From:	Colette Steffen
To:	comments@CardinalHickoryCreekEIS.us
Subject:	FW: Cardinal Hickory Creek Transmission line
Date:	Thursday, December 22, 2016 1:51:50 PM
Attachments:	image001.jpg Cardinal Hickory Creek Transmission 11-16-16.pdf

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Please find attached a letter to Cardinal Hickory Creek transmission line representatives from the City of Platteville Common Council for your consideration. Any questions please let me know. Thank you,

Colette Steffen
Administrative Assistant to the City Manager
City of Platteville
75 N. Bonson St. – P.O. Box 780 | Platteville, WI 53818
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WISCONSIN

Home of the University of Wisconsin-Platteville

November 16, 2016

To: American Transmission Company - Executive Vice President Randy Satterfield, Director of Local Relations Greg Levesque
Public Services Commission of Wisconsin - Commissioners Ellen Nowak, Phil Montgomery, and Mike Huebsch
Senator Howard Marklein
Representative Travis Tranel

From: Platteville City Council President Eileen Nickels
Platteville City Council President Pro-tem Barbara Daus
Platteville City Council Member, District 4 Ken Kilian
Platteville City Council Member At-Large Amy Seeboth-Wilson
Platteville City Council Member At-Large Tom Nall
Platteville City Council Member At-Large Katherine Westaby
Platteville City Council Member District 1 Don Francis

Re: Cardinal Hickory Creek transmission line

Dear Representatives,

The Platteville Common Council is not taking a formal position on the building of the Cardinal Hickory Creek transmission line at this time However, the Platteville Common Council unanimously opposes the proposed route for the Cardinal Hickory Creek transmission line that skirts the City of Platteville along U.S. Highway 151.

The reasons for our opposition are three-fold:

- The other proposed option is a more direct route, less costly and would impact fewer people,
- Significant landmarks would be visually impacted by the proposed transmission line. Those landmarks include the Platteville "M" as well as the first state capitol site located near Belmont, and
- Platteville, as part of the larger tristate area, is a regional center for tourism. A new transmission line would be an unsightly addition along the major transportation corridor in our area.

We look forward to the elimination of the proposed route that includes Platteville in the upcoming months.

Sincerely,

Eileen Nickels

Eileen Nickels
Platteville City Council President on behalf of the Platteville City Council.

PO Box 780, 75 North Bonson Street, Platteville, Wisconsin 53818
Telephone (608) 348-9741 Fax (608) 348-7812 www.platteville.org

November 28, 2016

Kellie Kubena
Environmental Division
USDA Rural Development/Rural Utilities Service
STOP 1510, Rm 5135
1400 Independence Ave., SW
Washington, DC 20250
<Kellie.Kubena@wdc.usda.gov>

Re: Meeting December 7th, in Barneveld, WI regarding EIS for the Dairyland Power Cooperative's transmission proposal, "Cardinal-Hickory Creek."

Kellie Kubena:

We write to you as four of 120 local governments and three conservation/environmental groups who request to contribute a great deal of input regarding the Environmental Impact Statement (EIS) your agency will be preparing in regard to the proposed Cardinal Hickory Creek 345 kV transmission facility in southwest Wisconsin and northeast Iowa. We are interested in meeting with you in person to learn more about specific data points you hope to collect, the resources RUS will be able dedicate to the EIS and how to provide information to you most effectively and efficiently.

We believe there is great common interest in sitting down and going over some important but lesser known recorded documents from a companion 345 kV transmission proposal, "Badger-Coulee"conducted from 2010-2014. As prospective transmission builders receive opportunities to present materials supporting their positions for the EIS, we request the same opportunity and hope do this efficiently and with knowledge of your goals.

We would like to propose meeting with you on or near December 7th when RUS , SWCA Environmental and other consultants will be on hand for the public scoping meeting in Barneveld, Wisconsin.

Who We Are

Our delegation represents four of 120 municipalities in Wisconsin concerned about soaring electricity costs and increasing adverse impacts on rural and urban local economies and lands from high voltage transmission expansion and other capital utility investments. These municipal governments,

including eight counties **(figure 1),** have formally petitioned the WI PSC to conduct comprehensive analysis of non-transmission alternatives for all high capacity transmission expansion proposals.

We are joined in this interaction with our state PSC and the transmission line builders by environmental and citizen groups including the Driftless Area Land Conservancy, Environmental Law and Policy Center, Driftless Defenders and S.O.U.L. of Wisconsin.

David Giffey, Energy Planning Advisor, **Town of Arena, Iowa County**
John Hess Chair, **Town of Wyoming, Iowa County**
David Stanfield, Energy Planning Advisory Committee, **Town of Vermont, Dane County**
Laurie and Richard Graney, **Town of Lima, Grant County**
Barbara Grenlie, Chair, **Town of Vermont, Dane County**
Rob Danielson, Energy Planning & Information Committee, **Town of Stark, Vernon County**
David Clutter, Driftless Area Land Conservancy, **Dane, Iowa, Lafayette and Grant Counties**
(Consultant: **Environmental Law and Policy Center**)
Katie McGrath, Driftless Defenders and former legislative specialist, **Iowa County**
Rob Danielson, S.O.U.L. of Wisconsin, seven chapters, **State-wide**
Michael Mc Dermott, Vermont Citizens Powerline Action Committee, **Town of Vermont, Dane County**

We ask for RUS support in making sure that a highly qualified expert is hired to conduct a comprehensive cost-benefit analysis of non-transmission alternatives and to provide a comparison of impacts on local economies for the EIS.

Though the public expressed considerable interest in including thorough analysis of non-transmission alternatives in the EIS conducted for CapX2020 line in 2013, the section in the final version is a mere 172 words in length **(figure 6).** The NEPA statutory obligation to study and develop understandings of low impact alternatives for public officials to review was dismissed largely through EIS adoption of utility-supplied assumptions. The inapplicability of these assumptions are noted in the referenced figure which we hope to explain further when convenient.

The non-transmission alternatives that we request be evaluated alone and in combination for the current Cardinal Hickory Creek EIS endeavor include:

- Accelerated and targeted applications of energy efficiency utilizing Wisconsin's Focus on Energy program and programs within Dairyland Power Cooperative and other utilities.

- Accelerated and targeted applications of the several types of load management resources.

- Accelerated and targeted applications of distributed generation including placement to remove demand and prolong the lifespan of the "reliability" transmission facilities identified by the applicants.

In the development of the above alternative resources, examined both alone and in combination, "accelerated" means not being restricted to current funding levels but utilizing funding amounts equal to the 40 year inclusive cost passed on to *all* electric customers for financing, construction, operation, maintenance, usage and depreciation of the proposed high voltage transmission option.

Additionally, we request that a comparison of the economic impacts on potentially affected local economies be conducted. This study should account for the impacts listed below in terms of benefits and losses under two conditions: (1) selected local economies in the presence of a 345 kV double-circuit, transmission facility and; (2) the same local economies without the transmission facility but influenced by optimized mix of investments in non-transmission alternatives:

- Impacts on property values and the local taxbase over 40 years.
- Impacts on the development of new residences and businesses within sight of the potential transmission facility over 40 years with special attention given to housing built or remodeled for retirement relocation.
- Impacts on businesses patronized by tourists and others visiting the area due, in part, to attractive, natural assets of the area. Estimate over a 40 year period.
- Impacts on the average cost of residential and commercial electric service over 40 years.

Please note that should the federal-level EIS for Cardinal Hickory Creek fail to include these assessments, it would have negative impacts on energy planning by setting example of insufficient analysis for the utility applicants and the WI PSC. An under-developed EIS also detracts from local government statutory rights to establish energy priorities and associated land use goals.

Further, we have examined the 2015 EIS for a transmission proposal conducted with input from the contracted scoping firm, SWCA Environmental Consultants, and it contains no section of cost benefit analysis of non-transmission alternatives http://bit.ly/SWCA-EIS . The other EIS's SWCA suggested we examine for example also lack such assessment: http://bit.ly/EIS_2 and http://bit.ly/EIS_3 .

Our delegation has received responses from two energy consulting firms expressing interest in conducting the analysis of non-transmission alternatives for the Cardinal Hickory Creek EIS:

Synapse Energy, Bruce Biewald <bbiewald@synapse-energy.com>

Sommer Energy, Anna Sommer <anna@sommerenergy.com>

The Regulatory Assistance Project, Janine Migden-Ostrander, <mailto:JMigden@raponline.org> is interested in assisting should interpretations of policy become involved.

Background: The State of Energy Planning in Wisconsin

In 1998, Wisconsin ceased Integrated Resource Planning (IRP) marginalizing the ability of investments in accelerated energy efficiency, modern load management and distributed generation to only competing with utility proposals on a case by case basis, and with very limited funding. As a result, the WI Public Service Commission no longer conducts on-going energy planning which has forced rural communities and local governments and state lawmakers to pressure the agency to allow user side, non-transmission alternatives to compete more fairly in the high voltage transmission review process.

Without competition from energy efficiency, load management, the high interest, long term *debt* created by uncontrolled spending in high capacity transmission expansion and fossil fuel generation, Wisconsin's rates and fees are now the highest in the midwest **(figure 2).** The high-capacity transmission expansion proposal for which the RUS will be preparing an EIS for, "Cardinal Hickory Creek," would become the eighth high capacity expansion project approved in the last ten years. Debt on *prior* transmission expansion spending now constitutes 19% of a typical rural electric bill **(figure 3).**

Rural communities with municipal utilities including those buying power from USDA loan applicant Dairyland Power Cooperative, pay a 20% fixed fee charge in this power which profoundly undercuts the communities ability to invest in solar, load management and energy efficiency.

The WI PSC has blocked state lawmaker requests to increase our region-lagging energy efficiency investments **(figure 4)** and the unchecked capital utility spending is effectively sending energy dollars that should remain rural economies to the finance industry for payment on debt.

Renewing Rural Community Engagement and Relevance for USDA/RUS Electric Program Loans

We ask for your assistance not only because our local economies and lands (and electricity costs) are dear to us but because we anticipate it can revive relevant direction for Electric Program loaning. Because improvements from energy efficiency, modern load management and local solar require individual/community investment to realize energy savings and environmental benefits, the improvements uniquely embody shared appreciations the REA used to enjoy. In contrast, very costly, unwarranted, environmentally unaccountable and imposing transmission facilities tend to undercut public trust in the RUS goals.

Unlike transmission additions which are challenged to *guarantee* savings or environmental benefits, partnered utility/community NTA investment not only assures lower electric bills and CO2 reductions in the quickest and most cost-effective ways, but can eliminate the primary source of rate and fees increases: ballooning capital expense for replacement of low voltage transmission facilities. The RUS many be familiar with the ReformingEnergy Vision (REV) initiative under the New York PSC where replacement of a $1 billion substation was avoided using $200 million in non-transmission alternatives. In Wisconsin, Dairyland Power Cooperative (DPC) is paving a similar path adding load-reducing solar facilities at 15 aging transmission facilities: http://bit.ly/DPC_substation_solar . At least three of these

installations partner with rural development with customers and businesses buying 20 year leases on solar production at less than $2 per watt: http://www.rec.coop/content/transition-energy-0

Escalating rural electricity costs in Wisconsin must be checked. Already, they threaten the ability of energy-intensive businesses including dairy operations to remain competitive with businesses in other states.

The Rural Utility Service's unique ability to lead the shift from rate-pressuring capital utility investments to NTA's is evident in the agency's heavy emphasis on replacement capital utility spending in the Electric Program loans granted in 2016 **(figure 5)**. The best possible way the agency can promote the new path is to fulfill the requests we pose in this letter to establish responsible precedence.

The cost-effectiveness and feasibility of rural electric development partnering community/utility spending has already been demonstrated.

A cost-benefit analysis for a prior high capacity transmission proposal in Wisconsin conducted by Powers Engineering (http://bit.ly/Powers_Testimony) demonstrated that a one time investment of $19 million in targeted energy efficiency, load management and community solar support at low voltage substations would avoid about $170 million in low voltage transmission facility replacement costs while:

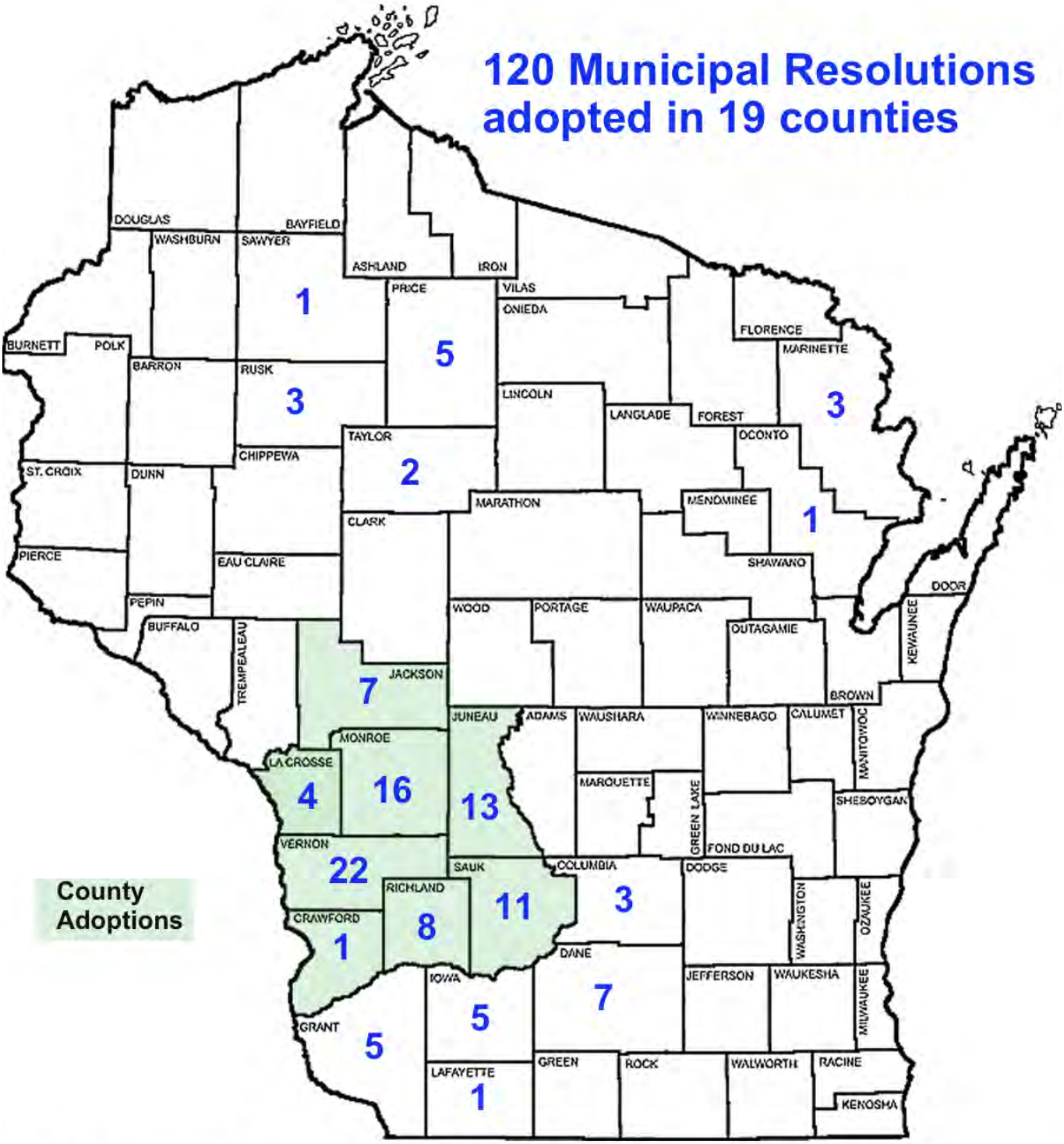
- Stabilizing or lowering electric bills in the affected footprint and beyond
- Allowing customers and businesses to invest in solar very cost effectively
- Accomodate flow through the transmission system relieving any future *potential* congestion more effectively than a 345 kV transmission facility at a minimal cost of $600 million.

We thank you for this opportunity to outline our goals, make our requests. We hope that you can set aside time to meet with us in person and help us take full advantage of our opportunity to provide scoping input.

Sincerely,
//SS//

David Clutter
Rob Danielson
David Giffey
Laurie and Richard Graney
Barbara Grenlie
John Hess
David Stanfield
Michael McDermott
Katie McGrath
Chuck Tennessen

cc:
Christopher McLean, Assistant Administrator, Rural Utilities Service
U.S. Senator Tammy Baldwin
U.S. Senator Ron Johnson
U.S. Representative Mark Pocan
U.S. Representative Ron Kind
U.S. Senator Joni Ernst, Committee on Agriculture, Nutrition & Forestry
U.S. Senator Charles Grassley, Committee on Agriculture, Nutrition & Forestry

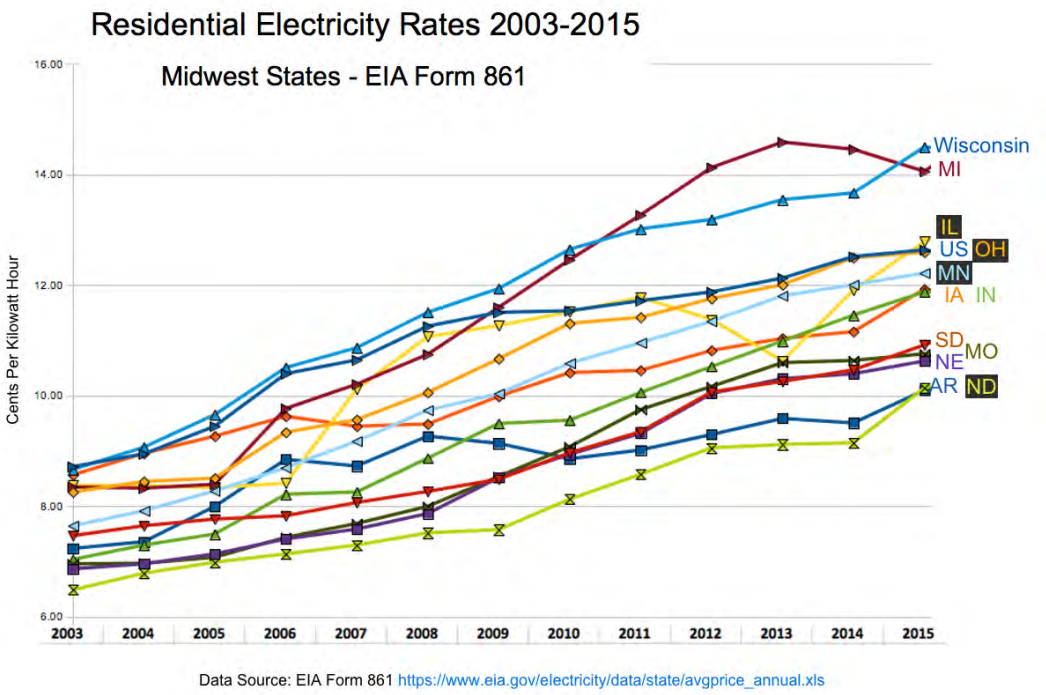


More than 100 of the Resolutions are *PSC Information Request* type asking applicants and the PSC to conduct cost-benefit analysis of *Non-Transmission Alternatives* including energy efficiency, load managment and local renewable power. Applicants are asked to conduct the analysis *during the pubic information stage* for inclusion in their application and sharing with local governments for statutory energy planning consideration and making informed feedback . The PSC is requested to indpendently conduct the analysis and include its study in the EIS of current and future 345 kV transmission proposals. see EIS Table G1-1, PSC REF#:223845

Figure 1

Since 2005 when Wisconsin utilities began adding charges for a greatly enlarged transmission system, our electricity rates have ranked highest or second highest in the Midwest. Though once below national average, by 2013 only seven states faced faster climbing rates than Wisconsin’s. [5]

[5a] WI Average Residential Rate is Highest in Midwest in 2015
https://www.eia.gov/electricity/data/state/avgprice_annual.xls



Data Source: EIA Form 861 https://www.eia.gov/electricity/data/state/avgprice_annual.xls

[5b] Only 7 states have experienced electricity cost increases higher than Wisconsin since 2003.

