark-Golf 120 kV line: create a 120 kV bus group at Golf and building a new 120 kV line from Bismarck to Golf.	770	Golf 120	Boyne 120	1	120		30-May-07	\$1,200,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ITC	518	Bismark-Golf 120 kV line: create a 120 kV bus group at Golf and building a new 120 kV line from Bismarck to Golf.	771	Golf 120	Houston 2 120	1	120		30-May-07	\$1,200,000	Planned
ITC	518	Bismark-Golf 120 kV line: create a 120 kV bus group at Golf and building a new 120 kV line from Bismarck to Golf.	772	Golf 120	Macomb 120 #1	1	120		31-Dec-05	\$1,000,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ITC	518	Bismark-Golf 120 kV line: create a 120 kV bus group at Golf and building a new 120 kV line from Bismarck to Golf.	773	Golf 120	Macomb 120 #2	2	120		30-May-07	\$1,600,000	Planned
ITC	518	Bismark-Golf 120 kV line: create a 120 kV bus group at Golf and building a new 120 kV line from Bismarck to Golf.	1375	Bismarck 120 kV	Malta 120 kV	1	120		31-Dec-05	\$700,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ITC	523	ITC-METC Interface Upgrade: (Rebuilding of Genoa-Latson 138 kV, Hunters Creek-Hemphill 138 kV, Atlanta 138-120 kV transformer, Genoa 138-120 kV transformer). This project involves replacing existing transformers with higher rated units.	700	Atlanta 138-120	transformer	1	138	120	30-May-05	\$1,200,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ITC	523	ITC-METC Interface Upgrade: (Rebuilding of Genoa-Latson 138 kV, Hunters Creek-Hemphill 138 kV, Atlanta 138-120 kV transformer, Genoa 138-120 kV transformer). This project involves replacing existing transformers with higher rated units.	701	Genoa 138-120 kV	transformer	1	138	120	30-May-05	\$1,200,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ITC	523	ITC-METC Interface Upgrade: (Rebuilding of Genoa-Latson 138 kV, Hunters Creek-Hemphill 138 kV, Atlanta 138-120 kV transformer, Genoa 138-120 kV transformer). This project involves replacing existing transformers with higher rated units.	703	Hunters Creek 120	Hemphill 120	1	120		30-May-05	\$900,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ITC	523	ITC-METC Interface Upgrade: (Rebuilding of Genoa-Latson 138 kV, Hunters Creek-Hemphill 138 kV, Atlanta 138-120 kV transformer, Genoa 138-120 kV transformer). This project involves replacing existing transformers with higher rated units.	776	Atlanta 120	Tuscola 120	1	120		30-May-05	\$350,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ITC	529	Macomb 120 kV capacitor	2087	Macomb	Capacitor Bank		120		31-May-05	\$535,000	Planned
ITC	565	Pontiac-Hampton 345 kV line upgrade	702	Oakly 120	Tuscola 120	1	120		30-May-05	\$350,000	Planned
ITC	565	Pontiac-Hampton 345 kV line upgrade	704	Pontiac 345	Hampton 345	1	345		30-May-05	\$250,000	Planned
ITC	578	DVARs at Bad Axe and Lee	2100	Bad Axe	DVAR		120		31-May-05	\$3,500,000	Planned
ITC	578	DVARs at Bad Axe and Lee	2101	Lee	DVAR		120		31-May-05	\$3,500,000	Planned
Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ITC	581	Caniff - Stephens 345 kV cable replacement	775	Stephens 345	Caniff 345	1	345		30-May-05	\$14,300,000	Planned
ITC	683	Northeast 120 kV - Lincoln 120 kV	1373	Northeast 120 kV	Lincoln 120 kV	1	120		30-May-05	\$250,000	Planned
ITC	684	Milan 345/120 kV	1374	Milan 345/120 kV	transformer	1	345	120	30-Dec-05	\$5,000,000	Planned
ITC	685	Pontiac 120 kV - Stratford 120 kV	1376	Pontiac 120 kV	Stratford 120 kV	1	120		31-Dec-05	\$500,000	Planned
LES	242	19th & Alvo - NW 12th & Arbor 115 ckt 1, Sum rate 373	191	19th & Alvo	NW 12th & Arbor	1	115		1-May-05	\$3,100,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
LES	246	NW68th & Holdrege - NW 12th & Arbor 115 ckt 1, Sum rate 373	193	NW68th & Holdrege	NW 12th & Arbor	1	115		1-May-07	\$4,608,246	Planned
LES	247	Wagener - NW68th & Holdrege 345 ckt 1, Sum rate 1088	541	Wagener	NW68th & Holdrege	1	345		1-May-08	\$22,033,174	Planned
