

STATE OF IOWA
BEFORE THE IOWA UTILITIES BOARD

IN RE:)
) DOCKET NO. E-22386
ITC MIDWEST LLC)
DAIRYLAND POWER COOPERATIVE)
)

REBUTTAL TESTIMONY
OF
NATHANIEL BAER

ON BEHALF OF
IOWA ENVIRONMENTAL COUNCIL, CLEAN GRID ALLIANCE, FRESH ENERGY, AND
MINNESOTA CENTER FOR ENVIRONMENTAL ADVOCACY
("CLEAN ENERGY INTERVENORS")

November 15, 2019

CEI-Rebuttal-Baer

1 **Q. Please state your name, business name and address, and role in this proceeding.**

2 A. My name is Nathaniel Baer. I am an Energy Policy Specialist with the Iowa Environmental
3 Council located at 505 Fifth Ave., Suite 850, in Des Moines, Iowa. I appear here in my
4 capacity as an expert witness on behalf of the Clean Energy Intervenors.

5
6 **Q. Are you the same Nathaniel Baer who filed direct testimony in this docket?**

7 A. I am.

8
9 **Q. What is the purpose of your testimony?**

10 A. I am providing a response to several new or updated studies regarding the route for the
11 Cardinal-Hickory Creek transmission line, which have been made available since the filing
12 of my direct testimony. These include an additional routing study filed by ITC Midwest in
13 this docket, the U.S. Department of Agriculture Rural Utilities Service publication of the
14 Final Environmental Impact Statement, and the U.S. Fish & Wildlife Service release of a
15 Draft Compatibility Determination. I respond to Office of Consumer Advocate Witness
16 Bents direct testimony regarding the additional approvals required for Cardinal-Hickory
17 Creek. Finally, I provide updated information regarding the relationship of solar energy to
18 Multi-Value Project transmission lines.

19
20 **Q. What additional routing information has ITC Midwest provided in this docket?**

21 A. On the same day that I filed direct testimony, ITC Midwest filed an additional route study.
22 This study was supported by Witness Middleton, filed as Middleton Direct Exhibit 1, and
23 is the Route Selection Study.

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Q. What is your response to this study?

A. The study presents similar information as previous studies on the route for Cardinal-Hickory Creek, including the Alternative Crossings Analysis, the Macro-Corridor Study, and the federal Draft Environmental Impact Statement, all of which I discussed in my direct testimony.

Q. Does this new route study change your support for the Iowa route, including the use of the Mississippi River National Wildlife and Fish Refuge (Refuge) for the part of the route that crosses the Mississippi River at Cassville, Wisconsin?

A. Not at all. This study’s analysis and conclusions are consistent with past studies and with my review of the Iowa route.

Q. You referenced that the federal Environmental Impact Statement was in draft form in your direct testimony. What has changed since then?

A. The U.S. Department of Agriculture’s Rural Utility Service published the Final Environmental Impact Statement (Final EIS) in October.

Q. Has anything in the Final EIS changed your support for the Iowa route, including the use of the Refuge for the part of the route that crosses the Mississippi River?

A. No. Like the Draft EIS, each of the route options considered in detail in the Final EIS utilizes the Refuge and the Cassville, Wisconsin area for crossing the Mississippi River. The Final EIS evaluates six alternative routes (Alternatives 1-6) in detail and every route

1 alternative crosses the Mississippi from the Refuge to Cassville, Wisconsin. The Final EIS
2 examines the different options within the Refuge for this crossing and concludes that the
3 Nelson Dewey crossing option is preferable, consistent with ITC Midwest's proposed route
4 in this docket, which I supported in my direct testimony.

5
6 **Q. Does the Final EIS provide recommendations or preferences about any route**
7 **alternatives?**

8 A. Yes. The Final EIS identifies Alternative 6 as the Agency Preferred Alternative. The route
9 for this alternative is consistent with ITC Midwest's proposed route in Iowa and uses the
10 Nelson Dewey crossing, and is also consistent with the utilities' route in Wisconsin as
11 approved by the Wisconsin PSC.¹ The Final EIS notes that this route uses existing right-
12 of-way and minimizes habitat fragmentation in the Refuge, consistent with my review as I
13 outlined in my direct testimony. The Final EIS does identify a different route, Alternative
14 5, as an Environmentally Preferable Alternative. Although Alternative 5 makes
15 adjustments for other parts of the Iowa and Wisconsin route outside of the crossing, it uses
16 the same route through the Refuge to cross the Mississippi River as Alternative 6 does. The
17 Final EIS is clear that the Agency Preferred Alternative can be – and is – a different route
18 from the Environmentally Preferable Alternative, given a mix of considerations. The Final
19 EIS states that the Agency Preferred Alternative “strikes the balance between reducing
20 impacts to resources while also maintaining consistency with the state regulatory process.”²

21
22 **Q. Has U.S. Fish and Wildlife provided additional information regarding the use of the**

¹ USDA RUS, *Final Environmental Impact Statement* at 126 (October 2019).