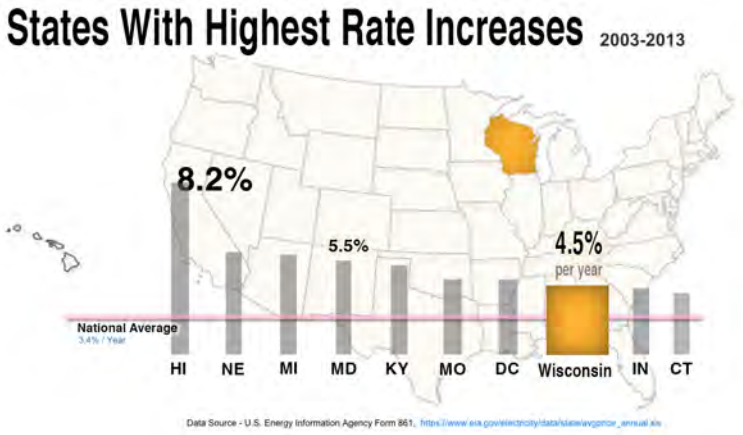


FIGURE 2

Regional Transmission Service

2016 Transmission costs were implemented January 1, 2016. The "Regional Transmission Service" (RTS) line captures the transmission costs from ITC Midwest and other transmission providers and breaks them out from the rest of a customer's bill.

Regional Transmission Service Q&A

Source https://www.alliantenergy.com/AboutAlliantEnergy/Newsroom/RateCases/030377

What is Regional Transmission Service?

Transmission is the high-voltage lines that carry power long distances between power plants and the neighborhood substations that serve our customers. The RTS line item reflects only the actual cost of this service.

What is the impact to my bill?

The average electric bill is made up of several parts. One of which is the cost for transmission service, labeled Regional Transmission Service (RTS). Because RTS only makes up only one part of your total bill, the overall impact on bills is much smaller, and will vary depending on customer class.

Typical Electric use =$20 per Month
Regional Transmission Service Costs

Here is the percentage increase for the RTS for each customer class for 2016:

Customer Class	RTS Rate Unit	RTS Rate 2015	RTS Factor 2016	% Change	RTS Component of Overall Bill*	Overall Estimated Bill Impact
Residential	$/kWh	0.02567	0.02858	11%	19%	2.1%
General Service	$/kWh	0.02579	0.02837	10%	20%	2.0%
Large General Service	$/kW	7.40	7.99	8%	22%	1.7%

*Percentage of total transmission to total annual bill.

Increase from 2015 to 2016 alone = $2.31 / Mo.

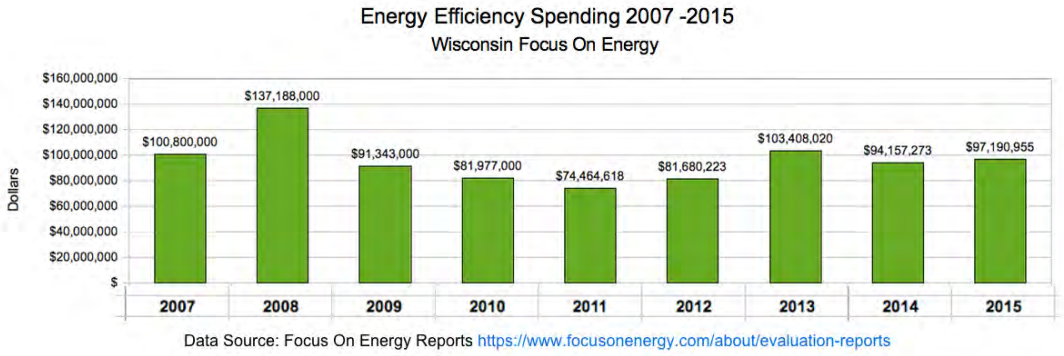
This amount would triple WI's current energy efficiency rebate program

How often will the rates for the transmission costs change?

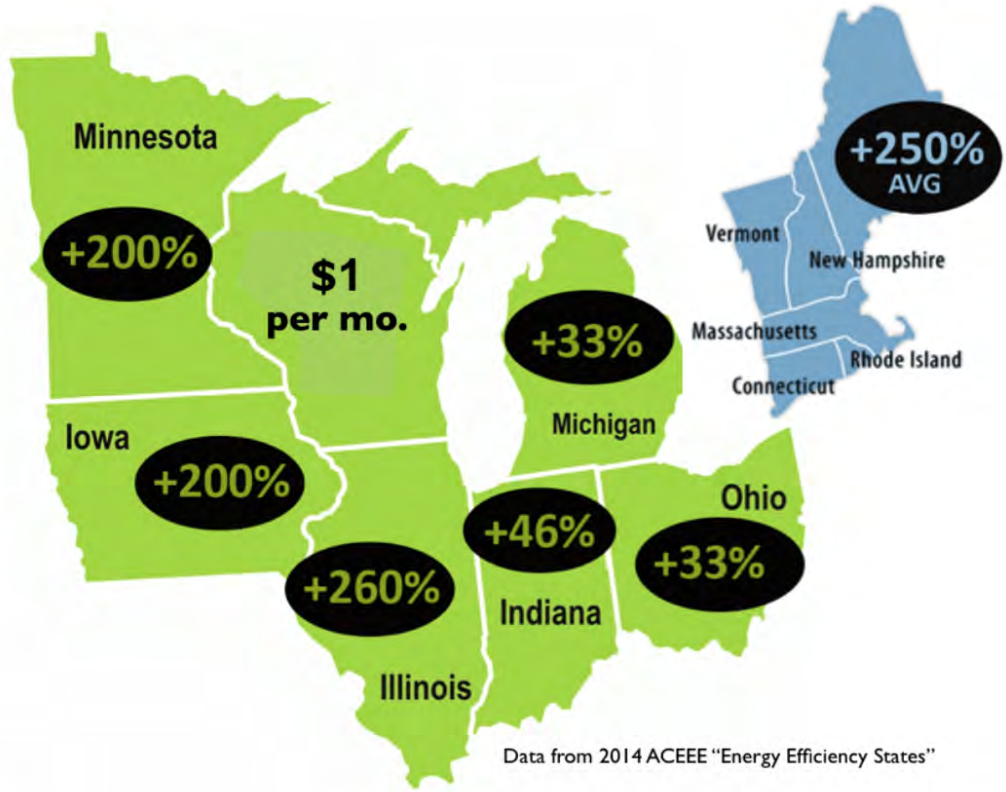
Costs for transmission service are subject to the authority of the Federal Energy Regulatory Commission. Alliant Energy adjusts its charges annually to reflect any changes which have occurred for these transmission costs. The charge is per unit of energy you use, so the actual cost adjusts annually based on your usage and any change in the charge.

Figure 3

[6b] Wisconsin Focus on Energy Spending in 2007 and 2012. The 2011 Energy Efficiency budget was 74% of the budget for the program in 2007 and in 2012 it was 81% of the 2007 amount. Program spending in the Wisconsin is close to $1 per month per residential customer which is less than spending in surrounding states.



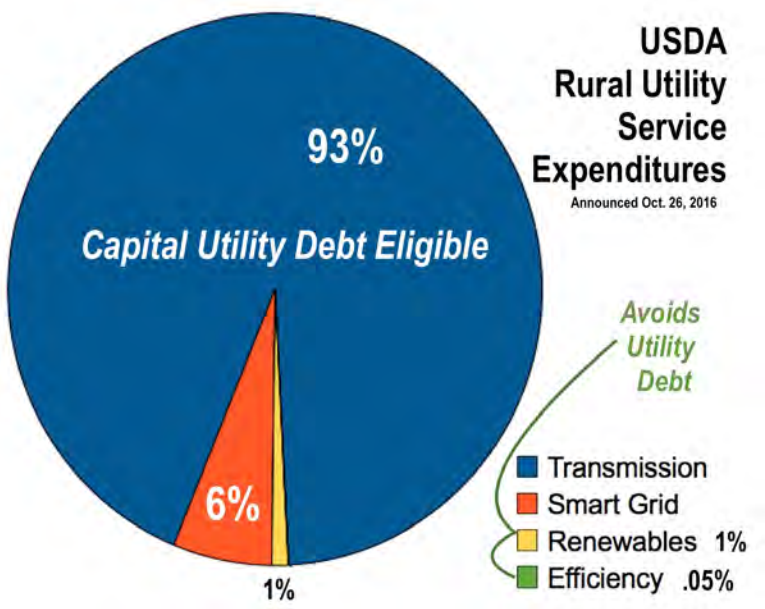
Source: https://www.focusonenergy.com/about/evaluation-reports



Source: http://aceee.org/sites/default/files/publications/researchreports/u1408.pdf

FIGURE 4

$3.6 Billion for RUS Electric Projects in 31 States *Funded in 2016*



Eight Distributed Generation and Efficiency Projects for Utilities

Edenton Solar LLC (North Carolina)
$26,000,000 for 20 MW solar photovoltaic renewable farm.

Plumas-Sierra Rural Electric Cooperative (California and Nevada)
$7,000,000 for solar photovoltaic renewable projects.

South Mississippi Electric Power Association
$1,250,000 for five distributed solar photovoltaic renewable projects.

Sioux Valley Energy (South Dakota, Minnesota and Iowa)
$200,000 for solar photovoltaic renewable projects.

Western Iowa Power Cooperative
$525,000 for a solar photovoltaic renewable generation system

Dixie Electric Cooperative (Alabama)
$684,000 for energy efficiency projects.

Midwest Energy Cooperative (Michigan, Indiana, Ohio)
$1,098,036 for energy efficiency projects.

FIGURE 5

CapX2020_EIS_Section2Alternatives_UWP_WI64-Dairyland_CapXHRLC_FEIS-Sec2_RDNotes.pdf (page 2 of 110)

"energy efficiency"

Final EIS Section Pertaining to Non-Transmission Alternatives for CapX2020 - 2013

Sort by: Search Rank | Page Order — Found on 1 page

CapX2020_EIS_Section2Alternativ...

Page 2 — 1 match

However, as explained in the AES, demand side management and ***energ...***

The entire section on non-transmission alternatives is 172 words in length.

The phrase "energy efficiency" occurs once in the EIS and dismissed as already accounted for in applicant provided assumptions . DSM, Conservation and Distributed Generation are dismissed with the same reasoning

those included in the Proposal, in addition to Proposal route alternatives that are not evaluated in detail.

Applicant projections of DSM were under estimated by applicants for CapX2020 and Badger-Coulee. Powers Engineering Direct

2.2.1 Demand Side Management

The AES evaluated the two components of demand side management, load management and conservation. Demand side management is important for reducing the need for both new generation and transmission facilities. However, as explained in the AES, demand side management and energy efficiency are measures that are already incorporated into a utility's projections and therefore are not available to further reduce load (Dairyland 2009b, pp. 3-14 and 3-15). **In other words, when utilities project future electricity needs, their projections include the expected effects of DSM. MISO likewise includes the effects of DSM in its growth projections (Webb 2012 p. 4).**

MISO estimates of DSM are slowly improving due to FERC Order 1000

While there is the potential that future legislative or private action may result in implementation of additional DSM measures beyond those already incorporated into projections, these potential future measures are speculative.

WI does not conduct an on-going IRP, process. User side alternatives are considered only a case by case basis. State statute does restrict NTA analysis to current funding or legislative policies in NTA analysis

Because DSM is already included in the projections upon which the need for the Proposal is based, it cannot independently meet the need for community or regional reliability. DSM would also not address the need for generation outlet.

Due to market rules set by FERC, transmission expansion proposals are not able to guarantee any environmental benefits such as CO2 emission reductions or economic savings assumed by "generation outlet.". It is wholly biased to fail to conduct analysis of the benefits of a comparable investment in EE, DSM and Conservation on the basis of any factors for which the applicants preferred option cannot be held accountable.

FIGURE 6

December 8, 2016

Kellie Kubena
Environmental Division
USDA Rural Development/Rural Utilities Service
STOP 1510, Rm 5135
1400 Independence Ave., SW
Washington, DC 20250
<Kellie.Kubena@wdc.usda.gov>

Re: Follow-up EIS meeting concerning NTA analysis, December 7th, Barneveld, WI

Our meetings yesterday were productive and encouraging. Our great thanks to everyone for their interest and support.

We have attached to this letter, questions for DPC and RUS that we went over about developing cost-benefit analysis of non-transmission alternatives in the EIS. We look forward to suggestions about points 1-4, soon.

We believe that our discussion increased appreciation for the abilities of non-transmission alternatives (NTA's) to revive partnerships between the coop and rural economies while addressing the pressing need to confront the negative impacts of capital utility projects that are driving up the cost of electricity across Wisconsin and the Midwest.

Including cost benefit analysis of non-transmission alternatives in the EIS will also substantiate the basis of the applicants' reliability goals .

Towards partnerships in developing rural economies, we noted that a good number of Dairyland's 15 ~1-1.5 MW solar projects will be removing load from older substations/lines prolonging their lifespans and avoiding capital expense passed onto electric customers. These facilities provide one example of the distributed generation leg of NTA's along wth targeted energy efficiency, load management. We also noted in the meeting that three of these solar facilities are examples of investment partnership by allowing electric customers to lease solar panels at less than $2 per watt lowering utility capital expense and saving DPC customers in the short and long term.

It was a pleasure to meet Joe Dorava and learn more about his engineering talents and start talking with Greg Poremba about engaging his talents as an economist and other specialists at SWCA.

Thank you again for this opportunity to continue assisting with development of the EIS section concerning Non-Transmission Alternatives.

We will be following up with a report about our other meeting soon.

Sincerely,
//SS//

David Clutter, Driftless Area Land Conservancy
Rob Danielson, Town of Stark (Vernon County), Energy Planning & Information Committee
David Giffey, Town of Arena (Iowa Co.)
Laurie and Richard Graney, Town of Lima (Grant Co.)
Barbara Grenlie, Chair, Town of Vermont (Dane Co.)
John Hess, Chair, Town of Wyoming (Iowa Co.)
David Stanfield, Town of Vermont, Energy Planning Committee
Michael McDermott, Town of Vermont Powerline Action Committee
Katie McGrath, Leglslative Outreach
Mark Mittlestadt, Blue Ox Forestry /Driftless Area Land Conservancy
Chuck Tennessen , Driftless Area Land Conservancy

cc:
Chuck Thompson, Dairyland Power Cooperative
Christopher McLean, Assistant Administrator, Rural Utilities Service
Dennis Rankin, Cardinal Hickory Creek EiS Project Co-Manager
Lauren Cusick, Cardinal Hickory Creek EiS Project Co-Manager

Dairyland Coop Members Meeting
1:30 pm December 7, 2016 Deer Valley Board Room . Barneveld, WI
Chuck Thompson, Dairyland Power Cooperative (DPC)
Dennis Rankin, Rurual Utility Service (RUS), EIS CHC Project Manager
Joseph Dorava, Rurual Utility Service, Engineer Specialist
Others Joining the meeting:

RE: RUS EIS being prepared for the Cardinal Hickory Creek (CHC) Proposal and alternatives that impact DPC customers, communities and related potentials for the RUS electric loan program.

Reference : July 2016, Alternative Evaluation Study (AES) https://www.rd.usda.gov/files/UWP-AlternativeEvaluationStudyJuly2016.pdf (Rob can provide references to related NTA initiatives.)

1. The AES does not seem to have a Low Voltage Transmission Alternative at this point.
   Shortfalls:
   (a) Required by PSCW
   (b) Traditionally used to establish basis of reliability concerns
   (c) Needed to determine facilities/loads where Non-Transmission Alternatives (NTA's) based on energy efficiency, load management and distributed generation can be most effectively targeted.

2. Do the nine listed reliability projects on page 22 have relationship with a Low Voltage Alternative?

Table 2-1. Transmission Projects Eliminated through the Cardinal-Hickory Creek Project

Transmission Project	Length (miles)	Cost ($)
Salem 161 kV Bus Tie	N/A	1,000,000
Rock Creek 161 kV Bus Tie	N/A	1,000,000
Beaver Channel 161 kV Bus Tie	N/A	1,000,000
Maquoketa - Hillsie 161 kV	11.99	17,985,000
Lore - Kerper 161 kV	7.02	10,530,000
8th Street - Kerper 161 kV	2.60	3,900,000
East Calamus - Grand Mound 161 kV	2.56	3,840,000
Dundee - Coggon 161 kV	18.10	27,150,000
Sub 56 (Davenport) - Sub 85 161 kV	3.80	5,700,000
Vienna - North Madison 138 kV	0.21	315,000
Townline Road - Bass Creek 138 kV	11.82	17,730,000
Portage - Columbia 138 kV Ckt 2	5.70	8,550,000
Portage - Columbia 138 kV Ckt 1	5.70	8,550,000

Source: MISO, 2014-1, Table 6-13.[6]

The Triennial Review's identification of avoided-reliability projects in 2033 was based on MTEP-13 (MISO, 2014-1, § 3.3, page 18).7 A more recent industry assessment of system reliability during summer peak in the year 2020 demonstrates that this Project would eliminate projected reliability issues under a variety of contingencies8 (ReliabilityFirst, 2015).

3. Is it possible for RUS to evaluate Reliability Benefits for CHC without a Low Voltage Alternative?

Primary info needed"

(a) A list of identified "reliability" transmission facilities for CHC with estimated thermal overloading data. Can be located anywhere as the project is defined as regional with regional cost sharing. Also address any anticipated load shedding issues using reliability projects that are expected to be resolved by CHC. Include Dairyland owned Stoneman-Nelson Dewey 161 kV options in this process?

(b) Estimated costs for above reliability projects.

(c) Estimated west to east power transfer data for CHC.

(d) Estimated west to east power transfer data with thermal over loading eliminated at reliability projects.

4. The AES does not seem to state the comprehensive costs for CHC *over 35-40 years* including construction costs, other construction period related costs, maintenance, operation, possible security or hardening costs, depreciation and other financial related costs passed onto electric customers. (In this case all electric customers as the project would be cost shared). This cost is needed to create a budget by which NTA' generated benefits can be compared.

(a) The need for this data in transmission expansion proposals is supported by more than 120 municipalities in WI.

(b) How do we go about determining these comprehensive costs for CHC over 35-40 years?

5. Follow-up meeting with engineers?

6. How to go about organizing and paying for the EIS including cost benefit analysis of non-transmission alternatives based on spending a comparable amount to that of 35-40 year Project costs on energy efficiency, load management and distributed generation.

(a) Outside, Third Party such as Synapse?
(b) Other options?

January 6, 2017

To: Kellie Kubena, USDA Rural Development/Rural Utilities Service (RUS)

CC: Lauren Cusick, USDA Rural Development/Rural Utilities Service
Joseph Dorava USDA Rural Development/Rural Utilities Service
Greg Poremba, SWCA Environmental Consultants (SWCA)
Dennis Rankin, USDA Rural Development/Rural Utilities Service

From: Municipal Government Delegation, Towns of Arena, Stark, Vermont and Wyoming

Re: Municipal government delegation comments and suggestions regarding the AES document in preparation of the Draft EIS for the Cardinal Hickory Creek proposal.

Thank you for this opportunity to provide our third entry of written comments, suggestions and recommended resources to assist with the development of the Draft EIS for the Cardinal Hickory Creek 345 kV transmission proposal. Comments with page references to the AES follow these general observations.

We use the phrase, "***HVT Project"*** to refer to the 345 kV transmission line option with any routing; "**LV Alternative"** to refer to PSCW-required Low Voltage Alternatives (related to "reliability projects) and the abbreviation "**NTA's"** to refer to Non-Transmission Alternatives mostly involving energy efficiency, load management and distributed renewable energy generation resources.

As stated in earlier correspondence, prudent analysis of the economic and environmental benefits created by non-transmission alternatives should be based on funding levels equal to the 40 year cost that would be assumed by electric customers for the HVT Project including construction, financing, operation, maintenance, depreciation and security hardening costs.