LES	590	56th & Pine Lake - 40th & Rokeby - 27th & Pine Lake 115 kV line	684	27th & Pine Lake	40th & Rokeby	1	115		1-May-06	\$1,674,138	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
LES	590	56th & Pine Lake - 40th & Rokeby - 27th & Pine Lake 115 kV line	685	56th & Pine Lake	40th & Rokeby	1	115		1-May-06	\$1,674,138	Planned
LGEE	305	Middletown 345/138 transformers 1, 2, & 3 to 448 MVA	490	Middletown 345-138 kV	transformer	1	345	138	31-May-04	\$125,000	Planned
LGEE	305	Middletown 345/138 transformers 1, 2, & 3 to 448 MVA	491	Middletown 345-138 kV	transformer	2	345	138	31-May-04	\$125,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
LGEE	305	Middletown 345/138 transformers 1, 2, & 3 to 448 MVA	492	Middletown 345-138 kV	transformer	3	345	138	31-May-04	\$125,000	Planned
LGEE	310	Northside - Beargrass - Jeffersonville Jct. (CIN) 138 kV lines	489	Beargrass	Jeffersonville Jct. (CIN)	1	138		31-May-04	\$52,000	Planned
LGEE	310	Northside - Beargrass - Jeffersonville Jct. (CIN) 138 kV lines	494	Northside	Beargrass	1	138		31-May-04	\$52,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
LGEE	310	Northside - Beargrass - Jeffersonville Jct. (CIN) 138 kV lines	495	Northside	Jeffersonville Jct. (CIN)	1	138		31-May-04	\$52,000	Planned
LGEE	313	Middletown - Buckner 345 ckt 1, Sum rate 1066	493	Middletown	Buckner	1	345		31-May-04	\$5,000	Planned
Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
METC	120	Farr Road - Tippy - Hodenpyl 138 line	534	Farr Road J.	Tippy	1	138		1-May-05	\$3,150,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
METC	120	Farr Road - Tippy - Hodenpyl 138 line	535	Tippy	Hodenpyl	1	138		1-May-06	\$2,200,000	Planned
METC	227	METC - Gaylord 138 ckt 1, Sum rate	631	METC	Gaylord	1	138		1-Oct-04	\$215,000	Planned
METC	229	METC - Barnum Creek 138 ckt 1, Sum rate 190	345	METC	Barnum Creek	1	138		1-Dec-04	\$252,000	Planned
METC	230	METC - Cheesman 138 ckt 1, Sum rate	632	METC	Cheesman	1	138		1-Dec-04	\$80,000	Planned
METC	231	Cobb - Brickyard 138 ckt 1, Sum rate	346	Cobb	Brickyard J.	1	138		1-May-05	\$905,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
METC	232	Pere Marquette - Stronach 138 ckt 1, Sum rate	518	Pere Marquette	Stronach	1	138		1-May-05	\$4,200,000	Planned
METC	234	METC - Ransom 138 ckt 1, Sum rate 386	342	METC	Ransom	1	138		1-Jun-05	\$1,100,000	Planned
METC	236	METC - Bayberry 138 ckt 1, Sum rate	519	METC	Bayberry	1	138		31-Dec-05	\$107,000	Planned
METC	237	METC - Titus 138 ckt 1, Sum rate	634	METC	Titus	1	138		1-Jun-05	\$160,000	Planned
METC	238	METC - Vernon 138 ckt 1, Sum rate	635	METC	Vernon/Bard	1	138		1-Jun-05	\$184,000	Planned
METC	239	METC - Withey Lake 138 ckt 1, Sum rate	636	METC	Withey Lake	1	138		1-Jun-05	\$184,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
METC	240	Garfiled - Hemphill 138 ckt 1, Sum rate 521	336	Garfiled	Hemphill	1	138		1-Jun-08	\$1,900,000	Planned
METC	476	Alma 138 kV 7.2 MVAR capacitor additions	3076	Alma	Capacitor addition		138		1-Jun-05	\$50,000	Planned
METC	477	Batavia 138 kV 7.2 MVAR capacitor additions	3077	Batavia	Capacitor addition		138		1-Jun-05	\$50,000	Planned
METC	482	Tittabawassee 5 Ohm Reactors (add)	1315	Tittabawassee Reactors		1&2	138		1-May-05	\$1,200,000	Planned
METC	484	Black River 138 kV 26 MVAR capacitor addition	2046	Black River	Capacitors		138		1-Jun-05	\$800,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
METC	485	Gallagher 138 kV 36 MVAR capacitor	3078	Gallagher	Capacitors		138		1-Jun-05	\$900,000	Planned
METC	490	Croton -Felch Road 138 kV (increase capacity)	1318	Croton (switches)	Felch Road	1	138		1-Jun-05	\$180,000	Planned
METC	634	Gaylord 138 - Gaylord 138 bus switches 138 ckt # 1	1313	Gaylord 138	Gaylord 138 bus switches	1	138		31-Dec-04	\$110,000	Planned
METC	635	METC - West Fenton 138 ckt # 1	1314	METC	West Fenton	1	138		1-May-05	\$20,000	Planned

