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December 5, 2005

Ms. Christy L. Zehner, Secretary  
Public Service Commission of Wisconsin  
P.O. Box 7854  
Madison, WI 53707-7854

Re: Docket No. 137-EI-100  
Investigation on the Commission's Own Motion of American Transmission  
Company's Access Initiative to Strengthen Electric Transmission Ties to Areas  
Beyond ATC's System Footprint

Dear Ms. Zehner:

In addition to the comments of American Transmission Company filed via  
ERFS, enclosed for filing is a CD which is a video entitled Attachment A  
to the December 5, 2005 American Transmission Company Comments on  
Staff Report. By copy of this letter, we are serving a copy of the CD by  
first class mail on the parties listed on the service list.

Please date stamp the extra copy of this letter and return to our messenger.  
Thank you.

Sincerely,

CULLEN WESTON PINES & BACH LLP



Lee Cullen

LC/lsh

Enclosures

cc: Service List

Administrative Law Judge David Whitcomb

**BEFORE THE  
PUBLIC SERVICE COMMISSION OF WISCONSIN**

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**Investigation on the Commission's Own Motion of American  
Transmission Company's Access Initiative to Strengthen Electric  
Transmission System Ties to Areas beyond ATC's System Footprint** **137-EI-100**

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**COMMENTS OF AMERICAN TRANSMISSION COMPANY  
ON THE STAFF DRAFT REPORT**

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These are the comments of the American Transmission Company (ATC) on the Commission Staff Draft Report (Report) in the above proceeding.

**I. Summary of ATC's Comments.**

In Section II of these comments, ATC provides specific information regarding Staff's observations about ATC's methodology in the Access Initiative. It states where it agrees with Staff's observations, and where it believes clarifications are appropriate.

ATC agrees with the policy questions that Staff poses for this proceeding. Section III of these comments provides ATC's perspective on these questions. In this section ATC explains why it believes that the Commission urgently needs to exercise decisive policy leadership in this proceeding. Where useful, ATC also provides supplementary information relevant to specific questions.

Finally, in Section IV, ATC presents two specific policy options for Commission consideration in this proceeding. These options are to either:

- 1) Develop and file a CPCN application for the Paddock Rockdale project no later than November 2008, while placing a high priority on further analysis of the Byron or Salem projects, or
- 2) Develop and file a CPCN application for either the Byron or Salem project no later than November 2008.

**II. ATC's Comments on Staff's Concerns about ATC's Methodology.**

The Report (p. 9) lists Staff concerns about ATC's Access Study Initiative Report. ATC provides the following additional information regarding its ASI Report:

**A. The financial analysis is a good screening technique but is not adequate for determining a commercially beneficial scenario for the ATC footprint.**

The ASI Report presents a screening-level analysis of five project packages. For each access alternative, ATC included all cost-effective complementary projects. ATC did not perform present-value calculations, as did Staff in its Revenue Requirement Analysis. However, it did optimize each access alternative economically. ATC's methodology is described in the ASI Report:

For the first PROMOD constraint identified for each proxy project, an appropriate transmission solution was developed and the analysis was rerun with the solution implemented to determine the next limit. For each scenario, this process was repeated until it was apparent that resolving the limit was not cost-effective based on the PROMOD analysis (i.e. additional low-voltage projects were only considered if sufficient additional production-cost savings were obtained.

(ASI Report, p. 5)

The Report (p. 1, item 13) states that "it may not be appropriate to eliminate all economic congestion with transmission additions" and that the focus should be on "the elimination of only the largest and most frequent economic flow impediments." This is why ATC used the above method to develop economically optimal project packages. In ATC's analyses, numerous transmission flowgates reported high shadow prices, which means that they were congested. But ATC only applied complementary transmission "fixes" to relieve congestion when they paid for themselves in energy savings (see Table 4 of the ASI Report for a list of these projects). The access alternatives that ATC is presenting to the Commission do not relieve all of the 2013 congestion irrespective of cost. They resolve only some of the expected 2013 congestion, and only when it is economically beneficial to do so.

The economic analysis in the ASI Report is not the only study submitted by ATC in this proceeding. For example, the ASI Report (p. 24-29) also contains detailed analyses of the reliability impacts of the access options (e.g. on LOLE and EUE). Reducing internal reserve margins and customer outages has obvious commercial and economic impacts. ATC has also provided other analyses in order to aid the Commission in this proceeding (e.g. the Assessment of Other Factors Report filed on August 15, 2005 and the Transportation Limits and Congestion Costs Report filed on October 13, 2005). The Intervening Utilities have filed a Wisconsin Congestion Analysis Report. Other intervenors have provided relevant empirical data (see, for example, Peabody Coal Company's data regarding current and future natural-gas prices). PSC Staff took the analysis one step further with its Revenue Requirement Analysis (Report, Appendix C), which provides additional useful information designed to help the Commission determine which access options are likely to be the most beneficial.

