Town of Stark Committee on Energy Planning and Information 403 West Main Street La Farge, WI 54639

John Callaway American Transmission Company 2 Fen Oak Court Madison, Wisconsin 53718

Ref: Docket #137ce160

Dear John Callaway.

Thank you for your letter of June 19th with responses to citizen questions. We posted the letter on the Town's website for residents to access shortly afterwards. On an attached page are some follow-up questions stemming from three of the answers.

Enclosed with this letter you will find 122 information request cards for low voltage and energy efficiency studies that citizens signed returned to us during discussion workshops. Shortly after we received the cards, Vernon County began working on a formal information request to you with similar objectives. We ask that the cards be recorded as evidence of citizen support for the information requests that Vernon County has made. Please note that some of the citizens asked to be added to your notification mailing list.

On June 24th during a discussion on Wisconsin Public Television, Madison, Sara Justus, in response to a question that Rob Danielson asked about citizens being able review the low voltage and energy efficiency options during the Public Information Meetings phase said, "It's absolutely critical and we are very actively encouraging people to get involved. In reference to various alternatives, it's important to note that part of the Public Service Commission's independent review of the need includes a review of non-transmission alternatives, so that absolutely is part of the scope of their review." Our committee would like to know if local governments can make recommendations about the design of the non-transmission study.

Following-up again the Committee's question posed in Brad Steinmetz's letter of February 25, 2011, we are still waiting for illustrative documentation of Lee's statement that imported and exported power are a large part of Wisconsin's current energy needs and activity. We asked for a list of the interstate lines in Wisconsin showing annual volume flow across them from 2000 to the present in order to study the evolution of regional reliability, RPS and the economic factors pertinent to present high voltage proposals that Lee alluded to.

We appreciate your attention to our questions as we continue to educate ourselves about the Badger-Coulee proposal.

Sincerely,

Joan Kent, Co-Chair Samantha Laskowski Co-Chair Rob Danielson, Secretary Bob Goonin Brian Jacobs Leah Jaynes Peggy Pasker Christel Stueckrad Byron Walker

Town Committee follow-up questions in regard to ATC responses of June 19, 2011

Question (4) with ATC reply:

(4) We already have had and are now paying for recent upgrades to the transmission line, why should we be transporting energy we don't need to communities in Illinois, Indiana, etc?

Power moves in many ways throughout the transmission grid and into and out of Wisconsin. It is possible that power moved on the Badger Coulee transmission line will be transported throughout Wisconsin and the entire Midwest region. However, in 2010, ATC customers used the transmission system to import electricity more than 88 percent of the time. A strong transmission grid benefits all electric ratepayers throughout the entire Midwest region. Badger Coulee does provide regional benefits in addition to local benefits. This is one of the reasons that the Midwest Independent System Operator has included the Badger Coulee line as part of the portfolio that may be paid for by all ratepayers across the 14-state MISO region. If Badger Coulee is accepted for this cost sharing, ATC customers will pay approximately 10-15% of the total cost of the line.

Our studies indicate that the proposed project would deliver benefits to Wisconsin, including the Kickapoo Valley area, and the Midwest region by improving electric system reliability, delivering economic benefits for Wisconsin utilities and electric consumers, and expanding

infrastructure to support greater use of renewable energy. A presentation about the benefits of this project is available at www.BadgerCoulee.com.

<u>Recommendation 4A</u> For future cost-benefit studying, we recommend the below set of factors for a one scenario:

Load Growth within ATC	Energy Growth within ATC	Load Growth outside ATC ²	Energy Growth outside ATC ²	Total Coal Retirements (or conversions to natural gas) Within ATC ³	Generator Additions Within ATC ⁴	Total Percent Energy from Renewables for ATC & Inside/Outside Percent ⁷	Natural Gas Price Forecast	
.5	.7		.7	907 MW	planned wind	max 3.7 % outside ATC	-20	

			Renewable Portfolio Standards (RPSs) and Wind		Generation
	Coal Price Forecast	Environmental	Power Zones	The second second	Portfolio
	for New Units ⁹	Regulations ¹¹	(GW: Existing Model / Expansion / Total) ²⁴	Transmission Overlay Outside ATC ¹⁶	Outside ATC ¹⁷
•					

+20 0/0 current MVP Starter Package Max

<u>Recommendation 4B</u> To be comprehensive and useful, future cost-benefit studies must include several, low voltage solutions such as:

- (A) Low Voltage upgrades meeting state reliability needs based on .7% growth and. .5% peak growth and assuming that CapX2020 would supply *all* the needed ~3.7% portion of the State RPS at a few, selected, western-located substations.
- (B) Low Voltage upgrades meeting state reliability needs and all the ~3.7% portion of the State RPS assuming that the CapX2020 line would somehow NOT be able to supply all or part of needed portion or was not built.

Low Voltage solutions should be included with all future cost-benefit studies including those based on MVP allocations.

<u>Question 4C</u> Assuming an average 380 million in benefit over 50 years divided among approximately 3,100,000 future residential Wisconsin Electric Customers (2010 customers X.20%), we estimate a benefit per customer of around .20 per month. Please let us know if this simple means of cost allocation is accurate or if you suggest another means—perhaps including the commercial and industrial customers as well.