Reporting Source	Project ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
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Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
		D									
METC	637	Hemphill - Hunters Creek 138 ckt # 1	1319	Hemphill	Hunters Creek (ITC)	1	120		1-Jun-05	\$220,000	Planned
METC	638	Hemphill 138 - Hemphill bus switches 138 ckt # 1	1320	Hemphill 138	Hemphill bus switches	1	138		1-Jun-05	\$50,000	Planned
METC	639	METC - Packard 138 ckt # 1	1321	METC	Packard	1	138		1-Jun-05	\$100,000	Planned
METC	640	METC - David 138 ckt # 1	1323	METC	David	1	138		1-Nov-05	\$170,000	Planned
METC	644	METC - Rogue River 138 ckt # 1	1327	METC	Rogue River	1	138		1-Jun-06	\$160,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
METC	740	METC 345 kV line relaying and communications upgrade project	1434	Gallagher	Tittabawassee	1	345		31-Dec-05	\$1,000,000	Planned
METC	740	METC 345 kV line relaying and communications upgrade project	1435	Keystone	Livingston	1	345		31-Dec-05	\$1,000,000	Planned
METC	740	METC 345 kV line relaying and communications upgrade project	1436	Livingston	Gallagher	1	345		31-Dec-05	\$794,000	Planned
METC	769	Tittabawassee 345 kV Breaker Replacements 3000 Amp	3074	Tittabawassee	Breaker Replacements		345		31-Dec-04	\$500,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
METC	770	Hampton 345 kV Breaker Replacement 3000 Amp	3075	Hampton	Breaker Replacement		345		1-Apr-05	\$500,000	Planned
METC	771	Hemphill, Thetford & Tallmadge 138 kV Breaker Replacements 40 KA	3079	Hemphill, Thetford & Tallmadge	Breaker Replacements		138		1-Jun-05	\$1,400,000	Planned
METC	772	Tallmadge 345 kV Transformer Bushing Replacements TBD	3080	Tallmadge	Transformer Bushing Replacements		345		1-Jun-05	\$258,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
METC	773	Tittabawassee & Kenoa 345 kV Breaker Replacements 3000 Amp	3081	Tittabawassee & Kenowa	Breaker Replacements		345		31-Dec-05	\$1,600,000	Planned
NIPS	118	Hiple 345 kV interconnection (NIPS-AEP) to East Elkhart-Collingwood 345	382	Hiple	East Elkhart	1	345		1-Apr-04	\$4,000,000	Planned
NIPS	118	Hiple 345 kV interconnection (NIPS-AEP) to East Elkhart-Collingwood 345	383	Hiple	Collingwood	1	345		1-Apr-04	\$4,000,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
NIPS	437	Hiple 138, 60MVAR Capacitor bank (2 steps of 30MVAR)	2070	Hiple	Capacitor bank (2 steps of 30MVAR)		138		1-Nov-04	\$1,400,000	Planned
NIPS	438	Leesburg 138, 84MVAR Capacitor bank (2 steps of 42MVAR)	2071	Leesburg	Capacitor bank (2 steps of 42MVAR)		138		1-Nov-04	\$1,600,000	Planned
Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
NIPS	467	Northeast-Kline 138	1278	Northeast	Kline	1	138		1-Jun-05	\$211,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
NIPS	613	Dune Acres - Michigan City 138 kV double circuit. Upgrade terminal equipment & 1 mile reconductor	1280	Dune Acres	Michigan City	1	138		1-Feb-05	\$167,000	Planned
NIPS	613	Dune Acres - Michigan City 138 kV double circuit. Upgrade terminal equipment & 1 mile reconductor	1281	Dune Acres	Michigan City	2	138		1-Feb-05	\$167,000	Planned
NIPS	757	Dune Acres 138 kV 100 MVAR Capacitor bank (1 step)	3034	Dune Acres	Capacitor bank (1 step)		138		1-Jun-06	\$1,034,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
NIPS	758	Miller 138 kV 100 MVAR Capacitor bank (1 step)	3035	Miller	Capacitor bank (1 step)		138		1-Jun-06	\$990,500	Planned
OTP/MPC	263	Wilton 230 - 230/115 ckt 2, Sum rate 187	238	Wilton 230-115 kV	transformer	2	230	115	1-Jun-05	\$4,073,336	Planned
OTP/MPC/XE L	46	Maple River 230/115 TX # 2 187 MVA, Maple River 345/230 TX #3 336 MVA, Winger 230-115 TX 187 MVA	233	Maple River 230- 115 kV	transformer	2	230	115	1-Jun-05	\$4,684,476	Planned
SIPC	81	Marion - CarrierMills 161 ckt 1, Sum rate 286	60	Marion	CarrierMills	1	161		1-Jun-06	\$7,083,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
Vectren	180	A B Brown - Henderson (add 9 ohm reactor) 138 and A B Brown (SIGE) - Northwest(SIGE)) 138 ckt 2	380	A B Brown (SIGE)	Northwest (SIGE)	2	138		1-Jun-06	\$2,650,000	Planned
Vectren	677	Duff (SIGE) - Dubois (SIGE) 138 ckt # 2	1366	Duff (SIGE)	Dubois (SIGE)	2	138		1-Jun-06	\$2,150,000	Planned
Vectren	781	Heidelberg 138 kV 31 MVAR Capacitor bank	3089	Heidelberg	Capacitor bank		138		31-May-05	\$500,000	Planned
Vectren	782	Angel Mounds 138 kV 31 MVAR Capacitor bank	3090	Angel Mounds	Capacitor bank		138		31-May-05	\$550,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
XEL	56	Chisago - Lawrence Creek 115, Lawrence Creek - St Croix Falls - Apple River 161	301	Chisago	Lindstrom	1	115		31-Dec-07	\$10,100,000	Planned
XEL	56	Chisago - Lawrence Creek 115, Lawrence Creek - St Croix Falls - Apple River 161	303	Lawrence Creek	St Croix Falls	1	161		31-Dec-07	\$9,080,000	Planned
XEL	56	Chisago - Lawrence Creek 115, Lawrence Creek - St Croix Falls - Apple River 161	304	Lawrence Creek 161-115 kV	transformer	1	161	115	31-Dec-07	\$6,000,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status	
XEL	56	Chisago - Lawrence Creek 115, Lawrence Creek - St Croix Falls - Apple River 161	306	Lindstrom	Shafer	1	115		31-Dec-07	\$5,800,000	Planned	
	Reporting Source	P ro - I D	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
XEL	56	Chisago - Lawrence Creek 115, Lawrence Creek - St Croix Falls - Apple River 161	310	Shafer	Lawrence Creek	1	115		31-Dec-07	\$3,500,000	Planned	