The Report (p. 9) also states that the ASI Report “does not include enough information to commit, at this time, to any particular solution for EHV expansion.” ATC agrees this information is not sufficient for a final and binding regulatory commitment to any particular project. That is not the purpose of this proceeding. The purpose of this proceeding is to examine ways to strengthen Wisconsin’s transmission system. ATC believes that the way the Commission can achieve this policy goal is to review the voluminous materials submitted in this proceeding and provide regulatory guidance regarding which EHV project(s) ATC should develop for a CPCN application. In other words, the value of this policy proceeding is to narrow the scope of available options. The decision on whether or not to commit to a particular project will not come until the Commission makes its decision in the relevant CPCN proceeding.

The Report states that “more facts, analysis, and dialogue are necessary to ensure that the Commission can eventually make the choices that are clearly in the public interest” (Report, p. 5). There will be many opportunities for more facts, analysis, and dialogue before any final and binding decision is made on an access project. Among these opportunities will be:

- ATC’s pre-CPCN activities with stakeholders
- Required regulatory proceedings in other states
- Other necessary Wisconsin regulatory proceedings (such as DNR permit proceedings)
- The CPCN proceeding itself

There will always be uncertainties in transmission policymaking. We will never have perfect data available to make policy decisions regarding transmission projects that will not see the light of day until 2013. If, for example, the Commission delayed making a scoping decision in this case in order to spend a year or two gathering more information, it might succeed (at the cost of another year of uncertainty) in getting partial answers to some relevant questions. By that time, however, circumstances will have changed, and new, equally important questions will have arisen. And the operational date of an access project will have been pushed out another year or two. To set sound energy policy for the future the Commission needs to make the best judgments it can with the information at hand. A decision to delay will only prolong the economic and reliability risks faced by Wisconsin customers as a result of the state’s transmission deficit.

**B. The ranking value techniques are too arbitrary for final determination.**

Again, this proceeding does not involve a final determination for any particular project. It is simply a scoping proceeding. ATC retained an independent consultant (Christensen Associates) to evaluate fourteen relevant qualitative factors for each of the projects. Many of these factors were based on feedback ATC received during the numerous stakeholder meetings it conducted during its Access Initiative. The Other Factors Report contains a four-page description of the methodology and assumptions employed in its Multi-Criteria Analysis (Other Factors Report, p. 4-7). While this Report is not as

comprehensive as, for example, the submissions in the CPCN proceeding will be in November 2008, it does provide useful analysis for Commission review.

**C. More sample years should be included in the analysis.**

Ideally, ATC would be in a position to analyze multiple years in PROMOD. However, analyzing even one more year would roughly double the amount of work, which was already substantial. Also, a working PROMOD base model for another year in which an access project would be in service was not available from MISO. ATC believes that analyzing a single year was reasonable for this scoping proceeding, and that the year 2013 was an appropriate choice because it is also the likely first year of operation of an access project.

It is also very important to note that a 2013 analysis provides conservative cost-savings estimates. The reason is that it is shortly after a large projected increase in the amount of generation (~2,500 MW) within Wisconsin.

**D. The methodology did not evaluate any regional generation expansion scenarios, such as coal and wind to the West and coal to the South.**

The results of an increased wind scenario to the west were presented during the August 3, 2004, Access Initiative meeting. Please use the following link and refer to page 24 for the results:

[http://www.atcllc.com/documents/PROMOD\\_Economic\\_Analysis080304.pdf](http://www.atcllc.com/documents/PROMOD_Economic_Analysis080304.pdf)

The Access Initiative participants did not put a high priority on rerunning this sensitivity as part of the final set of PROMOD runs. Note as well that any regional generation scenarios involving additional coal resources to the West and/or South would only increase the cost savings from the access options because more low-cost power would be available for import into ATC.

**E. If an LSE chooses to participate in generating plants out of state, it needs adequate FTRs to import the energy. FTRs can only be granted if enough transmission is located between the source (designated generator) and the sink (LSE load area). The ASI has not included likely new out-of-state designated network resources to load.**

An LSE's designation of a network resource is not the only way to obtain FTRs. While FTRs were granted during the startup of the MISO market only for designated network resources, the MISO Energy Market Tariff (EMT) also provides for "Issuance of FTRs for Network Upgrades" (see Section 46 of Module C of the MISO Tariff). Under this provision, the additional FTRs are allocated based on who pays for the new transmission upgrades.

