

# Opportunity to Comment on the Wisconsin PSC's Badger-Coulee Draft Environmental Impact Statement



*With observations compiled by SOUL & CETF Volunteers*



**In its Draft Environmental Impact Statement (DEIS),  
the WI Public Service Commission (PSC) states that need for the proposed  
Badger Coulee regional transmission project has yet to be determined.**

The DEIS provides opportunity for citizens, municipalities, and businesses to submit comments during through Oct. 3 on both need and route. The following information is intended to help in doing so.

- **Direct link to this DEIS resource:** <http://tinyurl.com/o74p7sb>
- **Download Draft Environmental Impact Statement Volume 1** for Badger-Coulee:
  - [http://psc.wi.gov/apps35/ERF\\_view/viewdoc.aspx?docid=214156](http://psc.wi.gov/apps35/ERF_view/viewdoc.aspx?docid=214156)
- **Post Recommendations On Line** (text only comments)  
[http://psc.wi.gov/apps40/ERF\\_public/comment/fileComment.aspx?util=5&case=CE&num=142](http://psc.wi.gov/apps40/ERF_public/comment/fileComment.aspx?util=5&case=CE&num=142)
- **Email Comments:** [Marilyn.Weiss@wisconsin.gov](mailto:Marilyn.Weiss@wisconsin.gov) (608) 266-1613
- **Mail Comments:** Marilyn Weiss  
Docket 05-CE-142  
Public Service Commission of Wisconsin  
610 North Whitney Way P.O. Box 7854  
Madison, Wisconsin 53707-7854
- **How to find/subscribe to the Badger-Coulee “Docket:** <http://tinyurl.com/mtu3ghf>

[More links on last pages](#)

Volunteers of SOUL of Wisconsin and Citizens Energy Task Force (CETF) encourage WI ratepayers to make specific comments to the PSC to be more effective than general statement.

The DEIS conveys that the primary issues of contention include:

- Need
- Cumulative impacts of CapX2020 and Badger-Coulee on some communities
- Compatibility of proposed routes with local land use plans
- Individual hardships and property impacts
- Reliable transfer of renewable generation resources

**BUT...These Are Not Inclusive of What a Complete and Accountable Environmental Impact Statement  
Should Consider and Provide Wisconsin Ratepayers.**



# Observations



Following are environmental, economic, legal, policy and health implications omitted or inadequately addressed.

1. **The Applicants' analysis of need relies heavily on the Midcontinent Independent System Operator (MISO) planning process, using criteria far different than Wisconsin's statutory requirements.**
  - 1.1. Wisconsin has the legal right to consider project need and deny approval -- regardless of MISO plans. State statutes require in-state benefits proportionate to Wisconsin ratepayers' costs, and the final Environmental Impact Statement (EIS) should clearly show who pays and who profits.
  - 1.2. MISO's focus is on the interconnected transmission network. Its planning structure and voting rights are dominated by utilities and transmission owners. These factors could suppress consideration of reliability, cost, and carbon reduction benefits enabled by non-transmission alternatives that have higher legal priority in Wisconsin. The final EIS should address how all alternatives contribute to these factors, include resiliency of electric supply as a key reliability factor and delineate when reliability is used to convey a market-trading issue such as congestion.
2. **A complete, unbiased consideration of alternatives is absent even though WI Energy Priority Law puts energy conservation and efficiency top of list when making ALL energy infrastructure decisions.**
  - 2.1. Decision criteria states, "If the Commission finds that any of these statutorily preferred options, or a combination of these options, constitutes a cost effective and technical feasible alternative to the project, the Commission must reject all of or a portion of the project as proposed." The final EIS should include an equally vigorous analysis of these alternatives to building Badger Coulee.
  - 2.2. Requests by more than 2,000 citizens, more than 90 resolutions by municipal governments and letters supporting those resolutions by 12 legislators seeking comparison with non-transmission alternatives are not but should be addressed. The final EIS must quote all requests made by the petitioners and municipalities, account for how the requests have and have not been addressed and list all state government officials who have submitted materials to the docket supporting the requests. If not, the EIS needs to explain why this accountability has not been provided.
3. **The costs and benefits used to analyze the project are inadequate.** Economic impacts on tourism, job creation, land use and property values have not but should be captured, and total sacrifices and financial burden to WI ratepayers should be included in the final EIS analysis alongside market-driven power flow. **Positive economic impacts from non-transmission alternatives including energy efficiency and local power were not but should be acknowledged** and compared to the Badger Coulee build-option.
  - 3.1. The DEIS states, "To date, no study has shown how the construction of a new transmission line negatively affects the 'assessed' value of a property," and the Aesthetics and Visual Impacts section dismisses these losses as subjective. The DEIS states that visual and aesthetic impacts of the 120-180 foot tall towers would be "negligible" and "relatively minor" if the system is passing through quiet soundscapes of trees and agricultural lands while describing the towers as "massive" and adding "adverse visual impacts" when passing near an interstate highway bridge and boating area. This section should be replaced with objective comparisons of before and after real estate values for many land use types and circumstances from comparable transmission landscape alterations in Wisconsin and other states. The final EIS also should provide estimate of total losses for all routes and impact on municipal land use plans, including negative effects on current and possible home lots that have greater value because of natural scenery.