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
XEL	56	Chisago - Lawrence Creek 115, Lawrence Creek - St Croix Falls - Apple River 161	312	St Croix Falls	Apple River	1	161		31-Dec-07	\$23,790,000	Planned
XEL	257	Aldrich - St. Louis Park 115 ckt 1, Sum rate 310	249	Aldrich	St. Louis Park	1	115		1-Jun-06	\$975,391	Planned
XEL	262	Red Rock - Rogers Lake 115 ckt 2, Sum rate 310	250	Red Rock	Rogers Lake	2	115		15-Dec-04	\$1,137,956	Planned
XEL	265	Glencoe - McLeod 115 ckt 1, Sum rate 300	561	Glencoe	McLeod	1	115		1-May-05	\$4,282,860	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
XEL	267	Lawrence - Minnehaha 115 ckt 1, Sum rate 310	563	Lawrence	Minnehaha	1	115		1-Jun-06	\$829,667	Planned
XEL	268	Minnehaha - Lincoln County 115 ckt 1, Sum rate 310	564	Minnehaha	Lincoln County	1	115		1-Jun-06	\$925,398	Planned
XEL	269	Prairie Island - Red Rock 345 ckt 2, Sum rate 1198	1137	Prairie Island	Red Rock	2	345		1-Jun-06	\$9,110,072	Planned
XEL	276	Inver Hills - Koch 115 ckt 2, Sum rate 310	576	Inver Hills	Koch	2	115		1-Jun-06	\$2,211,655	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
XEL	366	Sherco - Monticello 115 and Sherco - St Cloud 115 kV lines, Sherco 345/115 transformer	569	I94 Industrial Park tap	Salida Crossing	1	115		1-Jun-06	\$2,432,170	Planned
XEL	366	Sherco - Monticello 115 and Sherco - St Cloud 115 kV lines, Sherco 345/115 transformer	571	Salida Crossing	Sherco	1	115		1-Jun-06	\$765,368	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
XEL	366	Sherco - Monticello 115 and Sherco - St Cloud 115 kV lines, Sherco 345/115 transformer	572	Sherco	Monticello	1	115		1-Jun-06	\$714,344	Planned
XEL	366	Sherco - Monticello 115 and Sherco - St Cloud 115 kV lines, Sherco 345/115 transformer	573	Sherco 345-115 kV	transformer	1	345	115	1-Jun-06	\$3,001,443	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
XEL	366	Sherco - Monticello 115 and Sherco - St Cloud 115 kV lines, Sherco 345/115 transformer	574	St Cloud	I94 Industrial Park tap	1	115		1-Jun-06	\$850,409	Planned
XEL	417	Westgate 115, 80 MVAR Capacitor	2038	Westgate	Capacitor		115		1-Jun-08	\$1,500,000	Planned
XEL	561	Granite City 115 kV 2x40 MVAR capacitors	2086	Granite City	Capacitor		115		1-Jun-05	\$2,500,000	Planned
XEL	666	Maple River - Red River 115 ckt # 1	1354	Maple River	Red River	1	115		1-Jun-05	\$800,000	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
XEL	671	Oakdale - Tanners Lake 115 ckt # 1	1359	Oakdale	Tanners Lake	1	115		1-Jun-06	\$800,000	Planned
XEL	672	Wilmarth - Eastwood 115 ckt # 1	1360	Wilmarth	Eastwood	1	115		1-Jun-06	\$1,300,000	Planned
Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ATC LLC	11	Rhineland 115 kV Loop Short-Term Solution	2007	Cross Country	Capacitor bank		138		1-May-04	\$1,044,808	Proposed