Note as well that FTRs are only valuable if there is significant congestion. If import capability is substantially increased into Wisconsin, fewer FTRs will be needed as a hedge against congestion costs.

**F. The analysis included sensitivity studies of scenarios with uncontrollable outside events. However, the sensitivity events were not given any probability rating of occurrence and only one event in one direction was used.**

Using probabilistic techniques with PROMOD requires a large number of runs. Because of long computer run times and the number of alternatives being analyzed, it was not feasible for ATC to use such techniques. Instead, all participants in the Access Initiative meetings, including PSC staff, were asked to help define the sensitivity analyses and to rank them in importance. ATC selected and ran the most important sensitivity analyses based on the collective experience of all of the Access Initiative participants.

ATC studied only one sensitivity in one direction whenever the participants deemed this approach appropriate. For example, a sensitivity based on 20% higher natural gas costs was tested. Lower natural gas costs had been tested previously (and presented to the participants), and were shown to have little impact on the results. The participants also concluded that the upside risk was much higher, given price trends and natural-gas supply issues.

**G. The Assessment of Other Factors does not include comprehensively designed, objective, integrated regional studies with respect to its environmental analyses.**

This is an accurate statement. ATC concluded that it was not feasible to prepare such comprehensive regional analyses for this proceeding. It asked its environmental team to develop and provide to Christensen Associates information regarding new ROW for each project and habitat types traversed by each project. The consultant then used this information to evaluate each project with respect to these factors (Other Factors Report, p. 24-27).

ATC agrees that many other environmental factors will need to be studied before a construction permit is issued. Once it receives policy direction from the Commission in this proceeding (including any guidance regarding the Commission's environmental priorities), it will refine and expand its environmental review in preparation for a CPCN application.

The Report (p. 19-20) also points out that the environmental impact of expanded ROW should also be analyzed along with that of new ROW. ATC agrees, but it believes that expanding an existing ROW generally creates less environmental impact than creating an entirely new ROW. However, this is not universally true. There may be cases where expanded ROW poses serious challenges (such as in sensitive or congested areas). The issue of existing and expanded ROWs will be thoroughly examined in preparing the

CPCN application and in the CPCN proceeding itself. In this proceeding ATC was attempting to rule out fatal flaws, and to present the Commission with relevant screening information regarding the access options.

**H. Possible addition of generation at Nelson Dewey, Columbia, or Weston was not examined.**

ATC did not include this potential new generation in the ASI Report because these projects had not submitted interconnection requests during the analysis period of the ASI. The interconnection studies for these proposed units are now ongoing. Information on the specific impacts on the transmission system of these units will be available when these studies are completed.

The Report (p. 21) states that the MISO study of the Nelson Dewey project indicates “a severe congestion and deliverability issue without the addition of significant transmission improvements in the area.” The Report acknowledges that the MISO study is an initial Feasibility Study, and that “deliverability impacts” will be tested in the ongoing Interconnection System Impact Study (ISIS). The Feasibility Study does not determine deliverability or lack of deliverability. It presents a *double*-contingency analysis (n-2), whereas the ISIS will present a single-contingency analysis (n-1) to determine deliverability. The results described in the Report may not show up in the MISO deliverability study.

The MISO Feasibility Study is designed to identify problems, not solutions. Since it was examining double-contingency conditions, the probability of occurrence is relatively low. When solutions are considered, the cost of redispatch under the constraint condition, taking into account the probability of its occurrence, will be weighed against the cost of the transmission upgrades. It is difficult to analyze the impact of specific generation additions without completed interconnection studies because the associated transmission upgrades are not yet known.

ATC did not entirely ignore new generation in the ASI Report. It performed a sensitivity analysis with a third 600 MW Oak Creek unit. Also, the ASI Report does not include any generation retirements after 2005, which would tend to offset potential new generation that was not included.

Given the strict emission standards, especially for coal-fired units, that will have to be met as a result of EPA’s Clean Air Interstate Rule (CAIR) in 2009, 2010 and 2015 and the age of many of the plants in Wisconsin, it seems likely that some coal-fired generation will be retired. ATC thus agrees with Staff’s general point that its transmission planning would be enhanced by earlier disclosure of planned generation retirements (and their replacements). It has supported such disclosure in the pending Strategic Energy Assessment proceeding, and believes that the broader issue of improved generation and transmission coordination should be addressed in that proceeding.