- 3.2. Proposed Badger Coulee routes traverse miles of gateway interstate highway and rustic roads, and locations where natural beauty attracts tourists to linger and support local businesses including restaurants, grocery stores and gas stations. The EIS should provide a full estimate of the loss in tourism dollars that would result from the devaluation of natural beauty in a new section on indirect costs.
- 3.3. The final EIS should include a comparative impact of no-build to build alternatives relative to duration and location of jobs, and reliance on in-state generation and efficiency versus shipping these dollars on state as it relates to both tax based and employment.
4. **Health and environmental concerns should be adequately addressed in the final EIS.** The draft mentions negative cultural and environmental impacts, but fails to present plans of action to address them. Similarly, the DEIS assesses and dismisses electromagnetic field (EMF) health risks based on aged research while ignoring risks associated with corona, UV and ionizing radiation from transmission lines are omitted. The health and environmental risks should be updated and assessed taking these points into account. Alternatives, including no-build, should be compared on health and environmental risks and adequacy of transmission project corridor width and proximity to pollutants considered.
  - 4.1. The DEIS states, "...although some route segments may be more compatible with a new high voltage transmission line than others, construction and operation of the proposed Badger Coulee 345KV transmission line would have substantial impacts on many natural, community and cultural resources in the project area, regardless of what alternatives are chosen." The final EIS should address how a project driven primarily by economics, as claimed by applicants, fits within public need to justify acceptance of substantial and often irreversible consequences.
  - 4.2. Permits from numerous state and federal agencies will be needed. Rather than grant a Certificate of Public Need and Convenience (CPCN) first, as is conveyed in the DEIS, the final EIS should require permit completion before granting the CPCN or explicitly authorize agencies to deny the permit.
  - 4.3. The DEIS fails to address disruption to Amish households, farms and culture, though stating in the Cultural Concerns section, "a concerted effort was made to avoid impacts on this (the Amish) community." Because both proposed routes will impact Amish communities, the impact to those communities and general population impacts on tourism and economies should be quantified.
  - 4.4. The EIS false claim that only safe, non-ionizing radiation is omitted from transmission lines should be corrected, and the impact of time, voltage, capacity and distance addressed regarding health risks related to both corona and EMF.
  - 4.5. The DEIS rejects health risks related to EMF based primarily on pre-2006 research. The DEIS claims no mechanism of damage has been identified, while failing to consider recent research that proposes this and shows correlation to diseases particularly related to corona emissions. These omissions should be addressed in the final EIS. Also, because corona-induced ionizing particles are thought to attract pollutants that more readily stay in the lungs and have been measured to drift 1300 feet and up to drift 3280 feet, the final EIS should consider corridor implications including width and proximity of pollutants including but not limited to sand mines, pesticides, and industrial emissions. Because corona can also increase in the presence of water, the final EIS should address the impact of bodies of water and irrigation in determining optimal corridor placement and distance to avoid health risks.
  - 4.6. Research has identified how UV emitted by high-voltage transmission may impact migratory patterns of birds and UV-sighted mammals. This should be thoroughly evaluated in the final EIS, especially in sensitive bird areas.
5. **Dependent projects should be presented together in the final EIS with total costs, benefits and environmental impacts.**