Our request that the EIS exercise conducted for transmission expansion proposals include comprehensive, cost-benefit analysis of NTA's is established in formal resolutions adopted by more than 120 municipal governments in Wisconsin since 2011. A sample resolution may be accessed on the PSC Cardinal Hickory Creek docket (#05-CE-146): http://bit.ly/TownResolution_05CE146

We observe that information made available in the July 2016 AES, thus far, is insufficient to allow the RUS to comply with statutory EIS requirements to inform public officials, the public and

electric customers across the Midwest both concerning a potential need for the proposed HVT Project and of low voltage and non-transmission alternatives. We greatly appreciate that managing staff at SWCA and RUS have determined ways to ensure that non-transmission alternatives are thoroughly considered with "in house" resources should funds to hire additional expertise fail to become available.

This third round of comments attends to questions we have about statements in the AES and omissions in the document. The later includes information the applicants are not accounting for and statements for which no supporting documentation evidence is referenced.

In addition to line item comments that follow below, we offer these broad observations about the applicants' July 2016 AES document:

I. More than 90% of the AES attempts to justify the HVT Project, not address the primary goal of an AES to evaluate alternatives to the Project. The AES provides only narrative introduction to NTA's. It makes no effort to describe available resources and programs that could be engaged or estimate economic and environmental benefits if the many millions required of electric customers for Cardinal Hickory Creek over 40 years were alternatively spent towards NTA's.

II. The conclusions reached by the applicants in the AES are not based on evidence presented. For the most part, they are generalizations stemming from MISO, utility interest studies made previous to 2010. The applicants cite these pre-2010 studies in their Summary of Need but not the 2014 Triennial "update," which they attach. There are reasons to suspect the flow analysis behind the 2014 Triennial update is still based on pre-2010 calculations made before the industry was aware of the historic flattening and decline of electricity use.

III. With the abundant resources available to the organization, we do not understand why MISO has not provided a comprehensive update of planning for the remaining MVP projects using contemporary grid flow data. More than half of the 17 MVP expansion lines are now in service enabling calculations of potential benefits to be much more accurate. As noted by experts in the Badger-Coulee review, *potential* energy savings (from relieving congestion) are largely dependent on energy use *increasing. P*otential energy savings from that 345 kV line addition also to Wisconsin were razor thin, only 6-9 cents per month for residential customers under *higher than experienced growth rates*.

IV. By no measure have the applicants studied NTA's with the goals defined by NEPA to determine *if* any *potential* need for the HVT Project could be replaced with alternative investments such as NTA's. Any need for the HVT Project is "potential," because need cannot be established only through arguments from parties who profit from building transmission.

V. The AES cites no FERC reliability violations that would be eliminated by the HVT Project. WI's 10% RPS or renewable energy requirements are being met with existing transmission

and policy changes regarding renewable energy or CO2 requirements are in no way imminent as applicants suggest.

VI. The prospect of providing savings from lowering congestion in the transmission system is very low as evidenced *by decreasing* electricity rates over the last few years. The cost of electricity service is rising in Wisconsin due to huge increases in fixed facility fees to recover the fixed costs billed to utilities for capital utility debt. Cardinal Hickory Creek would add to that burden and not lower the cost of electrical service in Wisconsin or in other states.

VII. Typically, NTA experts require a list of transmission facilities for the Low Voltage Alternative(s) to study applications of targeted energy efficiency, load management and distributed generation to avoid all or most of the improvements at those facilities. This is is advisable and cost effective when energy use is flat and declining. Because LV Alternatives are designed to match the benefits claimed for the HVT project, any potential need for the HVT Project can thus be effectively evaluated using energy spending options preferred by electric customers.

VIII. Should the applicants refuse to provide one or more LV Alternatives for the Cardinal Hickory Creek proposal, it creates grounds for the RUS to observe that since analysis of NTA's is not yet possible, only a compromised EIS can be produced. Another possibility is to use the 13 "reliability projects" in Table 2.1 on page 22 with applicants providing comprehensive, recent and historical load information for these 13 facilities.

IX. We know that SWCA and RUS experts appreciate that the *central* value of the EIS effort is to reflect the goals of elected and appointed decision makers who are held accountable to landowners, local economies, electric customers and utilities in their judgements. These individuals are under great pressure and deserve the most responsible EIS that can be produced. Utility interests are *guaranteed* returns when a state PSC approves one of their projects. It is the electric customers who are conscripted by the PSC to pay for the high interest capital utility expense over decades, whether it is needed or not.

We hope that these comments can assist RUS and SWCA personnel explore all options and reach well-founded conclusions in the DEIS and FEIS. There are many instances in our comments where we have not yet provided information sources. We look forward to your follow-up questions and helping all parties access the best information available.

Sincerely,
//SS//

Rob Danielson, Town of Stark (Vernon County), Energy Planning & Information Committee; David Giffey, Town of Arena (Iowa Co.); Laurie and Richard Graney, Town of Lima (Grant Co.); Barbara Grenlie, Chair, Town of Vermont (Dane Co.); John Hess, Chair, Town of Wyoming (Iowa Co.); David Stanfield, Town of Vermont, Energy Planning Committee; Michael McDermott, Town of Vermont Powerline Action Committee and Katie McGrath, Legislative Outreach.

Delegation Comments Regarding AES July 16, 2016
Cardinal Hickory Creek Proposal
[quotations from AES in red]

A. "Each alternative will be described in sufficient detail so that the public and other stakeholders can understand and assess each alternative. This AES will also explain which [transmission-only] alternative is best for fulfilling the need for the Project and why the other alternatives considered were rejected." (p7)

NTA's IN GENERAL: "This section (3.4) introduces different types of non-transmission alternatives ("NTA") and evaluates whether they are feasible alternatives to the Cardinal-Hickory Creek Project. Typical NTAs include centralized generation, distributed generation, energy storage, energy efficiency, and demand response." (p44)

Though holding the namesake of the, "Alternatives Evaluations Study," the applicants' consideration of NTA's is limited to 4 pages or 4% of total document wordage. Discussion of load management and energy efficiency, alternatives with proven cost-effectiveness and robust deployment in other states, is restricted to two paragraphs-- less than 1/2% of the applicants' efforts to meet the purpose of the document.

No calculations of NTA potentials or modeling are attempted; no mention is made of any existing NTA resources in Wisconsin or Iowa. Conservation practices, which are known to follow after adoption of energy efficiency, load management and on site/community solar are roundly ignored by the applicant's study.

Given the focus of NEPA on studying and developing NTA's, this shortfall is highly unfortunate.

LOW VOLTAGE ALTERNATIVES: "MISO only studied an [low voltage transmission] alternative if it allowed the MISO states to meet their RPSs. [No] portfolio of low-voltage alternatives simply could not meet this fundamental requirement...therefore, MISO did not study an entire portfolio of low-voltage alternatives during the MVP process;" (p42)

As best as we can tell, the applicants are relying on MISO-conducted, selective analysis of reliability projects based on pre 2010 conditions. Given that a significant percentage of system lines are 40-70 years old and will eventually require upgrading or NTA support at some point anyway, the relatively small number of 42 "potential" reliability projects across the MISO footprint is an indication that the system is quite stable. (See pg 22)

To establish a reliability need for the HVT Project, applicants need to provide a *contemporary* list of reliability projects with and without the HVT Project taking into consideration the impacts of 14? of the MVP expansion lines that are now in service. It is not prudent to ask Wisconsin decision makers to use conclusions applicants have reached based on pre 2010 MISO projections when actual data is accessible.

LOW VOLTAGE ALTERNATIVES: "While MISO did not consider an entire portfolio of low-voltage alternatives,...MISO considered whether rebuilding the overloaded 138 kV lines between northeastern Iowa and southwestern Wisconsin would be better than a 345 kV line (MISO, 2012, p. 29). MISO rejected this low-voltage alternative because the estimated cost was greater than the Project and it would not provide the same level of benefits." (p42)

Ask the applicants to please provide the document name with link for "MISO, 2012." We cannot find it in the references list.

The AES does include a Low Voltage Alternative(s). The EIS development team for Rochester-La Crosse CapX2020 were given at least four LV Alternatives from the outset. As the WI PSC requires LV Alternatives for all transmission proposals, it is unclear why the applicants are not providing this information, especially in a document addressing alternatives.

The lack of contemporary LV Alternatives suggests that MISO could be hesitant to conduct updated, full analysis of flow characteristics in the impact area. This is concerning given the trend of flat and declining electricity use. Flat and declining energy use has significant impact on a transmission project's ability to deliver reliability and economic benefits. Potential savings are generally proportional to rate of growth in energy use and peak demand and reliability factors tend to stabilize. See page 5, Peter Lanzalotta Direct for Badger-Coulee http://psc.wi.gov/apps35/ERF_view/viewdoc.aspx?docid=229027

Because stress on transmission facilities does not tend to increase under flat and declining electricity use, Non-Transmission Alternatives become more feasible.

The "No Wires*" study of NTA's conducted for the Badger-Coulee HVT review demonstrated that targeted load management, energy efficiency and community solar are far more cost-effective than making the physical improvements to transmission facilities. Powers Engineering discovered that $190 million in reliability improvements on low voltage transmission facilities could be avoided with either $4 million in targeted load management, $9 million in energy efficiency and $19 million in community solar. A very similar approach was approved in 2014 by the New York PSC Reforming Energy Vision program. In that case, ComEd proposed spending $1 billion to upgrade a substation but the cost of removing load from the facility with NTA's proved to be about $200 million.**
***See** http://bit.ly/Powers-Direct
** http://bit.ly/NYC-1-Billion-NWA-Solution

We are not familiar with high voltage transmission proposals that are not able to determine Low Voltage Alternatives which, by definition, duplicate the benefits estimated for the HVT Project. With this information, primary reliability benefits for the Project are documented. Only through analysis of this information can head to head comparisons of potential energy savings, CO2 reductions and other factors be made with the HVT Project and the other alternatives.

Typically, NTA experts require a list of transmission facilities for at least one LV Alternative to study uses locally targeted energy efficiency, load management and distributed generation to make all or most transmission facility improvements unnecessary. If the applicants do not provide at least one LV Alternative for Cardinal Hickory Creek proposal, it creates grounds for stating that an un-compromised EIS is not possible.

LOW VOLTAGE ALTERNATIVES: "...as discussed above in Section 2.4.1.2, the recent development of Operating Guides for multiple element outages highlights the need for a new high-voltage connection into southwestern Wisconsin. If a new high-voltage connection is not built, multiple facility improvements would be required to avoid loss of load in addition to any combination of low- voltage lines." (p42)

Traditionally, such, "multiple facility improvements" would be part of one or more studied and determined LV Alternatives.

Ask the applicants: If building Cardinal Hickory Creek would result in continuing outage practices in SW WI, please discuss this necessity in relation to none of the reliability projects in Table 2.1 on page 22 being in the HVT Project study area.

Ask the applicants to explain how the 2015, double circuit?, ~$24 million upgrade of the Lore-Turkey River-Stoneman 161 kV transmission line as recommended by MISO has proven insufficient as connection into southwestern Wisconsin.

LOW VOLTAGE ALTERNATIVES: "...a low-voltage alternative would not provide the same level of economic benefits as the Project. Low-voltage lines have higher line losses than the Project and are, therefore, less economically efficient." (p43)

Ask the applicants what presented, "low-voltage alternative" they are referring to and if they have conducted cost-benefit analysis of this or any LV Alternative, to submit it with the proposal.

The referred to line loss and efficiency factors are traditionally accounted for through analysis of contemporary flow data and the determination of one or more LV Alternatives.

LOW VOLTAGE ALTERNATIVES: " ..a low-voltage alternative was not defined as an MVP by MISO so it would not be cost-shared across the MISO footprint such that the costs to local ratepayers would be higher than this Project." (p43)

The applicants are overlooking that the total cost of one, potential "LV Alternative" in the AES, the 13 reliability projects in Table 2.1 on page 22 appears is about $107 million. This amount is substantially lower than the constructions costs(?) for HVT Project estimates at $500 million.

Ask DPC if one of their motivations for promoting the building of Cardinal Hickory Creek is because it is cost-shared?

Ask DPC: Other than the 1 mile potential Stoneman-Nelson Dewey 161 kV upgrade, are there any other transmission facilities that DPC owns that might delay being upgraded if Cardinal Hickory Creek is built?

Ask the applicants to discuss what they mean by "local ratepayers."

Ask the applicants to explain how making ratepayers in other states pay for a part of a much costlier expansion transmission line is somehow better than Wisconsin ratepayers/utilities being primarily responsible for our own transmission needs.

LOW VOLTAGE ALTERNATIVES: "Based on MISO's information, eliminating the need for those projects would save approximately $151,710,000 (2014 dollars)" (p25)

Ask the applicants to confirm the list of reliability projects they are referring to in this statement and their source of the information. As the $151,710,000 amount may conflict with the figures in the chart on page 22, ask the applicants to provide and explain the accounting used to achieve this amount.

We observe a concern about consistency in LV Alternatives. There were two, almost mutually exclusive LV Alternatives presented by applicants for the Badger-Coulee proposal. The first LV Alternative was created under fairly high energy and demand growth rates and featured a good number of reliability projects in Southwest Wisconsin. The second, requested by PSC staff to account for more contemporary, lower energy and growth rates, shifted geographically northward with no reliability projects in SW WI.

Two of the "reliability projects" which applicants now claim would be avoided by Cardinal Hickory Creek were listed in September 2014 as "not avoided" from building Cardinal Hickory Creek or Badger-Coulee and from building both projects. The projects involved are the Portage - Columbia 138 kV Ckt 2 and Portage - Columbia 138 kV Ckt 1 at the bottom of the table on page 4 of this data submission: http://psc.wi.gov/apps35/ERF_view/viewdoc.aspx?docid=215261

ENERGY EFFICIENCY: "The four Futures studied by MISO all included reasonable increases in energy efficiency but still found a need for the MVP Portfolio." (p47)

Ask the applicants to identify the particular MISO Futures they refer to. Though encouraged by FERC Order 1000, MISO does not present Futures that test stand-alone, non-transmission *alternatives;* all of MISO's economic Futures assume that proposed transmission project(s) will be built.

Ask the applicants to quantify the "reasonable increases" they describe and if they were determined by MISO's "MECT" practice. MECT is a method of *asking utilities,* not PSC/PUC's or experts that study NTA's, to establish the value and potential of NTA resources in their service territories.

Comprehensive analysis of non-transmission alternatives estimates savings and environmental benefits from spending towards energy efficiency, load management and distributed generation using a budget matching the 30-40 year total costs of HVT Project that would be assumed by electric customers.

ENERGY EFFICIENCY: "For energy efficiency to replace this Project, energy efficiency efforts would have to eliminate demand to a level that all the RPS would be met with existing renewable resources and the reliability and congestion benefits would be achieved through a dramatic reduction in flows on the regional grid. Such an increase in energy efficiency is simply not possible.

For some reason, the applicants are asking Energy Efficiency to deliver benefits they do not claim the HVT Project will deliver. The applicants do not consider the energy reduction potential of accelerated spending in energy efficiency, lowered grid costs and the increasingly frequency* benefits of energy efficiency and load management with aging transmission facilities. Transmission builders are not sufficiently motivated to avoid transmission expenditures. *On page 8 of the AES, the applicants indicate that substation upgrades are averaging one per every 13 miles of transmission. "Since its formation, ATC has upgraded or built more than 2,300 miles of transmission lines and 175 substations" (p8)

Ask the applicants, as they insinuate in their comparison, if the HVT Project is needed to provide unmet WI utility demand for out of state renewable energy. Wisconsin utilities's are meeting WI's 10% RPS requirement with existing transmission. With these RPS goals met and electricity use flat and declining in WI, we note that purchases of renewable energy peaked in 2014. (See p46, PSC Strategic Energy Assessment http://psc.wi.gov/apps35/ERF_view/viewdoc.aspx?docid=289792

Even if energy efficiency was asked to match total existing renewable energy imports (a goal the applicants do not substantiate for the HVT Project), reducing electricity use by 5.3%* by the end of the project planning window should be doable with accelerated investment in energy efficiency. (*p45, PSC Strategic Energy Assessment http://psc.wi.gov/apps35/ERF_view/viewdoc.aspx?docid=289792 **53% of the 10% RPS was out of state renewable energy.) For energy efficiency energy savings rates and environmental benefits in WI, see audits of the Focus on Energy program,** https://focusonenergy.com/about/evaluation-reports

By, supposedly, lowering congestion-related energy costs and all other factors being equal, transmission expansion investment encourages greater energy use over time than electric customer dollars applied towards energy efficiency. Increasing demand over time, as MVP MISO expansion planning assumes, tends to increase grid related costs counter-acting congestion relief savings.

Unlike potential savings from transmission expansion that are dependent on energy use and costs increasing, savings from spending on energy efficiency and load management directly lower electric use and bills.

Unlike transmission additions, reducing use is core to Energy Efficiency and Load Management. Lower use over time enables greater transmission flow and congestion savings while providing reliability benefits through avoided peak use. Lowered peak use has great value at this juncture because it extends the lifespan of costly transformers and other components in aging substations. Thus, investments in Energy Efficiency and Load Management more reliably increase the inherent value of prior transmission investments.

Summer peak use in WI (the largest of the year) has been trending downward since 2011*, not upwards as MISO planning Futures assume. WI PSC analysis of load management practices by WI utilities show very considerable untapped resources in the state. (*p11, **p16, PSC Strategic Energy Assessment** http://psc.wi.gov/apps35/ERF_view/viewdoc.aspx?docid=289792

ENERGY EFFICIENCY: "Given that this Project is intended to deliver renewable energy from Iowa to Wisconsin and the entire region, energy efficiency is not a reasonable alternative." (p47)

Ask the applicants what they mean by "intended." Do they guarantee the Project would increase the amount of renewable energy purchased in Wisconsin? Ask the applicants to provide analysis of the HVT Project with sales of renewable energy to Wisconsin under flat and declining energy use without changes in the state 10% RPS.

The applicants do not acknowledge that CO2 emissions avoided when a kWh is not consumed are greater than importing a kWh of renewable energy from Iowa. The impact differences are largely determined by the heavily-weighted fossil fuel content of wholesale-marketed power. About 75-80% of wholesale power in the MISO fuel mix appears to fossil fuel generation and about 7% is from wind generation. See MISO annual reports,
https://www.misoenergy.org/MarketsOperations/IndependentMarketMonitor/Pages/IndependentMarketMonitor.aspx

When a household avoids a kWh of wholesale power use, 80% of the negative CO2 impacts associated with this unit of wholesale power are avoided. The reduction also lowers demand on the grid and related costs. However, if a few percents of renewable energy are added to mix imported from remote areas, the electricity consumed in Wisconsin still will have a very high concentration of fossil fuel generation.

Similarly, when renewable energy removes load from the grid installed "behind the meter" or supporting a local substation, CO2 emission reduction is optimized as is does with use of energy efficiency.

In contrast, when utility-scale renewable energy is added at a remote location, not only does importing power encourage more fossil fuel than renewable generation, it creates demand for capital transmission expense with long-term, negative impacts on the development of local renewable energy. These transmission costs paid over decades, are largely billed to utilities as a fixed cost, not by kWh which directly lowers the "avoided cost" calculation utilities often use to determine the price they can pay for local

renewable energy. For some municipal utilities in Wisconsin, these fixed charges for existing transmission are effectively lowering "avoided cost" calculations about 30% compared to transmission billed per unit. In the case of Alliant Energy in WI, some of the charges for past regional transmission now amount to 19% of a typical residential electric bill. (See https://www.alliantenergy.com/AboutAlliantEnergy/Newsroom/RateCases/030377

The $2 per month average household increase for Alliant's Regional Transmission Service fee from 2015 to 2016, alone, would have tripled the energy efficiency rebate pool in Wisconsin.

Even if RPS policy were to change requiring WI utilities to purchase more renewable energy, the applicants provide no reasons or evidence that WI utilities would favor buying the extra renewable power out of state source over developing the resource within their own service territories. This is what Dairyland Power Cooperative seems to be doing by installing 15 substation-supporting solar facilities and the 98 MW Quilt Block wind farm within their own service territory.

If wind power delivered from remote locations is attractive to utilities because of lower cost, why aren't Wisconsin utilities making this claim? Ask the applicants to provide analysis of end-costs paid by their utility customers for all types of power the utility buys adjusted for transmission costs and time of generation/use impacts on LMP wholesale pricing.

