### STATE OF IOWA DEPARTMENT OF COMMERCE BEFORE THE IOWA UTILITIES BOARD

IN RE:	DOCKET NO. INU-2021-0001
INVESTIGATION INTO A COMPREHENSIVE PLAN FOR IOWA'S TRANSMISSION GRID OF THE FUTURE	

#### COMMENTS

The Clean Energy Districts of Iowa ("CEDI") provide the following comments in response to the "Order Initiating Investigation, Requesting Comments and Setting Date for Workshop" ("Order") issued by the Iowa Utilities Board (Board) on July 2, 2021, in docket number INU-2021-0001.

There are currently nine energy districts in Iowa located in Allamakee, Clayton, Delaware, Dubuque, Howard, Jackson, Johnson, Linn, and Winneshiek County. A tenth is in the process of being formed in Polk County. Each energy district is oriented around three key principles:

- Local prosperity via wealth creation and retention, economic development, and job creation in the clean energy sector.
- Climate stewardship via investments in energy efficiency and renewable energy.
- Fairness, equity, and inclusivity in reaping the benefits of the clean energy transition. CEDI appreciates the invitation to offer comments in this docket because Iowa's

transmission grid is vital both to the prosperity of Iowans via economic development and also to

the welfare of our nation as we grapple with the growing climate crisis. The Board's Order is also timely given pending legislation in Congress and recent actions by the Federal Energy Regulatory Commission ("FERC").

#### I. Summary of Order

In recent years, the Board has received multiple petitions from private companies not regulated by the Board to construct "single-purpose" transmission lines to interconnect large renewable energy facilities with the high-voltage transmission grid to export electricity to consumers in other states.<sup>1</sup> The Board emphasizes that it expects to receive a substantial number of similar requests in the near future.

In order to grant a franchise, the Board notes that it must "make a finding that the proposed line or lines are necessary to serve a public use and represents a reasonable relationship to an overall plan of transmitting electricity in the public interest."<sup>2</sup> The Board's Order revolves around how it should implement this twofold legal obligation.

The Board acknowledges in its Order that the Iowa General Assembly has stated its intention "to encourage the development of renewable electric power generation and to encourage the use of renewable power to meet local electric needs and the development of transmission capacity to export wind power generated in Iowa."<sup>3</sup> In addition, the Board acknowledges "the term 'public' shall not be interpreted to be limited to consumers located in this state."<sup>4</sup>

<sup>&</sup>lt;sup>1</sup> Order, p. 2.

<sup>&</sup>lt;sup>2</sup> *Id.* p. 1, (citing Iowa Code § 478.4).

<sup>&</sup>lt;sup>3</sup> *Id.* pp. 2-3, (citing Iowa Code § 476.53A).

<sup>&</sup>lt;sup>4</sup> *Id.* p. 3, (citing Iowa Code § 478.3(3)).

That said, the Board finds the current "piecemeal" approach to transmission line approval "unsustainable" for various reasons and thus has opened this docket and issued this Order.<sup>5</sup> The Board's request for comments and information is two-fold. First, "the Board is seeking information to determine if a single-purpose transmission line extending for miles across lowa is in the public interest."<sup>6</sup> Second, "the Board considers it part of its statutory obligation to determine if a statewide [transmission] plan is feasible and, if so, what a statewide plan should include."<sup>7</sup>

Both of these requests for information are related to the Board's claim that "the rewards of renewable energy have not led to lower energy costs" for Iowa consumers.<sup>8</sup> In addition, the Board notes that "local governments, landowners, and residents in Iowa" have raised concerns with the Board about "the loss of prime farmland and infringement upon landowner use and enjoyment of their land."<sup>9</sup>

The Board asks the two investor-owned transmission companies, MidAmerican Energy Company and ITC Midwest LLC, as well as Iowa's rural electric cooperatives, municipal electric utilities, and independent power producers to provide detailed information about several matters. The Board also "encourages all interested persons to file comments and participate in the [August 30] workshop so the Board has all perspectives on the development of an overall plan for transmitting electricity in Iowa."<sup>10</sup>

- <sup>7</sup> *Id.* p. 4.
- <sup>8</sup> *Id.* p. 3.
- <sup>9</sup> Id.