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ATC LLC	22	Femrite - Sprecher 138 (new), Sprecher - Reiner 138 (conversion), Reiner - Sycamore 138 (conversion),	2011	Kegonsa	Capacitor bank		138		1-May-04	\$1,044,808	Proposed
ATC LLC	407	Loch Mirror (Birchwood) 138, 24 MVAR Capacitor bank	2012	Loch Mirror (Birchwood)	Capacitor bank		138		1-May-04	\$1,034,183	Proposed
ATC LLC	404	Clear Lake 115, 6 MVA Facts (D-SMES)	2006	Clear Lake	Facts (D-SMES)		115		1-Jul-04	\$1,900,000	Proposed
ATC LLC	431	Moorland 138, 54 MVAR Capacitor bank	2060	Moorland	Capacitor bank		138		1-Jun-05	\$750,000	Proposed

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ATC LLC	678	North Appleton - Werner West (Uprate) 345 kV	1367	North Appleton	Werner West (Uprate)		345		1-Dec-05	\$2	Proposed
ATC LLC	679	Werner West - Rocky Run (Uprate) 345 kV	1368	Werner West	Rocky Run (Uprate)		345		1-Dec-05	\$2	Proposed
ATC LLC	168	Werner West transformer - 345/138 ckt , Sum rate 500	436	Werner West	transformer		345	138	1-May-06	\$13,500,000	Proposed
ATC LLC	1	Arrowhead - Gardner Park 345 kV line	1453	Cornell (4.5 ohm reactor)	Fiebrantz		138		1-Jun-06	\$0	Proposed
ATC LLC	175	Ellinwood - Sunset Point 138 ckt , Sum rate	463	Ellinwood	Sunset Point		138		1-Jun-06	\$2,500,000	Proposed