LOAD MANAGEMENT: "As with energy efficiency, load reduction and load shifting result in a decreased need for electricity...Neither load reduction nor load shifting would directly increase the transfer capability between Iowa and Wisconsin to allow for additional renewable energy transfer." (p47)

The applicants' reasoning is incomplete and hard to understand. Ask the applicants to elaborate on the purported exclusiveness of benefits from additional renewable energy transfer from Iowa, how the additional transfer would be guaranteed by the HVT Project and how CO2 reduction and economic benefits are not guaranteed from investments in energy efficiency and load management.

LOAD MANAGEMENT: "Demand response would not provide the reliability benefits of the Cardinal-Hickory Creek Project. " (p47)

How much, what type, under what conditions and at what locations are the applicants assuming the demand response would be engaged?

What, established, "reliability benefits" are the applicants referring to?

If the applicants are referring to the 13 reliability projects in Table 2.1 on page 22 or the quoted "30 transmission projects mentioned in the Triennial Review," ask them to how

demand response applied to remove load from these transmission facilities would not provide reliability benefits under peak demand conditions.

If the applicants argue that the WI PSC or Iowa IUB or Minnesota PUC cannot recommend use of non-transmission alternatives in other states as more cost effective, ask the applicants to explain how this economic rationale is consistent with the ability to approve transmission projects whose costs are assumed by electric customers in other states?

Doe the review of cost shared, MVP project mean state PSC' are under no obligation to see that electric customer dollars are spent most cost effectively, in the whole, regardless of state jurisdictions?

LOAD MANAGEMENT: "If load reduction were contracted to respond to real-time market signals, it could provide some congestion relief. However, the scope of this Project would require an amount of price responsive demand that is not known to exist. In sum, demand response is not an alternative to this Project." (p47)

Ask the applicants to explain their hesitancy in placing economic values on demand response considering the "dual fuel" and "slab heat" programs at some Distribution Coops of Dairyland Power Cooperative which deploy radio-controlled switching of electric hot water, air conditioning, heating and other larger loads. According to correspondence with one of the Coops, these measures are averaging 5-7% of summer use and 10-12% of winter use. See: http://www.vernonelectric.org/content/dual-fuel
http://xso.dairylandpower.coop/lm/LCstatus_xres.html
http://www.vernonelectric.org/content/storage-heat

Ask the applicants to explain how these load management systems within Dairyland Power's service territory are not examples of, "responding to real-time market signals?

Ask the applicants to explain why these Distribution Coops bother to use this load shifting if it does not result in electric customers requiring/needing less power during peak demand when wholesale pricing trends higher.

Ask applicants to explain whether the load management practices at these Distribution Coops result in net savings for all co-op members.

Ask the applicants to explain why Wisconsin utilities cannot incentivize and implement modern, load management tools such as "nest" thermostats for A/C & heating controlled via computers or smart phones or utilize the new hot water tanks with federally required internet control capability.

Ask the applicants to explain how relatively low cost, automatic email and smart phone alerts encouraging end users to manually and voluntarily reduce use under peak demand conditions would not be economic.

NTA's IN GENERAL: "None of the NTAs could meet the purpose and need of this Project: bolstering reliability, increasing economic benefits, increasing transfer capability between Iowa and Wisconsin to ensure compliance with existing RPSs, and increasing flexibility to address emerging public policies. For these reasons, there is not a feasible NTA to this Project." (p47)

Ask the applicants to explain how existing transmission in Wisconsin is prohibiting compliance with Wisconsin's 10% RPS? Ask applicants to provide the names and locations of the limiting transmission facilities with the number of limiting hours per month by month with the explanation.

Ask the applicants to cite one or more laws and regulations with imminent approval that would legally require increasing transfer capability between Iowa and Wisconsin.

B. *General Claims about the HVT Project*

"The Project proposal...has been approved by the regional transmission organization ("RTO"), namely the Midcontinent Independent System Operator Inc. ("MISO")." (p9)

Such "approval" means there was agreement between utility-interest members of MISO, a non-governmental, not for profit organization. More than 16 of the approximate 26 total votes were held by for-profit utility interests utilities on the presiding committee when MVP expansion plans (including Cardinal Hickory Creek and Badger-Coulee as one project) were agreed upon over 6 years ago. There are only a few votes with the potential to represent electric customer interests such as the three votes shared by all 11? state utility commissions.

"The Project will be approximately 125 miles long, depending on the final authorized route with the estimated costs of approximately $500 million (2023 dollars) and an in-service date of 2023." (p9)

The costs covered by this $500 million figure are not stated. The EIS needs to inform policy makers and electric customers of inclusive costs that would be assumed by electric customers over the project life of 30-40 years including construction, financing, operation, maintenance, security hardening costs and the last three "interconnection" projects bulleted on page 11. Total cost is needed as well for the EIS to provide policy makers head to head comparison of economic and environment benefits that would be delivered by spending an equal sum on NTA;s as well as LV Alternatives.

Related "Interconnection Projects" with unspecified needs/costs/ alternatives as bullets. (p11)

The bottom four projects/expenses that would be necessitated by the HVT Project could exist either outside of the project area or outside of the HVT Project budget. Their costs, environmental impacts and NTA's need to be evaluated and submitted. The applicants

need to explain how the HVT Project creates the need for these upgrades and alterations. Locations and equipment requirements for the "facility reinforcement needed in Iowa and Wisconsin" need to be described. As currently worded, this proposed work and associated costs is not sufficiently accountable.

"The Utilities are proposing to cross the Mississippi River and the Refuge at Cassville, Wisconsin. There are two existing transmission lines in this area: (1) Millville to Stoneman 69 kV, and (2) Turkey River to Stoneman 161 kV. The Project would eliminate the need for the existing Dairyland 69 kV line across the Refuge and the existing Dairyland 161 kV line would be double circuited with the new 345 kV line." (p12)

Utilities need to provide full description of these facilities including the number of circuits and their ages. They need to explain how the need for Millville to Stoneman 69 kV line is eliminated by the HVT Project,. They need to explain where corridor for this facility is located relative to the Turkey River to Stoneman 161 kV line. Applicants need to account for the removal of this 69 kV line in relation to the Stoneman to Nelson Dewey 161 kV "reliability project" they claim would also be avoided by the HVT Project.

"While the present needs are for the existing 161 kV line and the proposed 345 kV line at the river crossing, Dairyland and ITC Midwest are also presenting a design with 345 kV/345 kV specifications within the Refuge. The facilities would operate at 345 kV/161 kV for the foreseeable future, but be capable of operating at 345 kV/345 kV should future system conditions warrant it. Constructing the line in its ultimate configuration at this proposed crossing of a refuge and major river, is a prudent and cost-effective investment to accommodate future needs in a manner that avoids future impacts to the Refuge if atransmission system upgrade between Iowa and Wisconsin is needed. As with the other transmission features planned for the Refuge, the final design of the transmission facilities will be determined in consultation with the USFWS." (p12)

What "river crossing" is being considered in the above passage?

This discussion is too brief and unclear. The crossing questions need to be fully taken up by the EIS aside from the USFWS.

The applicants need to specify anticipated challenges presented by each of the potential crossings, the electric and environmental goals for each crossing and how each crossing would impact existing transmission facilities as well as description of all new corridor creation for all five crossing locations.

Do any of the potential crossings potentially go to the Nelson Dewey substation and if so, how would this affect the Stoneman to Nelson Dewey 161 kV "reliability project" claimed as avoided by the HVT Project?

Are the applicants suggesting crossing with a single 345 kV circuit and, if so why, and at what locations? The applicants need to explain how a single circuit is consistent with other descriptions of the HVT Project being double-circuited. The applicants need to

account for the number of 345 kV circuits assumed in MISO planning for the Project in 2010 and in 2014. Any factor restricting flow through the proposed HVT project requires separate analysis under separate planning scenarios and differing economic and environmental benefits.

Does the existing Turkey River to Stoneman 161 kV line currently pass over the Cassville Elementary School and if so, how do the applicants justify adding the risk of one, or possibly two 345Kv circuits at this crossing?

C. [The HVT Project would a]ddress reliability issues on the regional bulk transmission system; (p6)

"In addition to NEPA, RUS has two requirements addressing how to demonstrate the need for a project... Second, RUS's New Guidance specifies, ' The purpose of the AES is to provide the applicant's rationale for the proposal And why that proposal is the best means of solving the problem. " (p13)

No fundamental "problem" is defined by the applicants in the AES. There are no reliability, economic or policy "problems" described. "Problems" would typically take the form of existing NERC violations, evidence presented of excessive amounts of congestion taking place and citation of unmet state RPS requirements that the HVT Project is best suited to address. Without problems on this order, discussions of solutions is premature.

Starting their discussion the need, applicants cite utility-biased studies, "beginning in 2008 and culminating in 2011 ...." (p13)

No independent analysis of need for the HVT Project or for transmission expansion as whole is provided or cited.

The cited 2008-2010 studies are not attached to the AES. The 2014 Triennial MVP study, which is attached, is not referenced in the section summarizing need.

Applicants need to specify whether the 2014 Triennial document is a full, updated study of need for the HVT Project or a revision of some assumptions with the bulk made pre-2010.

The question of providing contemporary need analysis has been raised in reviews of MISO MVP proposals in recent years by testifying experts. They have observed that MISO 2008-2010 planning is based on non-transpiring policies and much higher than experienced energy/demand forecasts and is out of date.

Ask the applicants if new, system-wide ProMod analysis was run for the 2014 Triennial document including the expansion transmission projects added since 2010. If so, when?

Experts have noted that the most substantive change in the 2014 Triennial is a very significant increase in natural gas pricing and, like the 2010 studies, electricity use and demand projections are still above those being experienced.

RELIABILITY: "Power usually flows from the 345 kV transmission source at the Hickory Creek Substation near Dubuque towards Wisconsin on the 161 kV transmission lines causing high flows on these 161 kV lines. (p14)

Ask DPC to confirm which 161 kV lines are involved in the above statement and to:

- **a. Describe the usual causes of high flows on these lines.**
- **b. Describe the reason/location of the high demand .**
- **c. Explain if demand for the high flow is located within or outside of DPC's service territory and if outside, where?**
- **c. Explain whether DPC purchases power generated by other utilities using the mentioned lines.**
- **d. Explain whether DPC imports power generated by facilities they own using the mentioned lines.**

RELIABILITY: "Criterion 3: The MVP must address at least one transmission issue associated with a projected violation of a North American Electric Reliability Corporation ("NERC") or Regional Entity standard and at least one economic-based transmission issue that provides economic value across multiple pricing zones. " (p19)

Ask the applicants to provide MISO's most recent list of projected NERC violations that would be avoided by the HVT project. Also to list the MVP projects assumed to be in service for the list of projected NERC violations.

Ask the applicants to specify the most important, "economic-based transmission issue that provides economic value across multiple pricing zones" for the HVT project. Ask them to provide the names all of the transmission facilities associated with addressing this issue.

RELIABILITY: "Due to the location of the intermediate substation in Montfort, Wisconsin, the reliability improvement would also be local to southwestern Wisconsin where there is a presently a lack of connectivity to the regional 345 kV network. " (p21)

Ask the applicants to provide the reasons for a 345 kV substation being located in a very sparsely populated area.

Ask the applicants whether there is any chance of other, new transmission lines being added to the area in the future because of the presence of the large substation at Montfort.

Ask the applicants whether there is any chance of any, new transmission lines connecting at Montfort that are 345 kV or larger.

D. [The HVT Project would c]ost-effectively increase transfer capacity to enable additional renewable generation needed to meet state renewable portfolio standards and support the nation's changing energy mix; (p6)

RPS: "RPS compliance was not only a requirement, it was the primary purpose for starting the MVP process. " (p42)

Ask the applicants to explain if and how MISO MVP planning for this HVT Project proposal was updated to account for actual demand and forecasts for renewable energy purchases in Wisconsin after utilities met the WI RPS requirement in 2013.

Ask the applicants if MISO's MVP projections for the development of distributed solar resources in Wisconsin made 2008 -2010 proved to be more or less than the resources that actually developed.

RPS: "In 2008, the governors of Iowa, Minnesota, North Dakota, South Dakota, and Wisconsin formed the Upper Midwest Transmission Development Initiative ("UMTDI") to "identify and resolve regional transmission planning and cost allocation issues" within the five-state area." (p16)

There are indications that the state PSC's and governors had a minimal little role in this 2008 study. In other places it is described as "independent." Ask the applicants to account for the funding behind this study. It is important to know what interests were doing the evaluation and making recommendations.

RPS: "Criterion 1: The MVP must enable the transmission system to deliver energy reliably and economically in support of documented federal or state energy policy mandates or laws." (p19)

Ask the applicants to explain which "federal or state energy policy mandates" are not being met that building the HVT Project would resolve.

Ask the applicants if they feel Criterion 1 only requires adding *additional* support of "federal or state energy policy mandates?"

Ask applicants to describe the conditions where the addition of *any* transmission line would not provide genearl, additional support of RPS.

RPS: "In 2011, MISO determined that [all of] the projects in the MVP Portfolio...[would] reduce carbon emissions by 9 to 15 million tons annually" (p20)

Ask the applicants to provide updated CO2 reduction accountability pertaining to only the impacts of the HVT Project for both Wisconsin (or ATC's footprint) and MISO as a whole. Ask that the update show estimated CO2 emission projections at the beginning and end the HVT Project's evaluated time frame, with and without the HVT Project in service.

An updated CO2 reduction forecast for the HVT Project is necessary for NEPA/EIS analysis including the LV Alternatives and NTA's.

The CO2 reduction information supplied for Badger-Coulee* revealed that the reductions claimed would be a very small fraction of state and regional emissions. It showed that MVP planning assumes CO2 emissions would continue to increase with Badger-Coulee in service under 5 of 6 futures including one future where regional wind resources were increased very considerably. The only future in MVP planning where CO2 emissions decrease over time assume unspecified investments in energy efficiency and load management to realize the lowest amount of energy use and demand. With these NTA improvements in place in MISO's study, CO2 reductions over time are projected when the propose MVP line is not built. *Original MISO posting: http://bit.ly/MISO-CO2-Increases Summary based on CO2 changes from 2020 to 2026 rather than net computations: http://bit.ly/B-C_CO2_OverTime (pg19)]

RPS: "Because of the existing limitations on transfer from Iowa to Wisconsin, the development of additional wind generation in Iowa is dependent on increasing transfer capability.

Ask the applicants to provide documentation describing these restrictions including the total amount of power that is has been limited over recent years, the lines involved with the restricted the power flow with the number of hours per month by month during which the flow is restricted.

Ask the applicant to describe the conditions under which this limitation can restrict the abilities of Wisconsin utilities to meet their 10% RPS requirement.

Ask the applicants if there are conditions under which power would flow from east to west on the HVT project and, if so, to describe the conditions and the likely frequency.

RPS:" Indeed, there are a number of wind generation projects in MISO that are explicitly dependent upon completion of the Project. MISO has informed these wind generators that they are only eligible for conditional interconnection agreements ("IAs") until the Cardinal-Hickory Creek Project is built and operational. " (p27)

Ask the applicants to provide correspondence or other, dated documentation from MISO to the affected wind generators informing them they are only "eligible for conditional interconnection agreements." Include descriptions of the conditions under which each wind generator must "limit their output to less than nameplate."

Ask the applicants to provide and explain a sample of a revised contact that would be created for one of the affected wind generators after the HVT project is in service with an estimate of the change in output to the grid as a percentage of the full annual potential.

Ask the applicants to estimate the amount of wind generation that was limited in 2015 and 2016 at each of this wind generation facilities as a result of the lack of the HVT Project both in MWH's and as a percentage of the full, annual potential.

For all of the cited wind generators, ask the applicants to indicate all that are contracted or have been contracted under Dispatchable Intermittent Resource terms.

E. [The HVT Project would a]lleviate congestion on the transmission grid to reduce the overall cost of delivering energy; (p6)

CONGESTION: "The Project's new 345 kV transmission connection between Iowa and Wisconsin will add transmission capacity and alleviate congestion, allowing lower cost generation from the west to flow to Wisconsin." (p14) and "The addition of a 345 kV transmission line between Iowa and Wisconsin would provide a path for lower cost renewable energy to reach market, reducing overall energy costs.." (p24I

Ask the applicants to identify the associated transmission facilities that will experience less congestion and to substantiate that power flowing from west to east is "lower cost" to end users.

The applicants need to document the assertion that imported renewable energy results in lower costs for Wisconsin electric customers. Ask the transmission builders to provide data from one of their utility customers showing the end-costs to their customers for all generation types and locations of power they provide to their electric customers. The end costs need to take into consideration all costs including transmission and values associated with LMP pricing for time of day for all generation/location types.

CONGESTION: "..Reducing congestion in the area is a benefit to Dairyland by allowing a more efficient dispatch of generation, and by improving Dairyland's service to its member cooperatives' load in northeast Iowa, southwestern Wisconsin, and northwest Illinois." (p14)

Ask the applicants to elaborate on how service to member cooperatives would be improved by increasing flow either west to east or east to west across the IA/WI border flow?

CONGESTION: "..MISO applied the economic benefits test to the Portfolio as a whole, i.e. it did not evaluate the economic benefits of each component of the Portfolio. (p24)

Ask the applicants to provide an evaluation of the economic benefits for just the HVT Project, not the entire MVP portfolio. Per proposal evaluation is necessary for NEPA/EIS cost benefit evaluation of alternatives including head to head comparison of economic benefits from a comparable investment in NTA's and the LV Alternative(s).

E. [The HVT Project would r]espond to public policy objectives aimed at enhancing the nation's transmission system and reducing carbon dioxide emissions.

See responses under D, RPS.

December 23, 2016

Laurie Graney
PO Box 240
Platteville, WI 53818

SWCA Environmental Consultants
Attn: Cardinal-Hickory Creek EIS
200 Bursca Drive
Suite 207
Bridgeville, PA 15017

RE: Cardinal Hickory Creek Transmission Line Project

To Whom It May Concern:

Enclosed you will find a copy of an environmental impact statement for Platteville Township in Grant County, Wisconsin. Please note that this is not a complete report. Changes will be made to this report as other things come to light.

Sincerely,

Laurie Graney

Laurie Graney

PLATTEVILLE TOWNSHIP
ENVIRONMENTAL IMPACT STATEMENTS

As concerned citizens of Platteville Township, we are compiling a listing of several environmental reasons why we oppose the Cardinal-Hickory Creek transmission line coming through our township. We take great pride in our historical beautiful countryside. We are a part of the DRIFTLESS AREA LAND CONSERVANCY. The Driftless Area is recognized internationally and by the Departments of Natural Resources in four states as a region of critical conservation opportunity and concern. The Driftless Area contains multiple rare habitats and is the largest contiguous area of fish and wildlife in the Upper Mississippi River basin area. The Driftless Area Land Conservancy is to maintain and enhance the health, diversity and beauty of Southwest Wisconsin's natural agricultural landscape. **This proposed new high capacity powerline severely threatens the heart of the Driftless Area.**

Rationale For Opposition

1. Lack of "need". The current supply of electricity exceeds demand and does not meet the need standard under Wisconsin law.

2. The proposed line is not likely to be needed in the foreseeable future. There is no evidence that this transformational energy trend across both residential and business sectors will reverse.

    - End-users – refrigerators, AC units, HVAC systems and the like continue to become more energy efficient.

    - Further energy developments of solar and hydro thermal.

    - Lighting – LED lighting is a game-changing technology that's 90 – 95% more efficient than incandescent lighting.

- American Transmission Company has not shown documentation that the proposed Cardinal-Hickory Creek transmission line is needed now or for the reasonable foreseeable future in Platteville Township.

Environmental Impacts of the Cardinal-Hickory Creek transmission line to our Driftless Area include:

- Degradation of clean streams and ground water.
- Degradation of wildlife habitat.
- Degradation of other important natural resources.
- Degradation of unique and beautiful landscapes.
- Impairment of conservation projects and easements.

GEOLOGY AND SOILS

1. "Geology of Upper Mississippi Valley – Zinc/Lead District", by Allen V. Heyl Jr., 1959 copyright. (Due to the size of the lead mining map obtained from this book, which shows the broadness of the Southwest Wisconsin lead mining region, an attachment has been added to this report. Please see it labeled as **"Attachment"**.)