### **III. ATC Comments on the Staff's Policy Questions.**

Staff also posed several policy questions relevant to this proceeding. ATC provides the following comments on these issues.

#### **A. Is there a need to increase Wisconsin's import capability? (Question #1)**

ATC submits that the answer to this question is yes. The reasons for this response have been presented in the previous filings of ATC and other stakeholders, especially the Intervening Utilities. These filings demonstrate that, in the language of the Report (p. 10-11), there is both a short-term and a long-term comparative advantage in increasing Wisconsin's regional-trading capacity. In the short term there is currently underutilized natural-gas and coal capacity in Illinois that is on offer at favorable prices, but which Wisconsin's load-serving entities cannot economically deliver to their loads due to transmission constraints. Long-term, there are and will be resources available in other states (e.g. Illinois mine-mouth coal and wind facilities in Iowa, Minnesota, and the Dakotas) that appear to have inherent production advantages (such as avoidance of coal-transportation costs and superior average wind speeds, respectively).

Because it has two of the Great Lakes on its borders, Wisconsin can integrate with the regional grid in only two directions (west and south). Until it improves its interconnections in these directions, it will have an ongoing disadvantage compared to other states with respect to taking advantage of regional generation diversity.

#### **B. Is reducing the planning reserve margin a prudent action? How should the Commission evaluate the reliability of regional v. Wisconsin generation? (Questions 2 and 9)**

As the Report notes (p. 18), a planning reserve margin is a derivative effect from a given Loss of Load Expectation (LOLE) criterion, the standard criterion being load exceeds generation not more than one day in ten years. If Wisconsin improves its interconnections with other states, Wisconsin utilities will be able to rely more on regional capacity and less on internal capacity to meet their planning reserve margins. This will tend to reduce the internal planning reserve percentage, but it will not change the reliability standard itself. The planning reserve margin is more of an engineering application of the reliability standard to the relevant system data than it is a matter of prudence.

The Report also notes (p. 18) that ATC's base case shows sufficient increased import capability in 2013 to consider reducing the reserve margin without any of the access options. However, it is critical to realize that this base case does not include any plant retirements after 2005. As stated previously, some Wisconsin plant retirements are likely given the age of the plants in Wisconsin and increasingly tight emission standards included in EPA's Clean Air Interstate Rule (CAIR). CAIR will require hundreds of

million dollars of new pollution control equipment for older plants if they are not retired. A summary of the significant emission reductions required by CAIR can be found at:

<http://www.whitehouse.gov/ceq/clean-air.html#4>

Based on load forecasts received from its customers, ATC is also projecting peak-load increases for its system of more than 300 MW per year. Given this load growth and probable plant retirements, the additional import capability provided by an access project is likely to be the most cost-effective means of meeting the LOLE criterion while simultaneously reducing the planning-reserve margin.

Finally, the Report (p. 5, item 9) states that non-Wisconsin generation plants “carry some increased reliability risk” compared to more expensive Wisconsin generation located closer to load centers. Proximity to load decreases reliability risk, but this is not the entire picture. Outage rates on the transmission system are much lower than those for power plants. For example, forced outage rates on coal-fired generators (including partial outages or “derates”) are typically around 7 to 8 percent. Outage rates due to line outages that impact import capability are much lower, typically around one twentieth of this value.

Thus, to the extent that Wisconsin increases its import capability, it receives the added benefit of being able to reliably import from a much larger pool of generation. The collective probability that this larger pool of generation will be available may well offset any reliability advantage of a new generation plant closer to load.

**C. Is new EHV capacity a form of insurance that is worth the price?  
(Question 3)**

The Commission itself has repeatedly answered this question in the affirmative. For example, in its 1998 Report to the legislature, the Commission unequivocally stated:

Throughout most of the history of the electric utility industry, increasing interconnections have increased reliability and decreased electricity prices.

*(Report to the Wisconsin Legislature on the Regional Electric Transmission System, (9/1/98), p. vi.)*

The converse of this statement is also true: fewer interconnections will decrease reliability and increase electricity prices. This is especially true in the current market environment, where both transactional volumes and loads are increasing, and where a price is paid for inadequate transmission capacity in the form of increased LMPs. The status of WUMS/NWUMS as the only Narrow Constrained Area in MISO is a clear sign of our relative deficit in transmission capacity. The hours of congestion at several flowgates that affect the ATC system far exceed the number of congested hours required for NCA status. While the Report (p. 10) notes that ATC projects between now and 2013 will help relieve congestion, no party to this proceeding has suggested that congestion

will be eliminated by 2013, or that WUMS/NWUMS will no longer be designated as an NCA by that date. Wisconsin will continue to pay the price for its congested transmission system until it takes decisive policy steps to remedy this problem.