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ATC LLC	430	Burlington 138, 50 MVAR Capacitor bank	2059	Burlington	Capacitor bank		138		1-Jun-06	\$1,000,000	Proposed
ATC LLC	433	Wautoma 138, 32.6 MVAR Capacitor bank	2062	Wautoma	Capacitor bank		138		1-Jun-06	\$500,000	Proposed
ATC LLC	446	Butler Ridge 138 kV, 36 MVAR Capacitor bank	2082	Butler Ridge (new generation site near Hartford)	Capacitor bank		138		1-Jun-06	\$750,000	Proposed
ATC LLC	432	Antigo (was Hogan St) 115, 13.6 MVAR Capacitor bank	2061	Antigo (was Hogan St)	Capacitor bank		115		1-Jun-06	\$1,820,000	Proposed
CILCO	142	R S Wallace - Substation (sub relocation) 138 ckt 1, Sum rate	391	R S Wallace	Substation (sub relocation)	1	138		1-Jun-06	\$5,082,700	Planned

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
CIN	618	Beckjord 138	1290	Beckjord	(rebuild substation)		138		1-Jun-06	\$1,738,266	Proposed
CIN	625	Pierce/Beckjord 345/138 kV - 345/138 ckt # C	1301	Pierce/Beckjord	transformer 345/138 kV	C	345	138	1-Dec-06	\$1,600,000	Proposed
Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
ITC	528	Placid 120 kV capacitor	2088	Placid	Capacitor Bank		120		31-May-05	\$425,000	Proposed
LGEE	314	Lake Reba Tap - JK Smith (EKPC) 138 ckt 1, Sum rate 251	161	Lake Reba Tap	JK Smith (EKPC)	1	138		30-Nov-05	\$5,000	Proposed
LGEE	315	Plainview tap - Middletown - Bluegrass Parkway 138 kV line	620	Middletown	Bluegrass Parkway	1	138		31-Dec-05	\$3,320,000	Proposed

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
METC	494	Battle Creek - Verona 138kV #1 & #2 Line, Remove Sag Limit	1317	Battle Creek	Verona(Sag)	2	138		1-Jun-05	\$50,000	Proposed
METC	497	Tallmadge - Wealthy Street 138 kV line #2	1322	Tallmadge	Wealthy	2	138		1-Jun-05	\$1,000	Proposed
METC	636	Amber 1 - Amber 2 138 ckt # 1	1316	Amber 1	Amber 2	1	138		1-Jun-05	\$1,000	Proposed
METC	641	Redwood - Oceana 138 ckt # 1	1324	Redwood	Oceana	1	138		1-Dec-05	\$2,000,000	Proposed
METC	422	Various 138, 200MVAR Capacitors	2047	Various	Capacitors		138		1-Jun-06	\$2,000,000	Proposed

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
METC	642	Argenta - Hazelwood (Sag) 138 ckt # 1	1325	Argenta	Hazelwood(Sag)	1	138		1-Jun-06	\$50,000	Proposed
METC	643	Gaines - Thompson Road 138 ckt # 1	1326	Gaines	Thompson Road	1	138		1-Jun-06	\$500,000	Proposed
METC	774	Gaylord 138 kV 36 MVAR Capacitors	3082	Gaylord	Capacitors		138		1-Jun-06	\$900,000	Proposed
METC	775	Iosco 138 kV 18 MVAR Capacitors	3083	Iosco	Capacitors		138		1-Jun-06	\$800,000	Proposed
METC	741	METC 345 kV line relaying and communications upgrade project - Phase 2	1437	Argenta	Battle Creek	1	345		31-Dec-06	\$3,000,000	Proposed

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
METC	741	METC 345 kV line relaying and communications upgrade project - Phase 2	1438	Battle Creek	Oneida	1	345		31-Dec-06	\$3,000,000	Proposed
METC	741	METC 345 kV line relaying and communications upgrade project - Phase 2	1439	Argenta	Tompkins	1	345		31-Dec-06	\$2,415,000	Proposed
Vectren	436	Northeast 138, 60 MVAR Capacitor bank	2069	Northeast	Capacitor bank		138		31-May-05	\$550,000	Proposed
XEL	270	Champlin - Champlin Tap 115 ckt 1, Sum rate 310	1138	Champlin	Champlin Tap	1	115		1-Jun-06	\$382,923	Proposed