2. Bell Investment Trust BJB – Section 18.

3. Mine Shaft – Dave Brylski – Comes out on Dale Hood Farm – Section 18 and 19.

4. Fred Domann land, Section 19, has a bat hibernacula, which is actually a tunnel of an old lead mine. This hibernacula is currently housing the Indiana Bat, which has been tested free of white-nose disease by the Department of Natural Resources.

5. Richard Bellmeyer farm has old mine diggings, Section 21.

6. Three mines are located on the Hammes farm, Section 32. There are three old mine shafts. One of these shafts is a bat hibernacula. The DNR is aware of the hibernacula, and has checked the bats to be free of white-nose disease. DNR Warden Jennifer A. Redell was the investigating contact.

7. A very historical 1800's stone house is on the Klinge Farm, Section 21, which is still inhabited today. There is a "**badger hut**", which is a miner's temporary home, on this property. Artifacts have been found at this location.

8. The following farms have had diggings and testing for lead and zinc ore:

    - Klinge Family LLC – Section 21
    - Judi Bellmeyer Farm – Section 21
    - Owen Bennett Farm – Section 21
    - Virginia Dimick Farm – Section 20
    - Michael & Joy Oliverio Farm – Section 20
    - Merv Wehnke Farm – Section 20
    - Stan Quincy Farm – Section 20
    - Phyllis and Stan Quincy Farm – Section 29
    - James Hammes Farm – Section 32
    - David and Margaret Klar Farm – Section 33
    - James Klinger Farm (Klinger Trust) Section 33
    - Patrick and Julia Clare – Section 33
    - Several more farms in Platteville Township have the same soil types that are conducive to lead mining.

WILDLIFE

The following species are known to habitat in Platteville Township:

- The Indiana Bat has been located and tested by the Department of Natural Resources in Platteville Township. Heather and Paul White are the DNR people who gave us this fact. A very large hibernaculum has also been located in the Cassville, Wisconsin area. The Swiss Valley area in Dubuque County, Iowa also has the Indiana Bat.

- The Long-Eared Myotis Bat has been sighted in the Platteville area, and it is on the endangered species list.

- Bob-O-Link birds are coming back to set aside lands. **(Very endangered.)**

- Platteville Township offers protection for prairie remnants and area sensitive species, such as grassland birds, to include pheasant, quail, grouse, mourning doves and turkeys.

- Platteville Township offers prime locations for nesting birds. These birds include Baltimore Orioles, Grossbeaks, Red-headed Woodpeckers, Hairy Woodpeckers, Downy Woodpeckers, Cooper's Hawks, Indigo Buntings, Bluebirds, and many other species.

- Bald Eagles reside year-round in different locations where food and water are available. There are Bald Eagles that nest in Section 18, Section 19 and Section 20. This is likely due to the habitat of the Platte River. Studies show that the bald eagle population is in decline.

- The **Eagle Valley Nature Preserve** in the Cassville area has been a mecca for the Bald Eagle. The open water by the power plants was an attraction for eagles. The Eagle Valley Nature Preserve was founded in the early 1970's near Cassville to protect the nesting area of eagles.

- The Cardinal-Hickory Creek project would **severely impact** this area. The preferred Cardinal-Hickory Creek route would be to build a new 345kv transmission line across the Mississippi River near the now closed Nelson Dewey Power Plant. This would be a new corridor on both sides of the river and would go through at least one wildlife refuge. The alternate route would be double circuiting the 345 kv Cardinal-Hickory Creek line with the existing 161kv line that crosses at the (closed) Stoneman Power Plant. This would add 8 new wires across the migratory flyway, and would also pass over an elementary school.

- Terry Ingram, perhaps the most knowledgeable living bald eagle authority, is at odds with the wide-spread perception that the bald eagle population is robust. His data on reproduction is quite disturbing and does not substantiate the Fish and Wildlife figures.

- Dr. Dan Frenzel of the University of Minnesota has done research on bald eagles and suggests that human activity within a quarter of a mile of an eagle's nest during the first 6 to 8 weeks of the nesting period is quite harmful.

- **Bald eagles were removed from the federal list of threatened and endangered species on August 9, 2007, and are no longer protected under the Endangered Species Act. However, bald eagles remain protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act.**

- **The Bald and Golden Eagle Act prohibits anyone from taking, possessing, or transporting a bald eagle (Haliaeetus leucocephalus) or golden eagle (Aquila chrysaetos), or the parts, nests, or eggs of such birds without prior authorization. This includes inactive nests as well as active nests. Take means to pursue, shoot, shoot at, poison, wound,**

kill, capture, trap, collect, destroy, molest, or disturb. Activities that directly or indirectly lead to take are prohibited without a permit.

- The Upper Mississippi River National Wildlife and Fish Refuge is a part of the central United States waterfowl migration flyway that's recognized as a "Ramsar Convention Globally Important Bird Area". Multiple studies have demonstrated the significant danger that transmission lines present to migrating waterfowl.

- Platteville Township has southern sedge meadows, oak openings and barrens, pine relicts, dry prairies, mesic and dry-mesic forests and Karst topography. These areas shelter and nurture diverse populations of birds, insects, amphibians reptiles and plants.

- Blanchard Cricket Frogs are on the endangered species list. These endangered frogs have been found in the wetlands, streams and near rivers in Platteville Township.

- Platteville Township offers prime hunting opportunities with bow and gun for the white-tail deer. The rare white-tail albino deer have been documented and photographed in Platteville Township.

- Platteville Township offers prime hunting for small game, such as: Rabbit, squirrel, raccoon, coyotes, fox and mourning doves.

- Platteville Township offers trapping for raccoon, muskrat, mink, fox and beaver.

CULTURAL AND HISTORIC RESOURCES

- **Platte Mound (Big M)** is **extremely historic**, not only to the City of Platteville and Platteville Township, but to the University of Wisconsin-Platteville, as well.

  The following information was taken from the "**History of Grant County**" Holford 1900 edition:

  "In the summer of 1827 Mr. Rountree made an exploration of the county which he has thus described in a talk to the Old Settlers' Club in 1876:

  A friend and himself who were located on the headwaters of the Fever River, took a prospecting tour to the northwest. As they saw the Platteville Mounds in the early morning they thought they were one of the most beautiful sights in nature. They climbed to the top of the mounds and viewed the country over. It was a wide and lovely prospect, but an unbroken wilderness. It was the 4th of July – the 51st birthday of our national independence. They inscribed their names upon the rocks of the mound and also inscribed the statement that they were celebrating the Fourth there. They did not stay there long, for it was a hot day and they wanted water, so they set out to the north. There was no road – nothing but an Indian trail. They had with them their blankets and provisions and were prepared to prospect for mineral. "

  Another account of this story is taken from the "**Wisconsin Magazine of History, Volume 28, 1944-1945. History of Old Platteville 1827 – 1835**", by James A. Wilgus.

  "After traveling some distance on foot with Alexander Gray, who was one of my traveling companions from Montgomery County, Illinois, and occasionally digging what was then called a sucker-hole in search for lead ore over the Country about New Diggings, Gratiot's Grove,

Shullsburg, and Elk Grove without finding any mineral for the balance of the month of May and all of June and the first three days of July, on the morning of the 4th of July, 1827, we concluded to visit the Mounds (called the Platte Mounds), and as it was a beautiful, clear, bright day, we could have a fine view of the surrounding country and spent our nation's 51st birthday on the most commanding position that we had ever seen....From there we travelled north along that beautiful prairie country to where Wingville was afterwards settled and located."

The following information was taken from the University of Wisconsin-Platteville website in commemoration of its 150th anniversary, which was held this year:

The "Big M", also known as the Platte Mound, is an iconic symbol of mining tradition and the history of the University of Wisconsin-Platteville marked its 75th anniversary this year. The world's largest "M" is located on the Platte Mound, which is four miles northest of the city of Platteville, and has served to help identify the university throughout the years.

At a December 1924 meeting of the Engineering Club, members voted to place an "M" on the mound. A committee of five students was formed to investigate the project. The investigation did not take place and there was no mention of an "M" until 1936.

As history tells it, Wisconsin Mining School students Raymond "Pat" Medley '37 and Alvin Knoerr '37 stomped a large "M" in heavy snow on the Platte Mound in 1936. "It took several trips in parallel to widen out the path so that it would show up at a distance," explaned Knoerr in Thomas B. Lundeen's book, "Jubilee! A History of the College of Engineering, The University of Wisconsin-Platteville, 1908-1983."

"Shortly before sundown we walked back to Platteville and were happy to note that the "M" could be discerned at a distance, said Knoerr in the book.

The weather was particularly cold and the image of the "M" was frozen in the hillside. "This freeze contributed to the life of the snow "M" and to its visibility, because a noticeable amount of dust or other material accumulated in the frozen pathway to make it more visible", recalled Knoerr.

The following spring, a classmate of Knoerr suggested they construct a stone "M". Another student suggested they make it the largest "M" in the country, even larger than the Colorado School of Mines "M", which was 200 feet high.

"When Pat and I had worked at Climax in Colorado during the previous summer as student miners, we resented the way some of the Colorado students would look down on Platteville miners as being inferior," said Knoerr. "Maybe that had something to do with the decision to outclass Colorado as "M" builders.

The school obtained permission from landowner William Snow to construct the "M", which is 241 feet high and 214 feet wide.

Shortly after beginning the project, H. B. Morrow, director of the Wisconsin Mining School, approved a field day for students to help construct the "M". Students used picks, crowbars and wheelbarrows to move an estimated 400 tons of limestone to form the "M".

The "M" was completed in the fall of 1937.

Throughout the years, the "M" has been cemented, limed and whitewashed.

The outline of the "M" is lit once each year in the fall and for special occasions, using coffee cans containing kerosene. Wicks made from sound-deadening board are lit inside more than 200 cans.

The "M" was first lit on October 16, 1937 as a part of Homecoming festivities. The torch traveled 4.6 miles, in an Olympic-style relay between students from the university to the "M". After being lit, the "M" is visible from parts of Illinois, Iowa and Wisconsin.

The original "M" design was based on the monogram of the Wisconsin Mining School in 1936.

The "M" garnered national fame in the May 23, 1949 edition of Life magazine. The multi-page spread highlighted the lighting of the "M" and compared it to others throughout the country.

MTV featured the "M" in November 1987 as 650 students gathered to complete the music televisions logo on the mound.

The "M" was also instrumental in influencing the selection of Platteville as the site for **Disney's Mickey's Hometown Parade** on July 4, 1998. The Disney committee selected Platteville as one of their small towns to host the Disney parade and celebration on July 4, 1998. To boost their chances at being selected, members of the Platteville Jaycees recruited approximately 250 people who dressed in black and made Mickey's ears on the "M".

Following Snow's death, the 90 acres became the property of L. R. Clausen. He later donated the property to the Wisconsin State College and Institute of Technology. The Platteville Mining School

became the Wisconsin Institute of Technology in 1939 and later merged with the School with the Platteville State Teachers College in 1959 to become the Wisconsin State College and Institute of Technology at Platteville. In 1971, the name changed to the University of Wisconsin-Platteville.

The land remains under the ownership of the Board of Regents of the University of Wisconsin System, and the property was later named Clausen Park. Clausen Park is located at the base of the Platte Mound, "M". It is heavily used by hikers, bikers, runners and people who want to picnic.

The Platteville Mound is one mile long and approximately one-half mile wide, 150 feet high and 450 feet above the city at the summit of the hill. The "M" was built on the south side of the hill at a 45-degree gradient.

The "M" is maintained by VECTOR, a student organization on campus consisting of representatives of organizations within the College of Engineering, Mathematics and Sciences. Maintenance includes whitewashing the "M" with lye at least once a year.

- **Cemeteries**:
  - Blockhouse/Robinson Cemetery
  - Adney Cemetery
  - Indian Park Cemetery
  - Greenwood Cemetery
  - Hillside Cemetery

- It should be noted Revolutionary War Veteran Samuel Mitchell, and the founder of the City of Platteville and Platteville Township, John Rountree, are buried at Hillside Cemetery. Many other members of the Rountree and Mitchell families are also buried at Hillside Cemetery.

  - Calvary/St. Mary's Cemetery

  - A small private cemetery is located along Highway 81 across the road from where Tom Genthe lives (Section 5).

- **Mitchell-Rountree Stone Cottage** – The Grant County Historical Society operates the Mitchell-Rountree Stone Cottage. Built in 1837 by Reverend Samuel Mitchell, father-in-law of John Rountree, the cottage stands today as it did for over 150 years ago, with original furnishings and restored interior and exterior. The Stone Cottage is known as "an architectural gem like no other in Wisconsin." The two-foot thick walls of dolomite Galena limestone are examples of some of the most perfect stone construction to be found in the United States.

- **Rountree House** – This is the home of Platteville's founder, John Rountree.

- **Platteville Academy** – This is where the University of Wisconsin-Platteville began, and it is still in existence today.

- **Ullrich Hall** – located on the UW-Platteville Campus. It was built in 1916, and is the oldest building on the university campus. Ullrich Hall has been placed on the State Historical Register.

- **Rountree Hall**- This building was built in 1866. It was the State of Wisconsin's first Normal School. The structure is an apartment building today.

- **Stone Cheese Factory** – Built in 1920. This building is registered with the State of Wisconsin Historical Society under historical #55767.

- **Platteville's Downtown and Second Street Historic Districts** – Most of these buildings are historic.

- **J. L. Pickard House** (formerly the Tri-Cor Insurance building. Built in 1850. Historical #46062.)

- **Clifford Schuldt Farmhouse** (Built in 1855. Historical #55778.)

- **David Canny Home** – Originally the Jacob Hoosier Homestead. Was built in the 1830's.

- **Platteville Mining Museum** – This building was originally built as a schoolhouse, and was the former Rock School. Construction took from 1857-1863. The Bevan's lead Mine opened at this location in 1845. A portion of this lead mine is open for the public to view today.

- **Rollo Jamison Museum** - The Rollo Jamison Museum began in Beetown, Wisconsin as a private collection of Rollo Jamison. Jamison collected artifacts of Southwest Wisconsin history for over 70 years. No longer able to care for his collection due to his age, Jamison offered it to the City. In 1980, Platteville's City Council accepted the collection. The Rollo Jamison Museum is located in Platteville's first high school built in 1905. The collections were

studied, interpretive exhibits developed, educational programs instituted and the Rollo Jamison Museum opened to the public in 1981. Since then additional artifacts have been donated by area citizens eager to see that local history is preserved and that this story is available to area school children, residents, and visitors.

- **Manx Museum** – This museum is dedicated to showcasing the immigrants from the Isle of Man and their descendants to North America. The Isle of Man is located in the Irish Sea between England, Ireland and Scotland. This museum is a place where people of all ages and backgrounds can explore the history of the Manx culture for their learning enjoyment and also gain a heightened understanding and appreciation of the Manx culture.

- **Trinity Episcopal Church**

- **First Congregational Church**

- **First English Lutheran Church**

- **Church of Christ**

- **Free Methodist Church**

- **New Hope Assembly of God Church**

- **Platteville United Methodist Church**

- **Rolling Hills Church**

- **St. Augustine University Parish**

- **St. Mary's Catholic Church**
- **St. Mary's Catholic School**
- **Westview Methodist Church**
- **Whig United Methodist Church**
- **Church of the Latter Day Saints**

CENTURY FARMS

- **Aiken-Graney Family Farm/Richard and Laurie Graney** – Section 2, 7231 State Road 80 - On paper, this family homestead can be documented to 1837. However, paper records only go back that far. Family lore has it that after being mustered out of the Blackhawk War relatives were walking back to Illinois from Spring Green when they spotted this piece of land and decided to make it their family homestead. Therefore, this family farm is likely **well over 176 years old**. (Continuous family ownership since 1839.)

- **Judi Bellmeyer Farm** – Section 21, 6031 Highway 80 South – **150 years old**. (Continuous family ownership since 1866.)

- **Fred and Arlene Bonin Farm** – Sections 29 and 32, 5287 Major Lane – **161 years old**. (Continuous family ownership since 1855.)

- **Fred Klinge Family/Carol Edge and Fern Whitcher** – Section 21, 5921 Old Highway 151 – **122 years old**. (Continuous family ownership since 1894)

- **Jim and Judy Lory Farm** – Section 20, 5865 Southwest Road – **166 years old.** (Continuous family ownership since 1850.)

- **Dale Sander/Sander Family Farm** – Section 22 - 5958 Highway 151 South, **161 years old.**

- **Orlan and Carol Sander Farm** – Section 22 – 906 College Farm Road, **162 years old.** (Continuous family ownership since 1854.)

FARMLAND

- **Dairies**

Tom Weigel	400 Cows	Section 26
Mike Weigel	100 Cows	Section 29
Charlie Vesbach	100 Cows	Section 25
Ryan Meisen	50 Cows	Section 27
Dave Huehne	50 Cows	Section 7
Duane Schuler	50 Cows	Section 4
Matt Miller	100 Cows	Section 27
Owen Bennett	200 Cows	Section 20
Wayne & Jackie Dieter	150 Cows	Section 12
Robert Voigts	100 Cows	Section 13

- **Goat Farms**

There are four goat farms in Platteville Township that are Amish owned. The Farm Service Agency in Grant County (Lancaster) will not disclose owners of these farms for privacy reasons. Many more of these goat farms are starting up.

- **Sheep and Llamas**

Destiny Acres, LLC	40 Sheep	Section 20
Wayne & Jackie Dieter	8 Llamas	Section 12

- **Horses**

  Fourteen farms in Platteville Township currently have equine. There are two stables that board horses, and their numbers change with different situations. Approximately 80 horses are currently owned, and approximately 20 horses are boarded.

- **Beef**
  - Cletus and Janet Vondra – Section 36
  - Roger and Elaine Wehnke – Section 35
  - Paras and Lori Reddy – Section 34
  - Arnold Anderson – Section 34
  - David and Margaret Klar – Section 33
  - Leroy and Connie Cardy – Section 31
  - Shinn Revocable Trust – Section 30
  - Richard and Patricia Lange – Section 30
  - Stan and Phyllis Quncy – Section 29
  - Aric Dieter – Section 28
  - Clare Land Company LCC – Section 28
  - Richard and Patricia Lange – Section 27
  - Scott Farm Enterprises Inc. – Section 19
  - Michael and Joy Oliverio – Section 20
  - Dale and Carol Hood – Section 18
  - BJB Cattle Company LLC – Section 17
  - James and Suzanne Weigel – Section 7
  - Jeff and Ann Jenkins – Section 6
  - Calvin Jr. and Barbara Gatch – Section 8
  - Roger and Jane Pink – Section 5
  - Dorothy Fowler – Section 9
  - David Margan – Section 3
  - James and Patricia Schaefer – Section 2
  - Wayne and Jackie Dieter – Section 12

Cattle numbers could not be broken down to Platteville Township only, as the census shows Grant County cattle numbers.

LAND USE

Description	% Area
Urban/Developed	13.5%
Agriculture	39.4%
Grassland	37.4%
Forest	9.1%
Wetland	0.1%
Barren	0.2%

Farmland Preservation

According to Lynda Schweikert, Administrator at the Grant County Conservation, Sanitation, & Zoning Department, 150 Alona Lane, Lancaster, Wisconsin 53813, 608-723-6377, extension 3, there are 4,294 acres in Platteville Township that encompasses 22 participants. Names and locations of these participants could not be disclosed, due to a privacy act.

TRANSPORTATION

- The east and south sides of Platteville Township are close to four-lane U. S. Highway 151.

- The Cardinal-Hickory Creek transmission line would cross over Highway 80 on the south side of Platteville Township.

- The Cardinal-Hickory Creek transmission line would cross over Highway 81 on the north side of Platteville Township

- The Platteville Municipal Airport is on the south end of Platteville Township.

- There are helicopter pads at the Southwest Health Center and Grantland Regional Hospital, which are used for emergencies on a daily basis, and sometimes more often.

- The Platteville Municipal Airport has 56 flights flying out of the airport daily, and it can house up to 32 planes. The University of Wisconsin-Platteville has an aviation course where the instructor and student use the municipal airport for lessons.