ATC commissioned Christensen Energy Associates to study the impact of increased transport capability on supply costs in the natural gas, coal, and electric-power industries. It presented the results of this study in Appendix C of its Reply Comments. The Report does not mention this study, presumably because it was filed while the Report was being drafted. This is unfortunate because ATC believes that the question of whether incremental transport capacity will be worth the price is at the heart of this proceeding. The results of this study show that even small increases in transport capacity produce substantial decreases in commodity costs and prices.

Decreased energy and capacity costs are not the only dividends that this insurance policy would pay. The Report focuses on direct energy-price savings, but other forms of benefit should also be weighed in the balance. For example, new EHV capacity would bring increased reliability benefits (reduced LOLE and reduced Expected Unserved Energy EUE), and improved connectability of new Wisconsin generation and load.

The price to secure these benefits is reasonable. The four EHV options have annual carrying costs of between \$5.5M/year and \$27.9M/year. These figures do not include the value of any FTRs that an EHV project may generate, nor do they assume any regional cost-sharing. Unlike a utility-specific power plant, these costs will be spread across the entire ATC customer base, reducing their retail rate impacts.

**D. Should the Commission encourage ATC and Wisconsin stakeholders to actively support regional cooperation efforts? (Questions 4, 5, 7, and 8)**

The answer to this question is obviously yes. But at the same time the Commission should also place a high priority upon Wisconsin determining its own transmission needs and acting vigorously to implement them on a regional basis. It is very important for Wisconsin to come to the regional bargaining table with a clear idea of its transmission priorities. This proceeding provides a good opportunity for the Commission to define these priorities.

The specific regional forums mentioned in the Report are regional transmission compacts pursuant to EAct 05; the MISO planning process (MTEP); the MISO cost-sharing proposal (RECB); and the Minnesota collaborative (CapX 2020).

Section 1221 of EAct 05 allows three or more states to enter into an interstate compact that establishes a regional transmission siting authority. Any such compact is subject to Congressional approval. Wisconsin law has authorized and encouraged such a compact since 1998 (Sec. 196.494(5), Stats.) None have materialized. This provision of EAct 05 requires no action by FERC, and none is planned. While such an authority may be a laudable goal, it is currently a very long way from actuality.

ATC has actively participated in the MISO transmission planning process from its inception. Currently, each transmission owner (TO) submits its own plan to MISO. MISO ensures that these plans meet reliability needs and do not negatively impact other transmission systems. The MTEP plan is thus an amalgamation of individual TO plans. MISO transmission planning is a developing process, and, as MISO gains experience, it plans to increase its review level of projects. None of this changes the fact that Wisconsin's best position is to identify its own transmission priorities and to be well prepared going into these regional-planning activities.

The Commission, along with ATC and other Wisconsin stakeholders, has been extensively involved in the effort to insure equitable cost-sharing for new, regionally beneficial EHV projects. These efforts will only improve the economics of the access projects. But, given the long lead times for new EHV projects and the multiple risks that Wisconsin faces as a result of its congested transmission system, it would not be prudent to delay making project-scoping decisions in this proceeding until there is a definitive answer regarding regional cost-sharing for access projects.

Regarding CapX, ATC was an active participant in the development process that led to CapX from early 2004 through spring 2005. It provided modeling inputs for the CapX project that is similar to its Columbia-Prairie Island access project. ATC met with Xcel in spring 2005 regarding the CapX initiative and hosted a presentation by Xcel regarding CapX in August 2005. The models used by CapX participants were first provided to ATC in late September. Since that time ATC has been working with CapX participants to thoroughly review the modeling and to analyze impacts on the ATC system. ATC intends to complete by the end of this year an analysis of the impacts of the CapX 345kV project from a new North Lacrosse substation to either the Columbia power plant, the North Madison substation, or the proposed West Middleton substation.

The Report (p. 4-5) states that ATC's results "have not been optimized with other regional transmission developments such as the CapX expansion plan being examined by Xcel Energy and others." However, Xcel did not actively participate in ATC's Access Initiative. Nor did it participate in this proceeding. The CapX projects were not in the MISO MTEP 2005 Plan and were only included in the Minnesota Biennial Transmission Projects on November 1, 2005. ATC looks forward to continued cooperation with the CapX initiative as it develops, but at this point it cannot be "optimized" with the access options because it is not yet as well developed as the access options.