Reporting Source	Pro-ID	Project Description	Fac-ID	From Sub	To Sub	Ckt	Line or HS kV	LS kV	Expected ISD	Estimated Cost	MTEP 05 Status
XEL	609	Long Lake - Woodbury 115 kV line	800	Long Lake	Oakdale (from Woodbury)	1	115		1-Jun-06	\$760,000	Proposed
XEL/WAPA	610	White - Buffalo Ridge 115 kV line & White 345/115 kV TX #2	646	White 345-115 kV	transformer	1	345	115	1-Jun-06	\$12,179,190	Proposed
XEL/WAPA	610	White - Buffalo Ridge 115 kV line & White 345/115 kV TX #2	645	White	Buffalo Ridge	1	115		1-Jun-06	\$10,178,228	Proposed

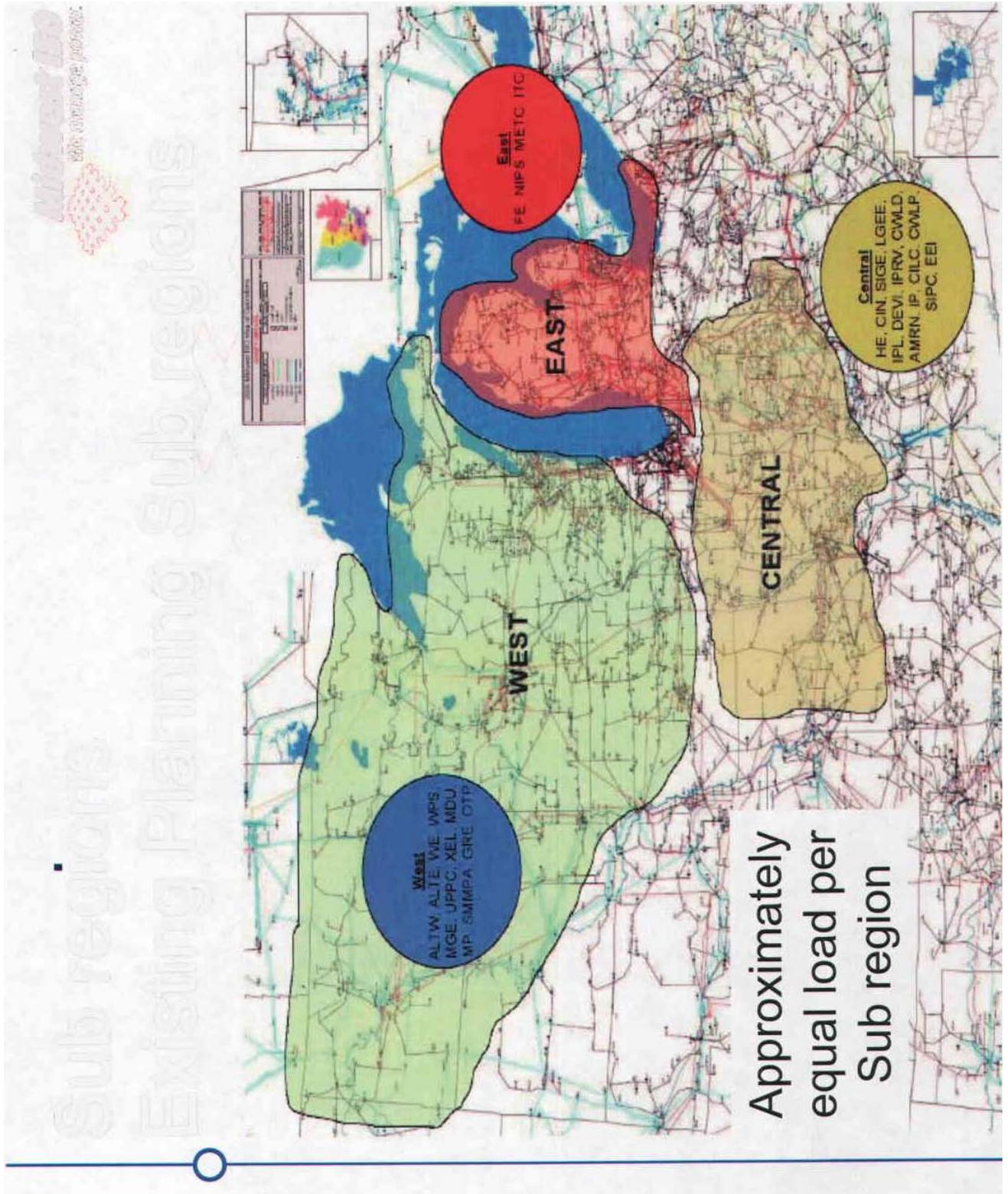
ATTACHMENT FF-2 LODF Table Version: 0.0.0 Effective: 7/28/2010