<u>Question 4D</u> Is ATC planning to include and compare low voltage solutions in its next cost-benefit study of the Badger-Coulee proposal?

Question (9) with ATC reply:

(9) The ATC 10 year plan states that, 'the Midwest ISO has studied these projects [Badger Coulee and Madison to Dubuque] extensively. MISO has identified both these projects as "starter projects" for a larger, renewable transmission build out.' Please clarify what the larger transmission build out entails, and specifically, what points the build out will connect and how many

out entails, and specifically, what points the build out will connect and how many additional transmission lines will be required.'

The Midwest ISO (www.midwestmarket.org) undertook a study in the 2008 to understand the transmission needs that would be created by all the Renewable Portfolio Standards across the Midwest. The results of that study (the Regional Generator Outlet Study) showed that a transmission build out costing between \$12-\$20 billion would be needed to safely and reliably deliver the wind power needed to meet the Renewable Portfolio Standards.

MISO is currently evaluating its initial "Candidate MVP Portfolio" of projects, also known as the "starter projects." This includes 17 projects across several states and have a total cost of \$4.8 billion. Badger Coulee is among those projects. MISO has taken an incremental approach to the overall buildout they believe is needed and the initial "Candidate MVP Portfolio" is that incremental approach. Please contact the Midwest ISO for more information about the regional transmission system and the Regional Generator Outlet Study.

ATC publishes a 10-Year Transmission System Assessment each year (http://www.atc10yearplan.com/). I've enclosed a copy for your review. It contains transmission planning information that ATC makes available to the public.

Question 9A We see that the Dubuque-Spring Green-Madison line is pictured along with Badger-Coulee line in maps of the latest MISO-MVP candidates in addition to Pleasant Prairie-Zion. <u>https://www.midwestiso.org/_layouts/MISO/ECM/Redirect.aspx?ID=116746</u>. We recently read of two more MVP lines between Madison and Central Illinois and North Beloit and Northern Illinois that ATC/Duke plan to propose. As all are proposed as MVP qualifiers, we assume that many of reliability, economic and environmental benefits of the five high voltage projects would overlap. Will ATC be updating its cost-benefit study for the Badger-Coulee line clearly distinguishing the benefits that are exclusive to each of the lines?

(22) Will the construction of these lines make it "financially" easier or more difficult to supply locally produced renewable energy to the area?

If there were locally produced renewable power in the area near this line, the line could make it "financially" easier to supply locally produced renewable energy to the area. Any generators who want to connect to the transmission system must go through the Midwest ISO's Generator Interconnection Queue. In that process the proposed generator's impact on the transmission system is studied. If the generator causes a need for additional transmission, at a minimum they need to finance that transmission until their generator is built and producing power. At a maximum the generator would need to pay for a significant portion of the transmission upgrade. If the transmission system is robust in an area and the line is already there, the generator can interconnect to the system at a much lower cost.

This line also makes it much easier to access renewables from more wind-rich areas to the west of Wisconsin. When renewable energy is produced by wind, placing the generator in an area with more wind means that fewer wind turbines need to be built to produce the same amount of energy. ATC has estimated the value of this benefit as part of the study of the Badger Coulee project and the benefit ranges from \$50-\$340 million over the lifetime of the project depending on the scenario. This benefit is known as the Renewable Investment Benefit. More information about this benefit can be found on ATC's Ten-Year Assessment website: http://www.atc10yearplan.com/documents/RIBStakeholderPresentation-1-19-11.pdf.

<u>Observation 22A</u> We would like to encourage ATC to make all studies such as this one easily accessible for electric customers, citizens and local governments. This could be done by to creating a prominent link on the Badger-Coulee Project main page directing citizens to "Studies Relevant to the Badger Coulee Proposal." The link could lead to complete list of the studies you have conducted with common terminology descriptions would facilitate interest in this very important information.

<u>Question 22B</u> Regarding page 10 of the RIB study, please tell us how the following figures were determined:

- Line 5 Wind to build inside Wisconsin
- Line 8 Capitol Cost Saved and time period
- Line 12 Amount of Wind Energy Generated outside of WI (MW-Hr) & time period

<u>Question 22C</u> Please provide us the data used to compute the benefits for the 6 futures that produced the chart on page 11.

<u>Question 22D</u> Please describe some of the lines, locations and costs that would be involved with the low voltage option on page 11 of the study.

<u>Question 22E</u> Please elaborate why the low voltage solution is not preferred by ATC as the benefits appear to be quite comparable.

<u>Question 22F</u> What are the estimated building costs for all of the transmission proposals on page 11? What percentage of the investment for each of the lines on page 11 is being applied towards meeting and maintaining the Wisconsin 2015 RPS requirements? If other predicted state or federal RPS requirements are used, what are they?

<u>Question 22G</u> The RIB study only compares transmission-to-transmission options for addressing the Wisconsin RPS. Will ATC be conducting a study to compare investments of similar monetary scale over time towards developing a mix of renewable energy production resources in-state? The economic and job creation advantages of all in-State solution seem to merit including this option.