**E. Which approaches will improve coordination between generation and transmission construction? How do new Wisconsin generation projects affect the access alternatives? (Questions 6 and 11)**

As noted above, ATC believes that the Commission should take action in the pending SEA to improve coordination between generation and transmission construction.

The location, type, and size of proposed new Wisconsin generation projects obviously have effects on the access alternatives. But ATC cannot study the impact of every potential new power plant, especially when many of these are proposed in the alternative. Many of the prerequisites for new power plants (such as, for baseload plants, proximity to water, high-voltage transmission, and fuel (pipelines or railroad lines)) are well known and locationally specific. ATC could evaluate some of these options as generic sensitivities in its future planning activities.

The Report (p. 14) attempts to adduce some rules of thumb about these matters, such as that “the cost of transmission requirements for new 1000 MW-plus generation plant sites typically accounts for less than 10 percent of the total capital costs of the generation facilities.” The Report then concludes that “it is the generation that is the cost driver and not the transmission.” Caution is in order here. The Report’s conclusion is based on the transmission costs for the Elm Road plant. While these costs are less than 10 percent, the transmission costs for the Weston IV project are estimated to be about 15 percent of the plant costs (\$100M of transmission costs and an estimated \$700M of generation costs). Even more importantly, both Elm Road and Weston IV are existing baseload sites with existing transmission connections. “New 1,000 MW-plus generation sites” would present an entirely different situation. In evaluating the tradeoffs between new generation and new transmission, the Commission should not discount the project-specific impacts of generation-related transmission costs.

**F. Will any of the access projects address system congestion and transmission constraints in Wisconsin? (Question 10)**

The Report (p. 10, item 2) states that much of the current congestion in Wisconsin “is expected to be alleviated with the Arrowhead to Weston 345kV line in 2008 and with upgrades to the transmission system between northeastern Wisconsin and the between northeastern Wisconsin and the Upper Peninsula that are under way or are being developed.” No data is cited to support this statement, and ATC’s studies do not support such a sweeping conclusion. Arrowhead-Weston and the other pre-2013 projects will relieve some of Wisconsin’s congestion, but ATC is not aware of any empirical basis for concluding that these projects will eliminate most of Wisconsin’s current congestion. On the contrary, the production-cost savings as a result of the 2013 access alternatives demonstrate that congestion and LMP differentials will persist even with Arrowhead-Weston and the other pre-2013 projects. If this were not true, the access alternatives would show no cost savings relative to the base case.

It does not take very much congestion to drive LMPs higher on a system as sensitive and geographically handicapped (by the Great Lakes) as ATC’s. During the Access Initiative ATC presented an LMP Comparison video to show how this could occur, even during off-peak and shoulder-peak periods. This video shows the ATC system in 2013, and then adds to that system an additional 345 kV path from the south (Byron to North Madison). Prior to the addition of the new path, the ATC system shows congestion and high LMPs under certain conditions. The new path provides low-cost imported power where it is needed most, and reduces congestion and LMPs. A high-quality version of

ATC's LMP Comparison video is included on a CD, which is marked as Attachment A and made a part of these comments. A streaming version of the video is available on-line at:

<http://www.atc10yearplan.com/R2.shtml> (select the "Access Initiative" link in the middle of the page)

The substantial congestion along ATC's interfaces is creating market risks because the load-serving entities within the ATC system are not able to fully participate in the broader wholesale market. This market operates over a large area. Focusing on a single state like Illinois (see Report, p. 11) is not very revealing because the new market structure allows power to flow more freely and over longer distances. The key priority is to reduce major congestion bottlenecks into ATC in order to take full advantage of this market and the lower-cost power available from the Dakotas and southern Illinois. The market outside ATC's system is naturally more flexible because it is not geographically circumscribed like ATC's system.

Current regional LMP differences, with ATC as a high-cost LMP island in the middle, clearly show that there are risks associated with insufficient import capability. These risks will not be alleviated by the pre-2013 projects.

Finally, it makes sense that, as load increases, so too should import capability to insure that the market remains competitive. As long as there is significant congestion into (or within) a region like the ATC system, there is always the opportunity to bid generation in at rates higher than production costs and drive up LMPs, whether now or in 2013 or beyond. Even with the NCA designation, MISO market rules still allow considerable bid rate flexibility.