- 5.1. The DEIS allows applicants to segment lines from Alma, WI to Dubuque, IA, and uses congestion and reliability concerns in La Crosse precipitated by building CapX2020 without Badger Coulee to justify Badger Coulee. The applicants further convey that they believe the combination of Badger-Coulee and Cardinal Bluff (from Spring Green to Dubuque) is the best solution bringing the approximate cost to almost a billion dollars. The final EIS should address what reliability issues are due to CapX2020 being forwarded without Badger Coulee, along with the financial and environmental costs of the complete project preferred by applicants. Given the lines are being forwarded primarily as economic projects, this should include expected profits to applicants, guaranteed minimum profit, total costs to Wisconsin ratepayers including CapX2020, and guaranteed cost savings to Wisconsin ratepayers.
- 5.2. The National Environmental Protection Act (NEPA) defines the Scope of a project and impacts to be considered in an environmental impact statement (EIS). To determine the scope of EIS, agencies are to simultaneously consider connected actions that are closely related and therefore should be discussed in the same impact statement. Actions are connected if they automatically trigger other actions which may require environmental impact statements, cannot or will not proceed unless other actions are taken previously or simultaneously, and are interdependent parts of a larger action and depend on the larger action for justification. Cumulative actions, which when viewed with other proposed actions have cumulatively significant impacts, should therefore be discussed in the same impact statement. The final EIS should consider if the desired combination of Badger-Coulee and Cardinal Bluff falls into this requirement, and if issues now presented may be due to segmentation of CapX2020 and Badger Coulee.
6. A point of contention, acknowledged in the Draft EIS, is the reliable transfer of renewable generation resources. This statement raises **significant policy issues that should be addressed in the Final EIS, in particular why transferring remotely-based, centralized renewables is a policy being given greater priority over energy efficiency, shaving of peak demand, and Wisconsin-based renewables. The inherent reliability risks and costs associated with maintaining a centralized grid and technologies available to enable market transformation should also be addressed** when considering the level of investment required of Badger-Coulee not only alone but in context of the entire transmission expansion of which it is a part.

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*More PSC Draft EIS Links*  
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List of All DEIS Documents with links:

[http://psc.wi.gov/apps40/dockets/content/detail.aspx?dockt\\_id=5-CE-142](http://psc.wi.gov/apps40/dockets/content/detail.aspx?dockt_id=5-CE-142)

Complete Draft EIS Volumes 1 and 2, Interactive Version (Large File, with Corridor Maps)

[http://psc.wi.gov/apps35/ERF\\_view/viewdoc.aspx?docid=214320](http://psc.wi.gov/apps35/ERF_view/viewdoc.aspx?docid=214320)

Draft EIS Figure Vol. 2-3 – Ecological regions and elevations in the project area

[http://psc.wi.gov/apps35/ERF\\_view/viewdoc.aspx?docid=214208](http://psc.wi.gov/apps35/ERF_view/viewdoc.aspx?docid=214208)

Trout streams and outstanding and exceptional resource waters

[http://psc.wi.gov/apps35/ERF\\_view/viewdoc.aspx?docid=214209](http://psc.wi.gov/apps35/ERF_view/viewdoc.aspx?docid=214209)

Draft EIS Figure Vol. 2-6 - Important bird areas in the project area

[http://psc.wi.gov/apps35/ERF\\_view/viewdoc.aspx?docid=214211](http://psc.wi.gov/apps35/ERF_view/viewdoc.aspx?docid=214211)