- Platteville Township has the privilege of having the following major roads passing through it:
    - U. S. Highway 151 (four-lane)
    - State Highway 80 (north and south)
    - State Highway 81 (south and northwest)
    - County D (north and south)
    - West County B (connects to State Highway 61)
    - East County B (goes out past the Platte and Belmont Mounds and connects to the Village of Belmont.

SOCIOECONOMICS

- Several Mennonite and Amish families live in Platteville Township. These families will often times buy land that have no homes or buildings on it, and they do not require electricity.

- Mennonite and Amish have complained about health issues that are connected to high voltage transmission lines

- Studies show that property values near high voltage transmission lines decrease 20 to 30 percent in value.

- Both Amish and Mennonites cross roads with non-rubber wheels. These vehicles often have steel wheels. What happens with stray voltage when they are traveling and/or are using this type of machinery? Safety is a major concern to these people.

- The Amish and Mennonite communities are developing egg and chicken hatcheries, as well as raising organic produce.

ENVIRONMENTAL JUSTICE EFFECTS OF ELECTRICAL HIGH VOLTAGE

Extremely high voltages lines cause electrostatic effects, whereas short circuit currents and line loading currents are responsible for electromagnetic effects. The effect of these electrostatic fields is seen prominent with living things like humans, plants, animals, along with vehicles, fences and buried pipes under and close to these lines.

ELECTROMAGNETIC EFFECTS ON HUMAN BEINGS

- The human body is composed of some biological materials like blood, bone, brain, lungs, muscle, skin, etc.. The permeability of the human body is equal to permeability of air but within a human body has different electromagnetic values at a certain frequency for different material.

- The human body contains free electric charges (largely in iron-rich fluids such as blood and lymph) that move in response to forces exerted by

charges on and currents flowing in nearby power lines. The processes that produce these body currents are called electric and magnetic induction.

- According to research and publications put out by the World Health Organization, electromagnetic fields, such as those from power lines can cause:

    - **Short Term Health Problems**
        - Headaches
        - Fatigue
        - Anxiety
        - Insomnia
        - Prickling and/or burning skin
        - Rashes
        - Muscle pain
        - Hearing disabilities

    - **Long Term Health Problems**
        - Risk of damaging DNA
        - Risk of cancer
        - Risk of leukemia
        - Risk of miscarriage

ELECTROMAGNETIC EFFECTS ON ANIMALS

The University of Wisconsin-Madison has completed many studies on the effects of milk production, pregnancies, abortion rates, and breeding problems, due to the closeness of current transmission lines and stray voltage. Goat and sheep herds are greatly affected in their conception rates.

ELECTROMAGNETIC EFFECTS ON VEHICLES

When a vehicle is parked under high voltage transmission lines, an electrostatic field is developed in the vehicle. If a person, who is grounded touches it, a discharge current flows through the human being. Our concerns now turn to the Southwest Health Center, Fox Ridge Estates, which is a multiple housing complex, and the University of Wisconsin-Platteville. These facilities have many parking areas for residents, visitors and employees; and all are relatively nearby to Platteville Township.

RECREATION

- Kayaking and canoeing are enjoyed on the rivers in Platteville Township.

- Platteville Township has approved DNR biking/walking trails. These trails are well lit and paved.

- Snowmobile clubs mark and maintain trails through authorized land owner properties with DNR funding.

- A non-motorized DNR biking/hiking trail is located between County O, just off of U. S. Highway 151, and County D.

- The Rountree Branch Trail is non-motorized. It begins at the University of Wisconsin-Platteville and it goes out the east side of Platteville behind Menard's.

- A DNR trail is currently under construction. This trail goes from Menard's to the Village of Belmont.

- The State of Wisconsin has approved a UTV trail that goes through the City of Platteville on Main Street and will connect with County B. County B runs east and west in Platteville Township.

- Platteville Township accommodates numerous hunters and fisherman.
- A camping facility is located on County B East.
- The Platte Mound, "M", is a huge attraction for tourists.
- **Parks**
    - City Park
    - Swiss Valley Dog Park
    - Harrison Park
    - Highland Park
    - Indian Park
    - Jenor Towers Park
    - Knollwood Park
    - Legion Field Park
    - Moundview Park
    - Platteville Aquatic Center
    - Sherman Park
    - Skate Park
    - Westview Park
    - Katie's Garden
    - Clausen Park
- **World's Largest "M"**

The world's largest "M" is constructed of limestone and weighs 400 tons. Constructed in 1937, the giant "M" measures 214 feet by 241 feet. The letter represents the first mining school in the United States. Visitors can climb the M using various existing paths and trails. The M is maintained by a University of Wisconsin-Platteville fraternity. The M is visible from 40 miles away in all directions. There is an area near Blue Mounds where you

can view the Platte Mound, Belmont Mound and Blue Mounds all at the same time. Visitors recognize the historic geographical importance, not only to the residents of Southwest Wisconsin but to our State.

VEGETATION

- Platteville Township is very concerned about how the land will be maintained under and near the transmission lines. Will herbicides be used for control of vegetation problems? What affects will these herbicides have on ground water, exotic plants, and natural habitats for birds and small animals?

- Platteville Township's hardwood forests consist primarily of red oak, white oak, hickory, sugar maple, cherry and walnut.

- Platteville Township's low areas consist of elm, cottonwood, birch, ash, silver maple and willow.

- Platteville Township has savanna areas, which consist of bur oak, blue stem grasses and other prairie grasses.

WETLANDS

- Platteville Township has wetlands that are located near rivers, streams, tributaries and springs. These wetlands provide habitat for a variety of mammals, birds and amphibians. The proposed transmission lines and corridors pass through environmentally sensitive areas, those specifically designated to be avoided under Wisconsin law. The proposed transmission lines and corridors pass through environmentally sensitive areas, those specifically designated to be avoided under Wisconsin law. The proposed infrastructure of towers and lines would damage our historical and natural

resources, and they would disrupt the scenic landscapes that are a part of our Driftless Area Conservancy.

- **Springs, Streams, Tributaries and Ponds**

  Platteville Township is concerned about ground water contamination. We would like to see any studies that have been documented proving that ground waters will be safe for consumption by individuals, farmers, businesses, and animals now and in the future. The diggings and testing for lead in various locations in Platteville Township have proven that it is not conducive for towers of this size and magnitude.

PALEONTOLOGY

- Geologist maps of common Paleozoic fossils show Platteville Township is in a prime location to find fossil bearing sedimentary rock. This sedimentary rock covers much of Wisconsin, particularly the far southern part of the state.

- The most abundant and easily collected fossils come from roadcuts, natural bluffs and quarries. The four-lane construction of U. S. Highway 151 proved this information and progress was delayed.

- The most well preserved fossils came from the Platteville formation of the Sinnipee Group. These fossils include barchiopods, bivalves (clams), gastropods (snails), trilobites, hyolitids, cephalopods, ostracods, crinoid-columnals and corals.

- Current construction tests such as perk testing and permits for building new residential, farms, businesses and roadways have brought up Indian artifacts in Platteville Township.

ENVIRONMENTAL JUSTICE

- Executive Order 12898, Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations, states that "each federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies and activities on minority populations and low-income populations." The analysis pursuant to this executive order follows guidelines from the Council on Environmental Quality (CEQ), Environmental Justice Guidance under the National Environmental Police Act (CEQ 1997).

- **Audible Corona Radio and Television Interference**

Corona is the electrical breakdown of the air near high voltage conductors into charged particles. Corona consists of audible noise and radio and television interference from electromagnetic interference, both of which are described below.

Corona on transmission line conductors can generate noise at the frequencies at which radio and television signals are transmitted. This noise can interfere with receiving signals and is called radio and television interference (RI/TVI). Radio reception in the AM (amplitude modulated) broadcast band (535 to 1605 kilohertz) is most often affected with what is commonly referred to as static. Frequency modulated reception, or FM (frequency modulated) radio reception is rarely affected. Only radio receivers very near to transmission lines have the potential to be affected by radio interference. Corona can affect the reception of the video (picture) portion of a television signal. Television interference at the edge of the ROW due to corona primarily occurs during rain or snow.

HEALTH AND SAFETY

- **Electrical Substations**
  - Pleasant Valley Road, Section 22
  - Dairyland on Southwest Road – Section 21
  - Substation close to Tom Weigel's Farm on College Farm Road.

- **Natural Gas Substations**
  - There are two natural gas substations located on Southwest Road, Section 21.
  - Northern Natural Gas has a substation/pipeline near Town and Country Tire, Section 28.
  - The Klinge Family LLC property has a natural gas substation, Section 21.
  - A natural gas pipeline passes north along Highway 80 from the City of Platteville out into the townships of Platteville, Lima, Clifton and Wingville.

- **Cell Towers**
  - Arlene and Harlo Scott Property, Section 16.
  - Hillside Cemetery near Weygant's Appliance, Section 22.

- **Residential Nursing Home/Assisted Living Facilities**
  - Manor Care, Section 10
  - Our House, Section 11
  - Sienna Crest, Section 21
  - The Lyghthouse, Section 5

VISUAL RESOURCES

As we look forward, it's clear that protecting the natural world is one of the most important gifts that we can pass on to our families, friends and the generations that follow.

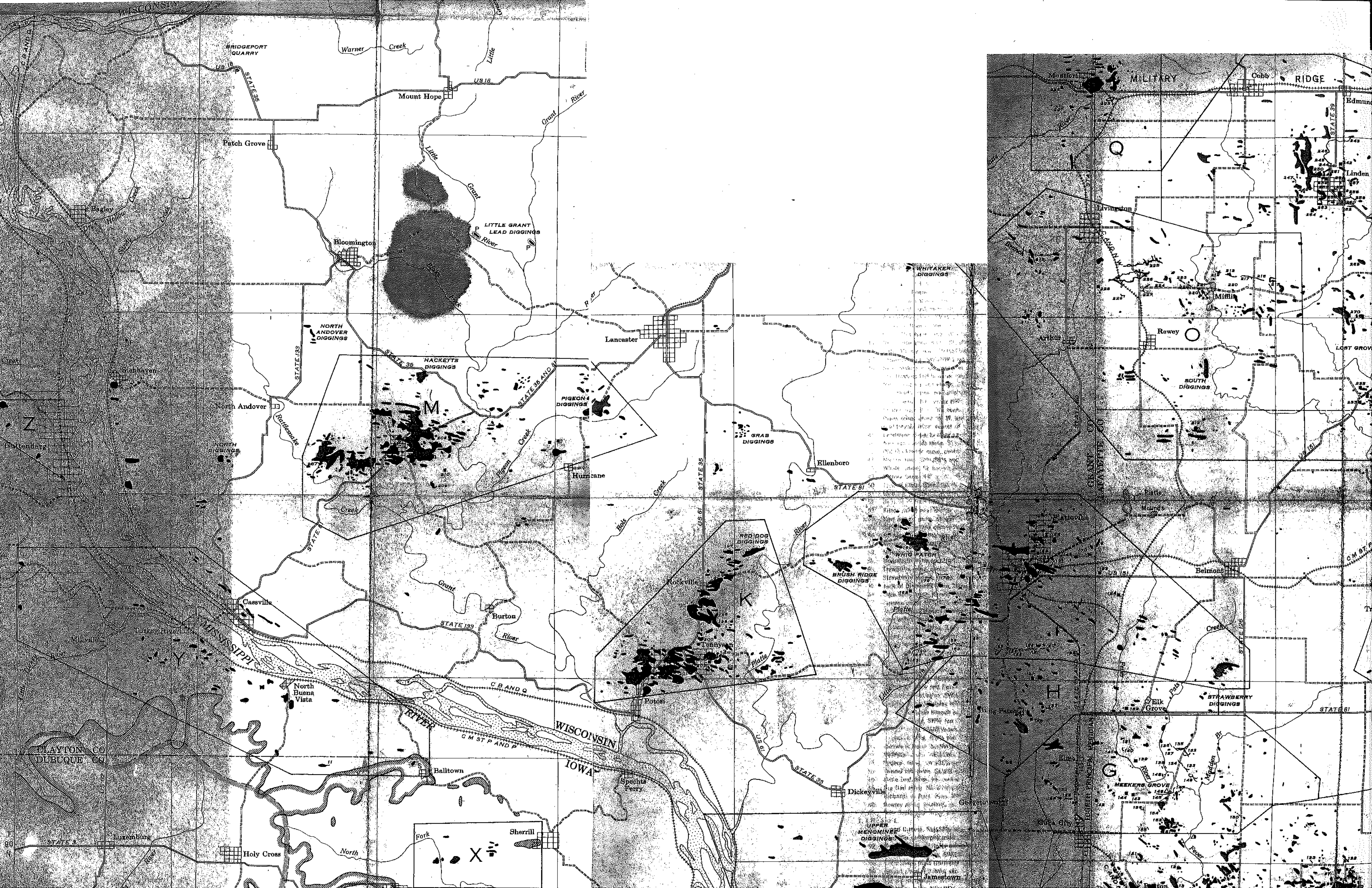
Platteville Township is a gateway to anyone entering our state from Iowa or Illinois. Our historical traditions have labeled our community as one of the oldest mining towns in Wisconsin.

We would like an unbiased cost-benefit analysis conducted by a group selected by the Wisconsin Public Service Commission. We would like to know if the analysis asks for the inclusion of the effects of efficiency measured combined with renewable (non-carbon) energy generation. Previously, in other power line projects, such requests for comparative studies have been unanswered.

We would like to thank the individuals, who provided us with information that has gone into this statement. We are sure that we are overlooking **many** things. However, we will continue to add more information to this statement as it comes to light.

Sue Wehnke
Laurie Graney
Richard Graney
Michele Bartels
Kathy Kopp
Deborah Fliegel

Attachment
Geology of Upper Mississippi Valley
Zinc Lead District by
Allen V. Heyl Jr.
Copyright 1959


WISCONSIN
BRIDGEPORT QUARRY
Warner Creek
Mount Hope
Patch Grove
Bagley
LITTLE GRANT LEAD DIGGINGS
Bloomington
NORTH ANDOVER DIGGINGS
HACKETTS DIGGINGS
PIGEON DIGGINGS
North Andover
Lancaster
GRAB DIGGINGS
Ellenboro
WHITAKER DIGGINGS
Hurricane
M
Z
Cassville
Burton
North Buena Vista
Potosi
Tennyson
Rockville
RED DOG DIGGINGS
BRUSH RIDGE DIGGINGS
K
Y
MISSISSIPPI
RIVER
WISCONSIN
IOWA
CLAYTON CO
DUBUQUE CO
Balltown
Spechts Ferry
Dickeyville
UPPER MENOMINEE DIGGINGS
Jamestown
Sherrill
X
Holy Cross
Luxemburg
MILITARY
Cobb
RIDGE
Linden
Q
Livingston
Mifflin
Rewey
O
SOUTH DIGGINGS
LOST GROVE
Arthur
Platteville
Belmont
H
Elk Grove
STRAWBERRY DIGGINGS
G
MEEKERS GROVE
GRANT CO
LAFAYETTE CO

Postage Required

SWCA Environmental Consultants
Attn: Cardinal-Hickory Creek EIS
200 Bursca Dr.
Suite 207
Bridgeville, PA 15017

TO MAIL BACK, FOLD HERE AND TAPE BELOW (NO STAPLES PLEASE)

To help us keep our mailing list accurate and up-to-date, please check the boxes below that apply to your wishes. Thank you for your assistance.

- [x] Please add my name to the mailing list.
- [ ] Please withhold my name and/or address from the public record (see disclaimer below).
- [ ] I prefer to be updated by email.

Name: Rand Schott

Organization (if any): Town of Arena Planning Commission member

Address: 6680 Amacher Hollow Rd.

City/State/Zip: Arena, WI 53503

Email address:

Please note: Before including your address, telephone number, electronic mail address, or other personal identifying information in your comments, you should be aware that your entire comment (including your personal identifying information) may be made publicly available at any time. Although you can ask us in your comments to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Public Scoping Period Comment Card

Cardinal-Hickory Creek Transmission Line Project
U.S. Department of Agriculture Rural Utilities Service

You are invited to participate in the National Environmental Policy Act (NEPA) process by voicing your ideas, suggestions, or concerns related to the proposed Cardinal-Hickory Creek Transmission Line Project. These comments will be considered as the Draft Environmental Impact Statement (EIS) is developed. Feel free to attach additional sheets as needed. If you prefer, you can submit comments via email to: comments@CardinalHickoryCreekEIS.us. The public scoping period ends on January 6, 2017.

Comments:

I am rehemently opposed to any transmission line that goes thru the town of Avena. The reason I built my ~~dream~~ dream home there 6 years ago was for the natural beauty of the duPAGE area that we call Home. A Transmission line thru our township (Avena township) would destroy the intrinsic beauty of our county.

I believe the line is unnecessary in any location. Conservation is needed more.

If the millions spent on the line were used to support alternatives (wind, solar, geothermal) the supply would be significant.

I have a wind turbine, solar electric panels and wood heat. I don't need any energy to live on my land. More people could and would do this if there were more financial incentives.

Please listen to the opposition and re consider dropping the line completely.

The public would be better served if you packed up and went home.

Postage Required

SWCA Environmental Consultants
Attn: Cardinal-Hickory Creek EIS
200 Bursca Dr.
Suite 207
Bridgeville, PA 15017

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- [x] I prefer to be updated by email.

Name: Brad Schobert

Organization (if any): Town of Belmont

Address: 25626 Schultz lane

City/State/Zip: Belmont, WI 53510

Email address: Bradschobert86@gmail.com

Please note: Before including your address, telephone number, electronic mail address, or other personal identifying information in your comments, you should be aware that your entire comment (including your personal identifying information) may be made publicly available at any time. Although you can ask us in your comments to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

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Comments:

The Town of Belmont is opposed to having this line go through our township. This line would Run by the large "M" in our community and create a significant visual impact and impact the quality of the land this would reside on. This Area of the township has very large dairies which are very worried about stray electricity and the environment impact such a line brings to the enviroment. The town of Belmont is located in the corner of Lafayette Count, next to Grant and Iowa County. This Area of the township is also the highest populated this this may impact health and financial values of the people in this part of the township. As I started, the Town of Belmont is opposed to having this line in our community / township.

Brad Schubert, Chairmen Town of Belmont.

Postage Required

SWCA Environmental Consultants
Attn: Cardinal-Hickory Creek EIS
200 Bursca Dr.
Suite 207
Bridgeville, PA 15017

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Name:

Organization (if any):

Address:

City/State/Zip:

Email address:

Please note: Before including your address, telephone number, electronic mail address, or other personal identifying information in your comments, you should be aware that your entire comment (including your personal identifying information) may be made publicly available at any time. Although you can ask us in your comments to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

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Comments:

The Town of Belmont is very much opposed to having this line in our township. The Area it would go thru is a very scenic Area surrounded by the natural made mounds in which 1,000's of people come Annually to see, this Area is not only Agriculture but Also in our historical district which we have limited New buildings and other activites which are not Conclusive to the Area. The Mounds have been a big part of the main tourism in our area and having these lines in and around the area would affect the value of this area.

Please consider another Route other than the through the town of Belmont,

Brad Schobert
Chairman Township of Belmont,

From:	Rod Hise
To:	comments@CardinalHickoryCreekEIS.us
Cc:	Marilyn A Gardner
Subject:	Town of Springdale, Wis. Comments
Date:	Friday, January 06, 2017 11:56:51 AM
Attachments:	RUS Scoping Final 010616.docx Land Use Plan 052013 Amended.pdf Land Use Plan Approved 11.2002.pdf

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Attached you will please find the comments of the committee authorized by the Town of Springdale, Wis., to study and act on the proposed Cardinal-Hickory Creek transmission line project. In addition to our comments, you will find our land use plan, which is the foundation of those comments. Please let me know if you have any questions.

Thank you.

Best regards,
Rod

Rod Hise
608-770-7850

January 6, 2017

SWCA Environmental Consultants
Attn: Cardinal-Hickory Creek EIS
200 Bursca Drive, Suite 207
Bridgeville, PA 15017

(sent via email to comments@CardinalHickoryCreekEIS.us)

To the Rural Utilities Service (RUS) and SWCA Environmental Consultants:

The Town of Springdale, Wisconsin, respectfully submits the following comments for your consideration as you prepare the Environmental Impact Statement (EIS) for the proposed Cardinal-Hickory Creek Transmission Line Project.