#### **IV. The Commission Has a Unique Opportunity in this Proceeding to Advance Wisconsin Transmission Policy.**

It will take decisive leadership by the Commission to protect Wisconsin's interests in this rapidly changing market environment. In this proceeding the Commission can take the first step in that direction by providing ATC and the other stakeholders with policy guidance regarding the next appropriate CPCN application for an EHV project. There will be many other steps that will need to be taken before any such project is operational in 2013 (and many opportunities for mid-course corrections along the way). In this section ATC presents its views regarding the options open to the Commission in this proceeding, consistent with the Report.

##### **A. Option #1: Encourage development of a CPCN application for the Paddock-Rockdale Project.**

The Report consistently ranks the Paddock-Rockdale project (P-R) highest among the other EHV options. The Executive Summary states:

Commission staff does believe that there could be some appeal in pursuing the lower cost, smaller scale projects in the ASI that would provide the State with significant boosts in regional transmission access.

(Report, p. ii)

The lower-cost, smaller-scale projects are the Low-Voltage option and P-R. P-R is the least costly of the four EHV options (at \$69M), and the smallest-scale (at 35 miles). This is \$117M and 62 miles less than the next EHV project (Byron-North Madison (B-NM)).

The Report also provides the following summary of its findings:

Technical analysis in Chapter 2 and the Appendices of this report suggest a rank ordering of the Lower Voltage option, followed by the Paddock to Rockdale 345 kV segment, and then perhaps the Byron, Illinois to North Madison Project.

(Report, p. 4)

More specifically, the Report indicates that P-R ranks first among the EHV projects according to the following measures:

1. Net Economic Savings (Production Cost less Annual Carrying Charge) (Report, p. 12 (Table 1));
2. Cost/GWH of Additional Energy (Report, p. 13 (Table 2));
3. Cost/MW of increased transfer capability (Report, p. 13 (Table 3))

The Report also shows that the benefits of P-R exceed its annual revenue requirements (both on an annual and cumulative basis) in the first year of operation, under either of the Staff sensitivities (lower reserve requirement or quadrupled production-cost savings). If only base-case production-cost savings are considered, benefits begin to exceed savings three years after operation (in 2016) and, on a cumulative basis, twelve years after operation. Since P-R is likely to have a useful life of 65-80 years, it is evident from this analysis that its lifetime benefits would far exceed its lifetime costs.

ATC has previously provided its analysis of the pros and cons of this project (see Analysis and Comments, p. 13-14, 16). Another major benefit is that, unlike all of the other EHV projects, it is wholly within Wisconsin and within the ATC service territory. For this reason, it would not have the additional uncertainty attendant upon EHV projects in other states. Also, given that it is a double-circuit project with a relatively short length, it could probably be completed sooner than the other EHV projects.

ATC does not regard the Low-Voltage option (L-V) alone as a sufficient response to the predicament in which the state finds itself. This option includes a fix for one of the chronic limiters of the ATC system (a 161 kV line in eastern Iowa).

However, there are many practical problems to implementing this option expeditiously. The line in question is in Alliant West's service territory, not in ATC's service territory, and so ATC lacks the direct ability to build it. The line is not in Wisconsin, and hence the Commission lacks the authority to approve its construction. The L-V option also requires a rebuild of a line crossing the Mississippi River near Cassville, Wisconsin. This requirement is similar to the requirement of a rebuild of the line crossing the Namekegon River that is part of the Arrowhead-Weston project. ATC's experience on this issue in that proceeding is that such a river crossing adds years to the project-approval process, because of the need for federal approvals.

Note as well that the L-V option is a package of projects that includes several subprojects. Many of these subprojects are also included in the EHV options, and hence the benefits produced by these subprojects would be realized if the EHV projects were selected for development. For example, the P-R project and the L-V project both include improving the 138 kV terminals at Potosi-Hillman on the ATC system (see ASI Report, Table 4). Note as well that the P-R package of projects does not include the Mississippi-River crossing that is part of the L-V option.

For all of the above reasons, unless directed to do otherwise by the Commission, ATC intends to develop and file a CPCN application for the Paddock-Rockdale project.

**B. Option #2: Select either the Byron-North Madison or the Salem-North Madison Project for development of a CPCN application.**

The Report (p. 4) tentatively ranks B-NM second among the EHV options. It also notes (p. 23) that B-NM "could have economic and reliability advantages" if mine-mouth coal is available in Illinois and because the Byron terminal is robust, with four 345 kV lines, two nuclear plants, and links in three directions. The Report also concludes (p. 23) that, with additional modeling of either a Nelson Dewey facility or Iowa wind energy sinking in Wisconsin, the Salem-North Madison project (S-NM) "could make sense." While the Report also notes that a LaCrosse-Columbia line might make sense if a CapX 2020 project terminates in LaCrosse or another generation unit is sited at Columbia, it does not include the Prairie Island-Columbia project in the revenue-requirement analysis because its annual costs "would exceed even the most optimistic of the scenarios performed in the analysis" (Report, p. 16).