ATTACHMENT FF-2

LODF TABLE

Sample Sub-Regional Allocations for 22 Facilities Based on LODF

		Prairie State Power Plant Transmission outlet	Chisago-AppleRiver	Jefferson City 345/161	Jefferson-Loose Creek 345	Moreau-Apache Flats 161 Rosser-Silver 230, 2005	Rosser-Silver 230, 2005	Callaway-Franks 345, 2006	Columbia-N Madison 138 kV converted to 345, 2006	Wagner-NW68th & Holdrege, 2008	BuffaloRidge Split Rock-Nobles Co 345kV	BuffaloRidge Nobles-Lakefield 345kV	BuffaloRidge NoblesCo 345-115	BuffaloRidge Buffalo-White 115	BuffaloRidge Chammb-Fenton 115	BuffaloRidge Fenton-Nobles 115	MillCrk-Hardin 345	Callaway-Franks 345	Stone Lake 345/161	Auburn N-Chatham 138	North Madison-Waunakee	Milan-Pioneer 120	Hilcrest-Eastwood 138 kV	
FE	202			0%	0%	0%					0%	0%	0%	0%	0%	0%							10%	0%
HE	207			0%	0%	0%					0%	0%	0%	0%	0%	0%	3%							0%
CIN	208			0%	0%	0%					0%	0%	0%	0%	0%	0%	14%							100%
VECT	210			0%	0%	0%					0%	0%	0%	0%	0%	0%	2%							0%
LGEE	211			0%	0%	0%					0%	0%	0%	0%	0%	0%	77%							0%



ATTACHMENT FF-4 Transmission Owners Integrating Local Planning Processes Version: 3.0.0 Effective: 1/1/2012

ATTACHMENT FF-4

TRANSMISSION OWNERS INTEGRATING LOCAL PLANNING PROCESSES INTO

TRANSMISSION PROVIDER PLANNING PROCESSES

FOR ORDER 890 COMPLIANCE

(NOT FILING A SEPARATE LOCAL PLANNING PROCESSES)

Allele, Inc. d/b/a Minnesota Power

AmerenCILCO

AmerenIPAmerenUE and AmerenCIPS

Big Rivers Electric Corporation

City Water, Light and Power (Springfield IL)

Dairyland Power Cooperative

Duke Energy Business Services, LLC (f/k/a Cinergy Services, Inc.) Duke Energy Indiana, Inc.
(f/k/a PSI Energy, Inc.)

Great River Energy

Hoosier Energy Rural Electric Cooperative, Inc.

Indiana Municipal Power Agency

Indianapolis Power & Light Company

ITC Midwest, LLC

Michigan Electric Transmission Company, LLC.

Michigan Public Power Agency

Michigan South Central Power Agency

Missouri River Energy Services

Montana-Dakota Utilities Co.

Muscatine Power and Water

Northern Indiana Public Service Company

Northern States Power Companies (Northern States Power Company, a Minnesota corporation,
and Northern States Power Company, a Wisconsin corporation)

Northwestern Wisconsin Electric Company

Otter Tail Power Company

Southern Illinois Power Cooperative

Southern Minnesota Municipal Power Agency

Vectren Energy for Southern Indiana Gas & Electric Company

Wabash Valley Power Association, Inc.

Wolverine Power Supply Cooperative

INDEPENDENT TRANSMISSION COMPANIES:

International Transmission Company

***ATTACHMENT FF-5 Transmission Owners with Separate Local
Planning Processes Version: 1.0.0 Effective: 6/1/2011***

ATTACHMENT FF-5

TRANSMISSION OWNERS WITH SEPARATE LOCAL PLANNING PROCESSES

American Transmission Company, LLC

MidAmerican Energy Company