## *Additional Links*



### Regarding Transmission Proposal Review Process in WI

- **“Disorderly Conduct of the Badger-Coulee Review,”** by Rob Danielson, <http://tinyurl.com/mokkzbn>
- **“ATC’S BADGER-COULEE TRANSMISSION LINE: AN UNDEMOCRATIC PROCESS,”** by Brad Steinmetz, <http://thecountyline.net/pages/?p=6152>
- **State Senators Dale Schultz and Jennifer Shilling Letter** to WI PSC Chairman Phil Montgomery on Ratepayer Notification, <http://tinyurl.com/kfe5xf5>
- **PSC Attorney John Lorence letter to Al Brinkman** on PSC’s “inability” to require utilities to answer ratepayer written questions concerning need for the high voltage transmission proposal and information about energy alternatives during the “Public Information Phase” of the Badger-Coulee proposal and other utility and agency discretions. [http://soulwisconsin.org/Documents/PSC2AlBrinkman\\_All.pdf](http://soulwisconsin.org/Documents/PSC2AlBrinkman_All.pdf)
- **Wisconsin’s Energy Future** 15 minute video concerning Wisconsin’s lack of comprehensive energy planning from a special, bi-partisan legislative meeting December, 2012. <http://tinyurl.com/bdbvhvy>
- **A Comprehensive and Accountable Draft EIS** done for the people of Montana: [http://www.savescenicjv.org/index\\_files/Page1229.htm](http://www.savescenicjv.org/index_files/Page1229.htm) Socio-economics section: <http://tinyurl.com/kfkaw92>
- **“WI Energy Trends Show Need for Change,”** An account of rising electricity rates and other shortfalls from reports made by utilities and consumer groups to the Wisconsin State Senate Committee on Energy, Consumer Protection, and Government Reform, January, 2013, <http://tinyurl.com/mzzq9hs>
- **List of Municipalities Adopting Information Request Resolutions to the PSC:** <http://tinyurl.com/cpf8fx4> Packet for adopting in your town (includes Cardinal Bluff’s proposal) <http://tinyurl.com/7bftlat>
- **Sample of an Information Request Resolution** to the PSC adopted by more than 90 municipalities across WI: <http://tinyurl.com/7bftlat>

### Non-Transmission Alternatives

- **GRAPHIC: Huge Profits For WI Home and Business Owners through Energy Efficiency and Solar** <http://tinyurl.com/lyatcu3>
- **SOUL & CETF VS. ATC DEBATE:** Should regional high capacity transmission expansion continue to be Wisconsin's No. 1 energy investment? <http://tinyurl.com/m39murj>
- **Sample of a Municipal Information Request Resolution** to the PSC requesting comparison of costs and benefits if the money utilities want ratepayers to spend on transmission expansion in Wisconsin and surrounding states was invested into Energy Efficiency and Local Power. The PSC received more than 90 adopted resolutions asking that the information become accessible to ratepayers early in the Badger-Coulee review process. [http://psc.wi.gov/apps35/ERF\\_view/viewdoc.aspx?docid=210168](http://psc.wi.gov/apps35/ERF_view/viewdoc.aspx?docid=210168)
- **B.E.T.T.E.R. BLOG** – Better Energy Transition Through Efficiency & Renewables <http://starkenergyplan.org/better/>
- **Can’t Afford to Go Solar?** Simple tips for saving a small bundle and the slashing your carbon footprint. [http://soulwisconsin.org/Documents/13X13\\_EfficiencyHandout.pdf](http://soulwisconsin.org/Documents/13X13_EfficiencyHandout.pdf)

## Property Devaluations with Transmission / Health

- **“Valuation Guidelines for Properties with Electric Transmission Lines,”** A study including before and after data for the Arrowhead-Weston 345 kV line in Wisconsin conducted by Kurt C. Kielisch <http://tinyurl.com/3jf9mrg>
- **“Transmission Lines & Property Value Impacts, FOR THE MSTI REVIEW PROJECT,”** [http://headwaterseconomics.org/wphw/wp-content/uploads/MSTI\\_PropertyValues.pdf](http://headwaterseconomics.org/wphw/wp-content/uploads/MSTI_PropertyValues.pdf)
- **“High Voltage Power Lines Like CapX2020 Pose Health Risks,”** By David O. Carpenter, MD <http://tinyurl.com/m7dImz3>
- **“ANALYSIS OF IMPACTS OF EMF ON HUMAN HEALTH,”** Direct testimony by David O. Carpenter, MD before the State of Minnesota Public Utilities Commission. <http://tinyurl.com/po9p995>
- **“Powerlines disturb animal habitats by appearing as disturbing flashes of UV light invisible to the humans,”** <http://tinyurl.com/m7f6lqr>

## Would Badger-Coulee Have Environmental Benefits?

- **“American Transmission Company and XCEL Energy Claims for Badger-Coulee,”** from ATC/Xcel publicity with responses by SOUL, <http://tinyurl.com/pletchk>
- **“WI Carbon Emissions 2020-2026 Projections For Badger-Coulee,”** Chart of emission performance inherent in MISO transmission expansion planning with data from the Badger-Coulee docket (linked in graphic) <http://tinyurl.com/nz79wsl>