Springdale is located in Dane County, Wisconsin, and would be directly affected by the proposed southern route through Iowa and Dane Counties as it heads north to the Village of Cross Plains. We would like to take this opportunity to tell you about the considerable environmental assets that exist within and adjacent to our town, and about the shared commitment of our residents to preserving the rural character of Springdale. This rural character would be irreparably damaged by the proposed transmission line.

1. The Town of Springdale has an existing Land Use Plan, adopted in March of 2002, that reflects the values and goals of our citizens and is intended to preserve the rural character of our town.

Through consensus and compromise, the volunteer leadership and citizens of Springdale developed a Land Use Plan (attached) that reflects our core values. This plan provides guidelines to the local Town government from its citizens regarding how land use decisions should be made. The Springdale Plan Commission continues to make their land use decisions based on this document today. ***The most significant shared value we were able to agree upon is that we wish to preserve the rural character of Springdale.***

We encourage you to appreciate the strong emotions that questions of land use engender in a rural municipality. A variety of perspectives on property rights and appropriate land use must be considered and accommodated. The development of our Land Use Plan was a long and sometimes contentious process that involved thousands of volunteer hours, along with input from a great number of our citizens. Two drafts were disseminated, with public comments encouraged. During the eleven-month period from May 2001 to March 2002, the Town conducted 10 information meetings, 30 citizen committee work sessions, three Plan Commission work sessions with the citizen committees, two public input sessions, and one public hearing.

When the Springdale Land Use Plan went before the Dane County Board of Supervisors for approval, the plan was praised for its innovative approach and incorporation of conservation subdivisions. Dane County Supervisor John Hendrick said, "In some ways, this (plan) may be the best plan that's ever come to this board. This is one of the few land use plans in Dane County that will be enforced primarily by land division ordinance. And that's innovative." [For more background information on the County Board response to the Springdale Land Use Plan, see the attached article from the *Mount Horeb Mail*.]

The Springdale Land Use Plan has these stated objectives, among others:

- To preserve the agricultural land, open spaces, and other natural resources of a rural town
- To respect environmentally sensitive areas and culturally significant sites
- And to prohibit large commercial development and industrial development.

2. The Land Use Plan for the Town of Springdale includes specific provisions to protect the visual landscape.

- The Land Use Plan contains provisions that prevent development on the highest points in our varied topography. For homes that require a Certified Survey Map, the Town asks that new homes be built so that they blend into the landscape as much as possible. Residential developments must be built off of farmland and in less obtrusive sites.
- Given our varied typography, characterized by rolling hills, forests, wetlands, and rich farmland, a 345 kV transmission line would directly conflict with the Town's Land Use Plan. A high-voltage line would be visible for miles from many vantage points—hardly blending in with the landscape as our Land Use Plan requires of new structures.
- Previous Environmental Impact Studies we have seen define "affected households" as those that are within either 150 feet or 300 feet of the proposed transmission line. We encourage you to consider the fact that the visual impact of transmission towers and lines extends significantly beyond that distance in environmentally rich, rural areas such as the Town of Springdale, where our topography includes rolling hills, forests, wetlands, and rich farmland. Neither 150 feet nor 300 feet seem to be adequate measures for capturing the impact on our visual landscape.

3. The Land Use Plan for the Town of Springdale has provisions to preserve and protect the unique and irreplaceable culturally significant sites found in the town.

- Culturally significant sites include—but are not limited to—the First Norwegian Church Cemetery and Monument to the early Norwegian settlers, and a century-old, historically significant farmhouse. The Town also contains other archaeological and historic assets.

4. We are concerned about the impact of a 345kV transmission line on the environmental assets within the Upper Sugar River Headwaters and Watershed, as well as the impact on agricultural producers.

- The Upper Sugar River Watershed, with a drainage area of approximately 170 square miles (109,404 acres) and 115 stream miles, is located in Dane County in southern Wisconsin. It is rich in resources, including fisheries, wildlife habitat (including rare and endangered species), native plant communities (many in decline), and recreational opportunities. The Upper Sugar River wetlands, and the headwaters, could be directly affected by the proposed transmission line.

- The Upper Sugar River Watershed Association (USRWA) is a grassroots organization that provides leadership for continuous resource improvement through strategic partnerships that benefit the watershed's land, water, and people. In 2016, USRWA received funding from the Department of Agriculture, Trade, and Consumer Protection to form a farmer-led coalition focusing on water quality. The Upper Sugar River Producer Coalition is targeting the Headwaters Sugar River and West Branch Sugar River watersheds, which are both impaired due to excess phosphorus loading.

  The mission of the Producer Coalition is to "ensure the future of agriculture by being responsible stewards of the land and water quality in the Upper Sugar River Watershed." The coalition plans to promote and incentivize conservation practices among agricultural producers, in order to address the problem of agricultural runoff and its impact on water quality in the Sugar River Watershed.

  http://usrwa.org/farmers/

- The sandhill cranes have been observed to travel up and down the Sugar River valley daily, and this daily migration could bring the cranes directly into the path of the proposed transmission line. Possible destruction of the area's sandhill crane population in collisions with lines should also be considered when evaluating the impact of the proposed transmission line on wildlife. This is a particular concern in the Sugar River valley, where the sandhill cranes are a visible and much-beloved part of the natural environment.

- Eagles have also been observed feeding in the Sugar River Valley in the winter months on a regular basis.

- In addition to sandhill cranes and eagles, the area provides habitat to a great many other species of wild birds. On a single day in May, 2016, one Springdale resident counted a total of 18 bird species visiting his feeders. Migratory birds that travel through our town include ruby-throated hummingbirds, cedar waxwings, and several species of warblers. The presence of transmission lines presents a threat to this rich and varied bird population due to the impact of collisions with the lines.

- Construction of a transmission line may cause significant damage to the Sugar River wetlands, including the natural springs.

- Construction work is likely to introduce invasive species into the Sugar River wetlands.

5. We are concerned about the impact of the proposed transmission line on the Southwest Wisconsin Grassland and Stream Conservation Area, which is located immediately to the south of the proposed transmission line that runs through the Town of Springdale.

http://dnr.wi.gov/topic/Lands/grasslands/swgrassland.html
http://swgsca.org/

Southwestern Wisconsin has been recognized for many years as one of the best grassland conservation opportunities in the Upper Midwest. The area stands out for its distinctive combination of resources: exceptional populations of grassland birds, which are in serious decline across their range; many scattered remnants of the area's original prairie and savanna that once covered the region; concentrations of rare plants and animals, and spring-fed streams, all set within this expansive rural farming region of open fields, croplands, oak groves, and pastures. These disappearing habitats, bird populations, and varied natural assets merit protection and would be threatened by the proposed transmission line.

The Wisconsin Department of Natural Resources has joined with a diverse group of conservation partners, local governments, and landowners in Southwestern Wisconsin to establish a Habitat Conservation Area known as the Southwest Wisconsin Grassland and Stream Conservation Area (SWGSCA). The SWGSCA protects 12,000 acres, expanding upon an existing grassland boundary for the federal Conservation Reserve Enhancement Program (CREP), a voluntary set-aside program aimed at buffering area streams.

The Southwest Wisconsin Grassland and Stream Conservation Area is a partnership between local, state, federal, non-profit organizations, landowners, and individual citizens, all working together towards the common goal of sustaining functional grasslands, savannas, and stream habitats.

We also are concerned about the impact of the proposed transmission line on the Driftless Area of Wisconsin, so called because it was never touched by glaciers and, as a result, has no glacial deposits or “drift,” the silt, clay, sand, gravel and boulders left behind by

glaciers. The unique driftless geology of this large area of south central and southwestern Wisconsin has created a varied and beautiful topography over tens of thousands of years. The area is home to environmentally-significant cold-water trout streams and wetlands. Its forests, prairie remnants and grasslands provide habitat for a range of wildflowers and wildlife.

6. We are concerned about the impact of the proposed transmission line on the aesthetic appeal, popularity, and use of the Military Ridge State Trail.

- The 40-mile Military Ridge State Trail is one of South Central Wisconsin's top tourist attractions, and is part of the Aldo Leopold Legacy Trail System. It also crosses the Ice Age National Scenic Trail. The trail passes by agricultural lands, woods, wetlands, and prairies. Several observation platforms are available adjacent to the trail for viewing wildlife, natural springs, and other natural features.

- The Military Ridge State Trail is used by more than 200,000 people per year (Wisconsin Department of Natural Resources, 2004). Every Chamber of Commerce along the trail, including Mount Horeb, features the Trail prominently in literature for visitors. The Military Ridge State Trail is also featured in numerous recreational guide books and Web sites, and is widely recognized as a haven for recreational bicyclists. All of these mentions extol the trail for its environmental virtues.

- The economic impact of the Military Ridge State Trail on the stores, restaurants, lodging and other businesses along its path is likely to be considerable.

- The Trail provides visitors with an opportunity to experience the rural landscape, including the asset-rich Sugar River Valley—an experience that will be forever altered by the presence of the 345kV transmission line. We believe that the proposed power line would lessen the appeal of the Military Ridge State Trail as a destination. This, in turn, is likely to have a negative economic impact on the communities along the Trail, all of which serve Trail visitors with shopping, restaurants, lodging, and other services.

In summary, we believe that the proposed Cardinal-Hickory Creek Transmission Line would do irreversible damage to the environmental, economic, and culturally significant assets within and adjacent to the Town of Springdale. This extraordinary collection of diverse assets should be preserved, for the benefit of our economy, our agricultural producers, our citizens, and the visitors who come here to appreciate the aesthetic beauty of rural lands.

Thank you for your consideration. If you have any questions about our comments, or need additional detail, please feel free to contact one of the individuals listed below.

Sincerely,

Springdale Committee on Utilities in the Rural Environment (SCURE)
Town of Springdale, Wisconsin

Contacts:
Rod Hise, Chair, SCURE, 608-770-7850, rod@rodhise.com
Ed Eloranta, Town Chair, Town of Springdale, 608-437-4692, townofspringdale@mhtc.net
Marilyn Gardner, 608-437-8030, mag@greydog.com
Keith Sadler, 949-337-3778, trebb2@gmail.com

TOWN OF VERMONT
Dane County
4017 Hwy JJ
Black Earth, WI 53515

Telephone: 767-2457

VERMONT TOWN HALL

November 2, 2016

Dennis Rankin,
Engineering and Environmental Dept
USDA Rural Development.

Dear Mr. Rankin:

Due to insufficient notice, I encourage the USDA to provide another scoping meeting no sooner than 30 days after mailing notifications to all local governments in the study area including the following information:

(a) Explain why an federal EIS is required at this time and what parties are involved.

(b) Describe the types of information that will be collected in the EIS scoping meetings including the relevant environmental, and economic sensitives that will be evaluated across the study area for Cardinal Hickory Creek. State that economic impacts for all energy investment options will be considered in the EIS including those that do not involve high voltage transmission.

(c) Name and describe the non-transmission alternatives to the transmission project that will be studied, developed and benefits compared. Explain that the EIS will make recommendations about the energy options with the least environmental impacts and steps that can be taken to improve their chances of being adopted.

(d) In addition to describing the study area of potentially affected landowners, provide the names of the utilities whose customers that would be charged for transmission services associated with Cardinal Hickory Creek were it to be built.

(e) If applicable, describe how Federal tax dollars would be utilized if Dairyland's request is approved.

(f) Describe how electric customer energy spending preferences will be assessed during EIS scoping input and reported in the final EIS.

Barbara

Sincerely,
Barbara K. Grenlie
Chair, Town of Vermont, Dane County
4017 County Road JJ
Black Earth, WI 53515
yoruby@mhtc.net

From:	clerk@townofvermont.com
To:	comments@CardinalHickoryCreekEIS.us
Subject:	Town of Vermont - Dane County re: Cardinal Hickory Creek EIS
Date:	Friday, January 06, 2017 9:56:07 AM
Attachments:	PSC_Resolution_TownofVermont_Amendment_111416.pdf

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Hello -

Please incorporate these suggestions from the Town of Vermont Board and residents for inclusion in the scope of the EIS. Of particular importance is the common theme requesting comparative cost benefit analyses of the CHC and the package of non-transmission alternatives. The citizen committee in the Town of Vermont has received hundreds of signed letters in support of the attached resolution. If you would like copies of those letters of support, please let me know.

Thank you for your consideration.

~Karen Carlock

Karen Carlock
Town of Vermont Clerk
Phone: 608-767-2457
Website: townofvermont.com

2016-0613A

A RESOLUTION TO THE PUBLIC SERVICE COMMISSION OF WISCONSIN CONCERNING APPLICATION #5CE146 FOR A 345 KV POWER LINE, THE CARDINAL-HICKORY CREEK PROJECT, PROPOSED BY THE AMERICAN TRANSMISSION COMPANY, ITC, AND DAIRYLAND POWER COOPERATIVE, AND CONSIDERATION OF ALTERNATIVE SOLUTIONS

WHEREAS, the Public Service Commission of Wisconsin is currently expecting an joint utility application containing an option for a 345 kV high-capacity transmission line from Middleton, Wisconsin to Montfort, Wisconsin to Dubuque County, Iowa; and,

WHEREAS, high-capacity transmission expansion projects increase the likelihood of additional transmission and electric customer investments in Wisconsin and regionally; and,

WHEREAS, the final cost of expansion projects including financing, operation and maintenance over 40 years can reach into billions of dollars and place significant financial burden on all Wisconsin ratepayers in addition to those in other states; and,

WHEREAS, demand for electricity in Wisconsin and adjacent states has been flat or in decline in recent years and utilities in affected service areas have projected no or minimal load growth in planning documents submitted to the PSC; and,

WHEREAS, other means of meeting energy demand claimed by the applicants must be considered, including comparable investment in accelerated energy efficiency, conservation, load management, and local renewable power options before high-capacity transmission is approved; and,

WHEREAS, average ratepayer investment in energy efficiency in the U.S. tripled from 2007 to 2012 to lower end-user costs and harmful emissions while investment in energy efficiency in Wisconsin dropped over the same period; and,

WHEREAS, our responsibilities include protecting and enhancing natural and local economic assets, including scenic beauty and development potential that would be adversely impacted by 110 to180 foot steel or concrete poles and wires for high voltage transmission; and

WHEREAS, high-profile transmission lines tend to reduce property values and tourism due to their prominent visibility and perceived negative health effects creating adverse impacts on local economies in contrast to non-transmission alternatives such as energy efficiency, load management and local solar which tend to produce positive economic impacts; and,

WHEREAS, Wisconsin State Statute 1.13(2) encourages local governmental units to define their energy planning priorities and State Statute 1.11(2) encourages the WI PSC

to study, develop, and describe appropriate alternatives to recommended courses of action for full public consideration before the scoping stage of utility applications and for preparation of the Impact Statement; and,

WHEREAS detailed explanations of the perceived need for regional transmission expansion have not been combined with a comprehensive comparison of long-term investment costs and returns for all energy investment options and provided for Wisconsin ratepayers stated in clear terms of monthly, average potential savings, long-term job creation, and carbon emission impacts.

NOW, THEREFORE, BE IT RESOLVED, that

1. The Town of Vermont in Dane County requests that all efforts made to develop or enhance the energy system upon which our community relies and adhere to these energy investment priorities:
    a) Maximize cost-effective conservation, efficiency, and load management;
    b) Rely to the greatest extent possible on local, renewable generation;
    c) Support local ownership of energy generation that includes dispersed renewable energy to support the local economy, including the creation of sustainable jobs;
    d) Minimize the size, scale, voltage, and environmental impacts of electric
    e) transmission and generation.

2. Town of Vermont is without sufficient means to evaluate the current proposal in terms of these priorities.

3. Town of Vermont requests the Public Service Commission of Wisconsin to ask the applicants to provide potentially impacted landowners and Wisconsin ratepayers clear, consumer-friendly descriptions of the applicant's cost-benefit analysis concerning all energy investment options, their cost-benefit analysis being made available in open houses during the public outreach phase of this proposal and on the internet during the same time period.

4. Upon receipt of the application, Town of Vermont requests Public Service Commission of Wisconsin to ensure that the applicants provide a clear, consumer-friendly, comprehensive, cost-benefit analysis incorporating comparisons of comparable investments in accelerated energy efficiency, load management, distributed generation (on site/community and other local, non-fossil fuel generation). The dollar amount applied to each of these non-transmission investment options should be no less than estimated total Wisconsin ratepayers would assume for the proposed project, with financing, maintenance and operation costs over 40 years. We ask that this analysis provide summaries of these comparisons with estimated, averaged impacts on typical monthly electric bills for residential and commercial customers in Wisconsin accommodating all costs.

5. Upon receipt of the application, Town of Vermont requests Public Service Commission of Wisconsin to ensure that the application evaluates the economic outcomes on directly affected local economies for the high voltage transmission option, the low voltage transmission option and the non-transmission options. We ask that application include analysis of total carbon emission impacts over time for the same energy investment options.

6. Upon receipt of the application, Town of Vermont requests Public Service Commission of Wisconsin to ensure that the above application information be complete and fully accessible to all potentially impacted landowners, all municipal governments in all potentially impacted counties and state wide media outlets for all affected ratepayers at the same time Notice of Proceeding is made and before the public scoping process is initiated.

7. The Town of Vermont, Dane County, requests the Public Service Commission of Wisconsin to record this document in the public record of Docket 05-CE-146 and to include it, in entirety, in the Appendixes of the state and federal Environment Impact Statements for this proposal

The person/agent below is authorized to transmit this resolution and other appropriate documents to Wisconsin Public Service Commission on docket #05CE146.

AND, BE IT FURTHER RESOLVED, that the Town of Vermont Board hereby approves the resolution ADOPTED this 14th day or November, 2016.

Signed by: _____ (chair)

Attested by: Karen Gilbert (clerk)

on this 14 day of November, 2016.

Agent's email address: clerk@townofvermont.com

From: Ryan Czyzewski
To: comments@CardinalHickoryCreekEIS.us
Subject: Village of Mount Horeb, WI Comments
Date: Friday, January 06, 2017 2:10:18 PM
Attachments: USDA RUS Comments - Mount Horeb.docx

Please see attached comments regarding the Cardinal-Hickory Creek Transmission Line

Ryan Czyzewski
Village Trustee

January 6, 2017

SWCA Environmental Consultants
Attn: Cardinal-Hickory Creek EIS
200 Bursca Drive, Suite 207
Bridgeville, PA 15017

(sent via email to comments@CardinalHickoryCreekEIS.us)

To the Rural Utilities Service (RUS) and SWCA Environmental Consultants:

On behalf of the Mount Horeb Village Board, I respectfully submit the following comments on the Environmental Impact Study (EIS) for the proposed Cardinal-Hickory Creek Transmission Line Project. Mount Horeb resides in the southwestern corner of Dane County, WI. State Highway 151 currently acts as our southern border, though growth is planned within the sited route path. We have spent the last several months reviewing the proposal and its effect on Mount Horeb. There are potential environmental and economic impacts to the future of our community, and thus we propose limiting the route being built within the Village as well as in areas of planned future growth.

Mount Horeb sits within the Upper Sugar River Watershed. This watershed is an important resource for wildlife (Sandhill cranes and eagles), agriculture, and recreational activities (trout fishing and Military Ridge Bike Trail). Disruptions to the watershed would have a negative impact on a pristine area. The diverse and sensitive nature of this area should be protected.

Our largest economic concern is the potential route on the southwest side of the Village, creeping into the area recently added to our comprehensive plan for a future business park. We are already in negotiations with landowners to develop the area. The proposed lines would affect property values and market values as well as interest from developers. Not only could the physical location of the poles and wires affect how the business park can be developed, but the aesthetic degradation would be detrimental.

Sincerely,
Ryan Czyzewski
Mount Horeb Trustee
608-437-1356
Ryan.czyzewski@mounthorebwi.info

City of Dubuque **Action Items # 9.**

ITEM TITLE: ITC Overhead Electric Transmission Facilities

SUMMARY: City Manager recommending adoption of a resolution which states that the filing of a petition by ITC for a proposed overhead electric transmission line facility in the City of Dubuque and a formal public hearing process would not be in the public interest and further recommends that the minimum 250-foot distance from transmission lines not be waived if a petition is considered.