² *Id.*

1 **Refuge for the crossing?**

2 A. Yes. The Final EIS includes a Draft Compatibility Determination from U.S. Fish and
3 Wildlife as Appendix J.

4

5 **Q. Has anything in the Draft Compatibility Determination changed your support for the**
6 **Iowa route and use of the Refuge for crossing the Mississippi River?**

7 A. No. The Draft Compatibility Determination appropriately recognizes the benefits to the
8 Refuge of the Nelson Dewey crossing option and provides a determination that the
9 Cardinal-Hickory Creek use is compatible with the Refuge, with stipulations. For example,
10 U.S. Fish and Wildlife states that “Restoration of the Stoneman right-of-way would result
11 in reduced habitat fragmentation and restoration of larger continuous blocks of habitat”
12 and further states that “a net reduction in habitat fragmentation would occur on the
13 floodplain of the Turkey River. A more contiguous array of habitats would exist on the
14 floodplain as a result of realigning the right-of-way.”³ This approach to the Cardinal-
15 Hickory Creek use of the Nelson Dewey crossing option is consistent with my direct
16 testimony.

17

18 **Q. OCA Witness Bents discussed additional approvals for Cardinal-Hickory Creek.**
19 **What is your response?**

20 A. OCA Witness Bents responded to a question about “concerns” with the additional
21 approvals and discussed both the possibility for rehearing in Wisconsin and the timeline
22 for federal approvals, including the expectation that federal approvals will occur after the

³ USDA RUS, *Final Environmental Impact Statement*, Appendix J at 14 (October 2019).

1 conclusion of the IUB hearing. I do not disagree that the timeline for federal approvals
2 extends beyond the IUB hearing. However, as discussed above, I note that the most recent
3 milestones are on track for required federal approvals in both timing and substance. The
4 Final EIS was released on schedule with the Agency Preferred Route consistent with the
5 proposed route in Iowa and the approved route in Wisconsin. The Final EIS included U.S.
6 Fish and Wildlife's determination that the proposed use of the Refuge for the Cardinal-
7 Hickory Creek line using the Nelson Dewey crossing is a compatible use. These are
8 positive indications regarding both timing and substance of required federal approvals.
9

10 **Q. Your direct testimony described the relationship between Multi-Value Project**
11 **transmission lines and wind energy. What new information is available regarding**
12 **solar energy?**

13 A. Most of the initial analysis regarding the development and proposal of the portfolio of
14 Multi-Value Project lines in Iowa related to wind generation. My direct testimony, like that
15 of Witness Goggin, also focused on this relationship. In the past few months, major utility-
16 scale solar energy projects have been proposed in several locations in Iowa. These include
17 the 100 megawatt (MW) Wapello Solar/Central Iowa Power Cooperative project in Louisa
18 County that has received initial approval from the Board in docket GCU-2019-0001. Three
19 additional solar projects proposed by subsidiaries of Invenenergy Renewables LLC are under
20 review in dockets GCU-2019-0002, GCU-2019-0003, and GCU-2019-0004. In my review
21 of these three pending projects, it is clear that available transmission capacity from Multi-
22 Value Project lines is an important factor in the decision to locate these projects at the
23 proposed locations.

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Specifically, the project application for the 300 MW Worthwhile West solar project states that the “Project location was determined primarily because the newly constructed ITC Midwest Ledyard-Colby 345 kV line will have adequate capacity to accommodate a power injection from the Project.” *In Re: Worthwhile Solar Farm West LLC*, Docket No. GCU-2019-0002, Application for Generating Certificate and Waivers at 15 (filed Sept. 13, 2019). The Ledyard-Colby 345 kV transmission line is one of Iowa’s Multi-Value Project transmission lines. In addition, the 149 MW Worthwhile East solar project is located adjacent to this same Ledyard-Colby transmission line and may benefit from available capacity on the line (the project application discusses the nearby 161 kV line that it would tap into directly rather than the Ledyard-Colby line and states that transmission and interconnection studies are underway).

Q. How would Cardinal-Hickory Creek benefit future solar development?

A. The projects described above demonstrate that as MVP transmission lines make transmission capacity available in Iowa, solar is now likely to benefit in addition to wind. Iowa’s solar market is beginning to grow and has a bright future. Iowa has a number of utility-scale solar projects in the interconnection queue in MISO: approximately 3,300 MW across 22 projects.⁴ Cardinal-Hickory Creek can support this growing solar market in the near-term as well, given that the federal Final Environmental Impact Statement identifies three Iowa-based solar projects totaling 300 MW that have interconnection agreements that

⁴ MISO, *Generator Interconnection Queue* (last accessed Nov. 7, 2019) at https://www.misoenergy.org/planning/generator-interconnection/GI_Queue/.

1 are conditional on Cardinal-Hickory Creek.⁵ In addition to being a key to Iowa’s future
2 wind market, Cardinal-Hickory Creek is likely to be important to Iowa’s future solar
3 market.

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5 **Q. Does this conclude your rebuttal testimony?**

6 A. Yes.

⁵ USDA RUS, *Final Environmental Impact Statement* at 14, Table 1.4-1 (October 2019).

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)

AFFIDAVIT OF NATHANIEL BAER

STATE OF Maine)
)
COUNTY OF Waldo)

I, Nathaniel Baer, being first duly sworn on oath, state that I am the same Nathaniel Baer identified in the testimony filed in this docket on November 15, 2019, that I have caused the testimony to be prepared and am familiar with its contents, and that the testimony is true and correct to the best of my knowledge and belief as of the date of this affidavit.

/s/ Nathaniel Baer
Nathaniel Baer
November 15, 2019

Subscribed and sworn to me this 15th day of November, 2019.

/s/ Jessica M. Tracy
Jessica M. Tracy

Notary Public in and for the
State of Maine