The Byron or Salem project would create a long-lived asset producing a steady stream of economic and reliability benefits for Wisconsin. Either project would substantially improve the robustness and geographic diversity of Wisconsin's 345 kV backbone structure. Each of these projects produces considerably more total transfer capability than the other options (Report, p. 13 (Table 4)). Each of these projects also mitigates customer-outage risk (EUE) much better than the other options (ASI Report, p. 29 (Table 13)).

The longer "payback" periods of these two projects appear to be more than offset by their long-term benefits and the economic and reliability risks they would mitigate. ATC

believes that the voluminous materials submitted in this proceeding demonstrate that it would be appropriate to develop a CPCN application for either of these projects. Alternatively, as suggested by the Executive Summary of the Report (p. ii), the Commission could direct ATC to pursue the P-R project while giving a high priority to further analysis of the Byron and Salem projects.

Unless the Commission's policy guidance indicates that it is prudent to develop a CPCN application for the Byron or Salem project, ATC plans to place a high priority to further development of these two projects, paying special attention to new-generation scenarios (such as Nelson Dewey and Columbia) that, as the Report indicates (p. 23), materially affect these options.

## **V. Conclusion.**

The Wisconsin legislature authorized the creation of ATC for the following "sole purpose":

the planning, constructing, operating, maintaining, and expanding of transmission facilities that it owns to provide for an adequate and reliable transmission system that meets the needs of all users that are dependent on the transmission system and *to support effective competition in energy markets* without favoring any market participant.

(Sec. 196.485(1)(ge), Wis. Stats.) (emphasis supplied)

The ATC transmission system thus must meet the needs of its transmission-dependent load-serving entities, including their need to take advantage of available economic transactions. Its system must also support effective competition in energy markets, including the MISO market. ATC has a public-utility duty to expand its transmission system not just for reliability reasons, but for economic reasons as well, subject to Commission approval.

Wisconsin is now part of an energy market that schedules generation resources regionally, according to security-constrained economic dispatch. Wisconsin load-serving entities have not been able to take full advantage of this market, despite the additional costs that MISO membership imposes. On the contrary, they are now exposed to additional financial risks as a result of transmission congestion, high LMPs, and uncertain FTRs. This situation will not correct itself by 2013 (even with the transmission projects already underway) unless the Commission acts decisively to increase Wisconsin's access to the new regional market.

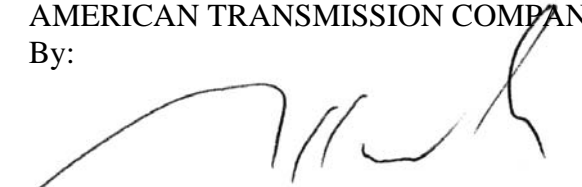
ATC's statutory purpose also includes a requirement to meet the needs of the transmission-dependent utilities on its system. Four of those five utilities, representing more than half of the load on the ATC system, have expressed their need for increased access in unequivocal terms.

The Commission showed great leadership in initiating this energy-policy docket. Now it is time for the Commission to exercise its undoubted policymaking authority in these matters. ATC respectfully requests that the Commission issue a policy order providing ATC and other stakeholders with policy guidance in the following areas:

1. the specific attributes that the Commission values for an additional EHV project
2. which of three EHV options (Paddock-Rockdale, Byron-North Madison, Salem-North Madison) it is appropriate for ATC to develop for a CPCN application
3. which procedures ATC should follow prior to the filing of a CPCN application for one of the three EHV projects.

Dated December 5, 2005.

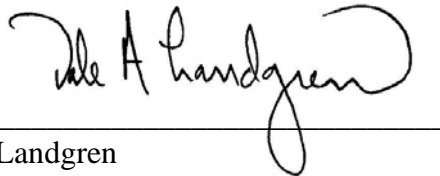
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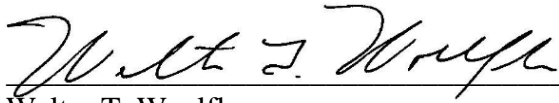


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A handwritten signature in black ink, appearing to read "Walter T. Woelfle", written over a horizontal line.

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