RESOLUTION Providing that a proposed project by ITC Midwest LLC for a license to erect, maintain and operate a proposed Electric Transmission Line Facility in the City of Dubuque would not be permittable under the City of Dubuque Code of Ordinances and would not be permitted by the City Council and therefore an application for a license and the required process for such a license would not be in the public interest

SUGGESTED DISPOSITION: Suggested Disposition: Receive and File; Adopt Resolution(s)

ATTACHMENTS:

	Description	Type
☐	ITC Route Alternatives for Overhead Electric Transmission Facilities-MVM Memo	City Manager Memo
☐	Staff Memo	Staff Memo
☐	ITC Proposed Routes Map	Supporting Documentation
☐	Iowa Code Chapter 6	Supporting Documentation
☐	Resolution	Resolutions

THE CITY OF
DUBUQUE
Masterpiece on the Mississippi

Dubuque
All-America City
2007 • 2012 • 2013

TO: The Honorable Mayor and City Council Members

FROM: Michael C. Van Milligen, City Manager

SUBJECT: ITC Route Alternatives for Overhead Electric Transmission Facilities

DATE: June 10, 2015

ITC has proposed three (3) route alternatives for a 345 kilovolt (KV) overhead electric transmission line through the City of Dubuque.

The City Code for licensing electric transmission line companies requires that a company file a petition with the City Council, and that the City Council hold a public hearing when considering a petition. The City Code requires a transmission line to be at least two hundred fifty feet (250') from any dwelling or other building, except by agreement or when the line crosses or passes along a public highway or is located along a railroad right-of-way.

City staff has identified potential impacts for each route alternative proposed by ITC. Areas of the community affected by each route alternative include residential and commercial properties, parks, attractions, open space, other utilities, wetlands and waterways. Based on the minimum 250-foot distance between transmission lines and buildings and on the identified impacts, Planning Services Manager Laura Carstens and City Engineer Gus Psihoyos recommend that the City Council adopt the enclosed resolution which states that the filing of a petition by ITC and a formal public hearing process would not be in the public interest.

I concur with the recommendation. I further recommend that the minimum 250-foot distance from transmission lines not be waived if a petition is considered. I respectfully request Mayor and City Council approval.

Michael C. Van Milligen

MVM:lc
Attachment

cc: Barry Lindahl, City Attorney
Cindy Steinhauser, Assistant City Manager
Teri Goodman, Assistant City Manager
Laura Carstens, Planning Services Manager
Gus Psihoyos, City Engineer

C:\Users\jhilkin\Documents\GroupWise\Memo on ITC MVM to CC.doc

THE CITY OF DUBUQUE
Masterpiece on the Mississippi

Dubuque All-America City 2007 • 2012 • 2013

MEMORANDUM

TO: Michael C. Van Milligen, City Manager

FROM: Laura Carstens, Planning Services Manager
Gus Psihoyos, City Engineer

SUBJECT: **ITC Route Alternatives for Overhead Electric Transmission Facilities**

DATE: June 10, 2015

INTRODUCTION
This memorandum provides a recommendation on the route alternatives for overhead electric transmission facilities proposed by ITC through the city of Dubuque. Enclosed are a map of the route alternatives, City Code Chapter 11-6 Procedure for Licensing Electric Transmission Line Companies, and a resolution.

BACKGROUND
City Code Section 11-6-3 requires an electric transmission line company to apply, via petition, for a license to erect, maintain and operate a facility within the city. The applicant must hold a public informational meeting prior to filing the petition. Section 11-6-5 requires the City Council to hold a public hearing when considering whether to grant, amend, extend, or renew a license. Section 11-6-7 sets forth location criteria. This section requires a transmission line to be at least two hundred fifty feet (250') from any dwelling or other building, except by agreement or when the line crosses or passes along a public highway or is located along a railroad right-of-way.

DISCUSSION
ITC has proposed three (3) route alternatives for a 345 kilovolt (KV) overhead electric transmission line as shown on the enclosed map. The Hickory Creek-East Dubuque Route Alternative is ITC's preferred route. City staff had the following comments and concerns on potential impacts for each route alternative:

1. Hickory Creek-East Dubuque Route Alternative (blue line on map)
    a. This route is near a planned water tower site on Roosevelt Street.
    b. This route will affect the most wetland acres.
    c. This route will affect residential properties (125 residences within 250 feet).

2. Lock and Dam No. 11 Route Alternative (green line on map)
    a. Sutton Public Pool and Eagle Point Water Plant are within 200 feet and 250 feet of this route.
    b. This route is near a planned water tower site on Roosevelt Street.
    c. This route will affect the highest number of residential properties (133 residences within 250 feet).
    d. This route will affect the highest number of woodland acres.
    e. This route is the only one which includes areas that are not currently occupied by overhead transmission facilities.
    f. This route will have obvious negative visual impacts on Eagle Point Park, one of the Midwest's most outstanding parks. Each year, the park hosts approximately 240,000 visitors and more than 1,200 events.

3. Salem-East Dubuque Route Alternative (yellow line on map)
    a. The National Mississippi River Museum and Aquarium is within 200 feet and 250 feet of this route.
    b. This route will affect the highest number of communication facilities.
    c. This route will affect the highest number of commercial properties.
    d. This route includes the highest number of streams and waterways crossed.
    e. This route will affect residential properties (18 residences within 250 feet).

RECOMMENDATION

Based on the minimum 250-foot distance between transmission lines and buildings in City Code Section 11-6-7 and on the identified impacts described above, City staff recommends that the City Council adopt the enclosed resolution which states that the filing of a petition by ITC and a formal public hearing process would not be in the public interest.

REQUESTED ACTION

The requested action is for the City Council to concur with the staff recommendation and adopt the resolution.

Enclosures

Prepared by Nate Kieffer and Laura Carstens

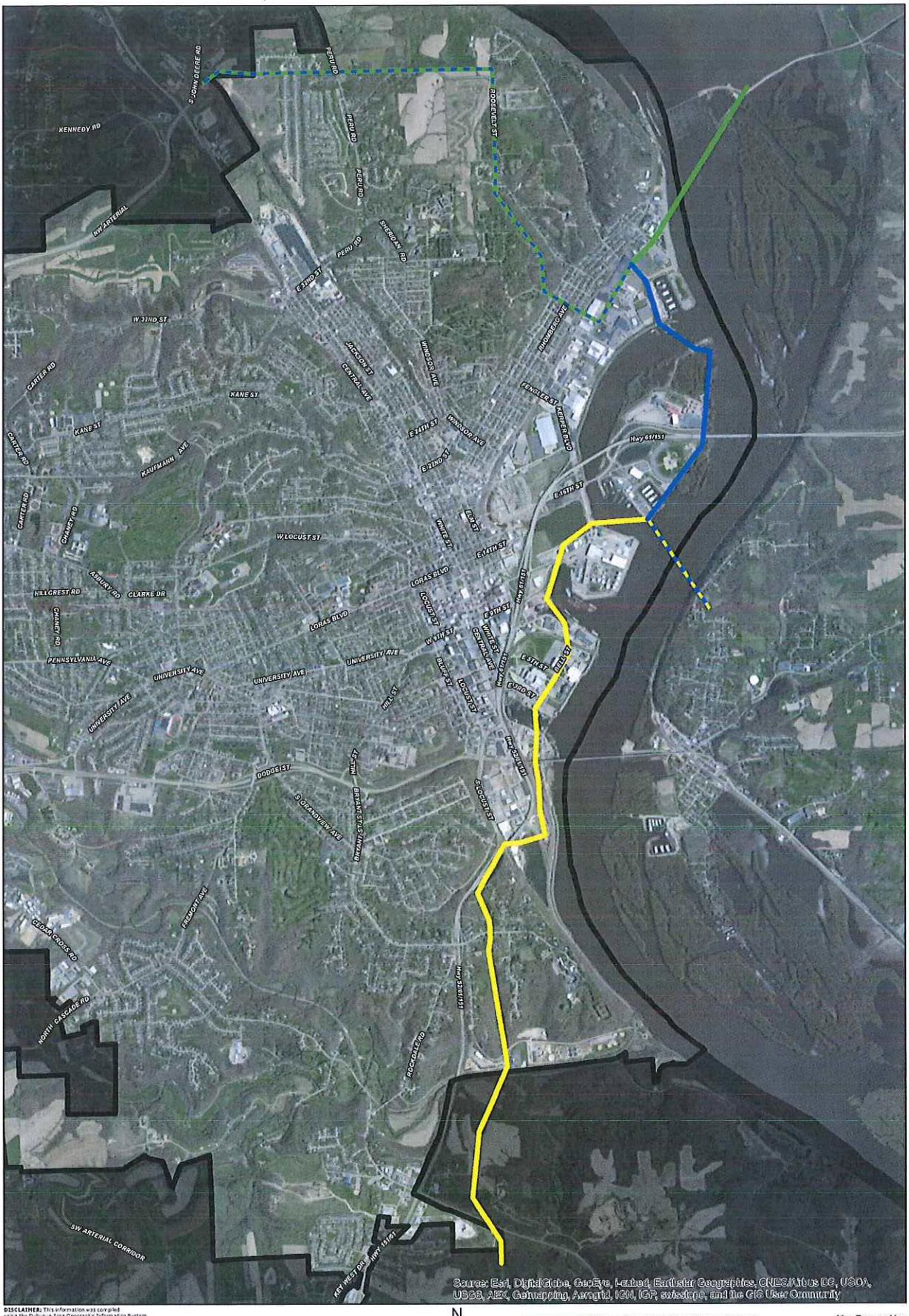
cc: Barry Lindahl, City Attorney
Steve Brown, Project Manager
Nate Kieffer, Land Surveyor, PLS

F:\USERS\LCARSTEN\WP\Utilities\Memo MVM ITC route alts.doc

THE CITY OF DUBUQUE
Masterpiece on the Mississippi

ITC Proposed Routes

a process of DAGIS
DUBUQUE AREA GEOGRAPHIC INFORMATION SYSTEM



DISCLAIMER: This information was compiled using the Dubuque Area Geographic Information System (DAGIS), which includes data created by both the City of Dubuque and Dubuque County. It is understood that, while the City of Dubuque and participating agencies utilized the most current and accurate information available, DAGIS and it's suppliers do not warrant the accuracy or currency of the information or data contained herein. The City and participating agencies shall not be held liable for any direct, indirect, incidental, consequential, punitive, or special damages, whether foreseeable or unforeseeable, arising out of the authorized or unauthorized use of this data or the inability to use this data or out of any breach of warranty whatsoever.

1 inch = 2,500 feet

0 1,250 2,500 Feet

N
W E
S

- Hickory Creek to East Dubuque Route
- Lock and Dam Route No. 11 Route Alternative
- Salem to East Dubuque Route Alternative
- Dubuque City Limits

Map Prepared by:
City of Dubuque
Engineering Division
50 West 13th Street
Dubuque, Iowa 52001
Phone: (563) 589-4270
Fax: (563) 589-4205

CHAPTER 6

PROCEDURE FOR LICENSING ELECTRIC TRANSMISSION LINE COMPANIES

11-6-1: GRANT OF LICENSE:

A. The city council may grant to any person a license to erect, maintain, and operate an electric transmission line within the city.

B. The license may regulate the conditions required and the manner of use of the streets and public grounds of the city. (Ord. 15-13, 3-4-2013)

11-6-2: LICENSEE FEE:

A. A license fee will be assessed by the city council based upon the city's cost of inspecting, supervising, and otherwise regulating the licensee's operations.

B. The licensee shall also pay the city a franchise fee of five percent (5%) of gross revenues generated from sales of the franchisee within the city. (Ord. 15-13, 3-4-2013)

11-6-3: PETITION FOR LICENSE; INFORMATIONAL MEETINGS HELD:

A. Any person authorized to operate electric transmission lines in the state may file a verified petition with the city clerk asking for a license to erect, maintain, and operate a line or lines for the transmission of electric current and for such purpose to erect, use, and maintain poles, wires, guywires, towers, cables, conduits, and other fixtures and appliances necessary for conducting electric current over, along, and across any city lands or rights of way.

B. As condition precedent to the filing of a petition requesting a license for a new transmission line, and not less than thirty (30) days prior to the filing of such petition, the person shall hold a public informational meeting.

C. The meeting shall be held in the city of Dubuque at a location reasonably accessible to all persons that may be interested in the granting of the license.

D. The person seeking the license for a new transmission line shall publish notice of the informational meeting. The notice shall contain the following:

1. The name of the applicant.

2. The applicant's principal place of business.

3. A general description and purpose of the proposed project.

4. The general nature of the right of way desired.

5. A map showing the route of the proposed project including the location of all towers, poles, and other equipment.

6. A description of all towers, poles, and other equipment to be constructed or installed.

7. The place and time of the meeting.

E. The notice shall be published not less than thirty (30) days prior to the time set for the meeting once in a newspaper of general circulation in the city at least one week and not more than three (3) weeks before the time of the meeting. (Ord. 15-13, 3-4-2013)

11-6-4: PETITION:

A. All petitions shall set forth:

1. The name of the individual, company, or corporation asking for the license.

2. The principal office or place of business.

3. The starting points, routes, and termini of the proposed lines, accompanied with a map or plat showing such details, including the location of all towers, poles, and other equipment and a detailed description of all towers, poles, and other equipment to be constructed or installed.

4. A general description of the public or private lands, highways, and streams over, across, or along which any proposed line will pass.

5. General specifications as to materials and manner of construction. Whether the transmission lines will be aboveground or underground, and if aboveground, the petitioner's detailed explanation why the lines will not be underground.

6. The maximum voltage to be carried over each line.

7. An allegation that the proposed construction is in the public interest.

B. Petitions for transmission lines capable of operating at sixty nine (69) kilovolts or more shall also set forth an allegation that the proposed construction represents a reasonable relationship to an overall plan of transmitting electricity in the public interest and substantiation of such allegations, including, but not limited to, a showing of the following:

1. The relationship of the proposed project to present and future economic development of the area.

2. The relationship of the proposed project to comprehensive electric utility planning.

3. The relationship of the proposed project to the needs of the public presently served and future projections based on population trends.

4. The relationship of the proposed project to the existing electric utility, gas, stormwater, sanitary sewer, water and fiber systems and parallel existing utility routes.

5. The relationship of the proposed project to any other power system planned for the future.

6. The possible use of alternative routes and methods of supply.

7. The relationship of the proposed project to the present and future land use and zoning ordinances.

8. The inconvenience or undue injury which may result to property owners as a result of the proposed project.

C. The city council may waive the proof required for such allegations which are not applicable to a particular proposed project.

D. The petition shall contain an affidavit stating that the required informational meeting was held and the time and place of such meeting. (Ord. 15-13, 3-4-2013)

11-6-5: PUBLIC HEARING:

A. When considering whether to grant, amend, extend, or renew a license, the city council shall hold a public hearing on the question. Notice of the time and place of the hearing shall be published as provided in Iowa Code section 362.3. The city council shall consider the petition and any objections filed to it. It shall examine the proposed route or cause any engineer selected by it to do so. It may hear testimony as may aid it in determining the propriety of granting the license. It may grant the license in whole or in part upon the terms, conditions, and restrictions, and with the modifications as to location and route as may seem to it just and proper.

B. A license shall not become effective until the petitioner shall pay, or file an agreement to pay, all costs and expenses of the license proceeding, whether or not objections are filed, including costs of inspections or examinations of the route, hearing, publishing of notice, and any other expenses reasonably attributable to it. (Ord. 15-13, 3-4-2013)

11-6-6: MANNER OF CONSTRUCTION:

A. Such lines shall be built of strong and proper wires attached to strong and sufficient supports properly insulated at all points of attachment; all wires, poles, and other devices which by ordinary wear or other causes are no longer safe shall be removed and replaced by new wires, poles, or other devices, as the case may be, and all abandoned wires, poles, or other devices shall be at once removed. Where wires carrying current are carried across, either above or below wires used for other service, the said transmission line shall be constructed in such manner as to eliminate, so far as practicable, damages to persons or property by reason of said crossing. There shall also be installed sufficient devices to automatically shut off electric current through said transmission line whenever connection is made whereby current is transmitted from the wires of said transmission line to the ground, and there shall also be provided a safe and modern improved device for the protection of said line against lightning. The city council shall have power to make and enforce such further and additional rules relating to location, construction, operation and maintenance of said transmission line as may be reasonable.

B. All transmission lines, wires or cables for the transmission, distribution or sale of electric current at any voltage shall be constructed and maintained in accordance with standards adopted by rule by the Iowa utilities board. (Ord. 15-13, 3-4-2013)

11-6-7: DISTANCE FROM BUILDINGS:

No transmission line shall be constructed, except by agreement, within two hundred fifty feet (250') of any dwelling house or other building, except where said line crosses or passes along a public highway or is located alongside or parallel with the right of way of any railway company. In addition to the foregoing, each person, company, or corporation shall conform to any other rules, regulations, or specifications established by the Iowa utilities board, in the construction, operation, or maintenance of such lines. (Ord. 15-13, 3-4-2013)

11-6-8: NONUSE; REVOCATION OF LICENSE; EXTENSIONS OF TIME:

A. If the improvement for which a license is granted is not constructed in whole or in part within two (2) years from the date the license is granted, the license shall be forfeited, unless the person holding the license petitions the city council for an extension of time.

B. Upon a showing of sufficient justification for the delay of construction, the city council may grant one or more extensions of time for periods up to two (2) years for each extension. (Ord. 15-13, 3-4-2013)

11-6-9: WIRES ACROSS RAILROAD RIGHT OF WAY AT HIGHWAYS:

No corporation or person shall place or string any such wire for transmitting electric current or any wire whatsoever across any track of a railroad except in the manner prescribed by the utilities board. (Ord. 15-13, 3-4-2013)

RESOLUTION NO. 215-15

PROVIDING THAT A PROPOSED PROJECT BY ITC MIDWEST LLC FOR A LICENSE TO ERECT, MAINTAIN AND OPERATE A PROPOSED ELECTRIC TRANSMISSION LINE FACILITY IN THE CITY OF DUBUQUE WOULD NOT BE PERMITTABLE UNDER THE CITY OF DUBUQUE CODE OF ORDINANCES AND WOULD NOT BE PERMITTED BY THE CITY COUNCIL AND THEREFORE AN APPLICATION FOR A LICENSE AND THE REQUIRED PROCESS FOR SUCH A LICENSE WOULD NOT BE IN THE PUBLIC INTEREST

Whereas, City of Dubuque Code of Ordinances Chapter 11-6 establishes a process for licensing electric transmission line companies which requires an electric transmission line company to apply for a license to erect, maintain and operate a facility within the city; and

Whereas, the applicant must hold a public informational meeting prior to filing the petition; and

Whereas, Chapter 11-6 requires the City Council to hold a public hearing when considering whether to grant, amend, extend, or renew such a license; and

Whereas, ITC Midwest LLC (ITC) proposes to apply for a license for three (3) proposed route alternatives for a 345 kilovolt (KV) overhead electric transmission line as shown on the attached map; and

Whereas, the City Manager has met with representatives of ITC to gather information about the proposed project; and

Whereas, the City Manager and City staff have investigated the project, including material provided by ITC; and

Whereas, the City Manager has provided the City Council with the attached recommendation that the filing of a petition by ITC and a formal public hearing process would not be in the public interest; and

Whereas, the City Council, having reviewed the City Manager's recommendation, and material provided by ITC, finds that the City Council has adequate information to determine that the proposed project is not permittable and would not be permitted under Chapter 11-6, and that the recommendation of the City Manager should be approved.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF DUBUQUE, IOWA:

Section 1. The City Council hereby approves the recommendation of the City Manager that the filing of a petition by ITC for a license to erect, maintain and operate a facility within the city as proposed by ITC is not permittable and would not be permitted

by the City Council, and that the filing of an application by ITC and proceeding with the process required by the City of Dubuque Code of Ordinances for such a license would not be in the public interest.

Passed, approved and adopted this 15th day of June, 2015.

Roy D. Buol, Mayor

Attest:

Kevin S. Firnstahl, City Clerk

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