<sup>&</sup>lt;sup>5</sup> *Id*, p. 4.

<sup>&</sup>lt;sup>6</sup> *Id.,* p. 2.

<sup>&</sup>lt;sup>10</sup> *Id.* pp.5-6.

In the comments that follow, CEDI will begin by addressing both of the Board's requests for information summarized above. We will conclude with responses to the Board's concern that "the rewards of renewable energy have not led to lower energy costs" for Iowa consumers.<sup>11</sup> In addition, we will address the concerns expressed by "local governments, landowners, and residents in Iowa" about "the loss of prime farmland and infringement upon landowner use and enjoyment of their land."<sup>12</sup>

# II. Is a single-purpose transmission line extending for miles across lowa in the public interest?

The short answer to this question is, yes. As the Board notes in its Order, Iowa Code § 478.3(3) states that "the term 'public' shall not be interpreted to be limited to consumers located in this state."<sup>13</sup> In addition, such transmission lines facilitate the export of renewable electricity generation to other states, which is established in Iowa Code § 476.53A. As will be discussed in the next section on planning, many of the transmission lines the Board is concerned about are included in or required by the Midwest Independent System Operator's Transmission Expansion Plan ("MTEP").

That said, the Board does bear responsibility for approving the siting and construction of transmission lines and it should use its authority under Iowa Code § 478.18(2) to ensure that:

A transmission line shall be constructed near and parallel to roads, to the right-of-way of the railways of the state, or along the division lines of the lands, according to the government survey, wherever the same is practicable and reasonable, and so as not to interfere with the use by the public of the highways or streams of the state, nor unnecessarily interfere with the use of any lands by the occupant.

<sup>&</sup>lt;sup>11</sup> *Id.* p. 3

<sup>&</sup>lt;sup>12</sup> Id.

<sup>&</sup>lt;sup>13</sup> Id.

In addition, per Iowa Code § 478.3, the Board requires all petitions for transmission line

franchises capable of operating at sixty-nine kilovolts (kV) or more and extending a distance of

not less than one mile across privately owned real estate to "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 system 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.

The acquisition of voluntary agreements and/or the identification of least-cost routes do

not overrule the primacy of these statutory criteria when it comes to the Board's review of

proposed transmission line franchises. That said, some of these criteria can only be

substantiated via the Board's and the line developer's engagement with information and studies

provided by the Midwest Independent System Operator's Transmission Expansion Plan.

High-voltage transmission is integral to the implementation of existing Iowa policy that

emphasizes the importance of continuing and even accelerating the growth of Iowa's renewable

energy industry. Iowa Code § 476.41 states plainly "It is the policy of this state to encourage the

development of alternate energy production facilities and small hydro facilities in order to conserve our finite and expensive energy resources and to provide for their most efficient use." In addition, as noted above, Iowa Code § 476.53A makes clear that Iowa policy supports renewable energy development for both in-state use and for export: "It is the intent of the general assembly to encourage the development of renewable electric power generation. It is also the intent of the general assembly to encourage the use of renewable power to meet local electric needs and the development of transmission capacity to export wind power generated in Iowa." Finally, Iowa Code § 476.53 further defines support for renewable energy development as necessary to transition towards a lower carbon future: "It is also the intent of the general assembly to encourage rate-regulated public utilities to consider altering existing electric generating facilities, where reasonable, to manage carbon emission intensity in order to facilitate the transition to a carbon-constrained environment."

These policies clearly and unambiguously define support for continued renewable energy development in Iowa, within all ownership categories, and for both in-state consumption and for export. We encourage the Board to ensure that any improvements to the transmission planning and franchise approval processes are consistent with this overarching policy framework.

These policies are also reflected in the Iowa Energy Plan. As the Board notes, the executive summary makes clear that an objective of the Iowa Energy Plan is to "[e]ncourage the prudent . . . development of energy delivery infrastructure."<sup>14</sup> In addition, the Iowa Energy Plan

<sup>&</sup>lt;sup>14</sup> *Id.* p. 4, (citing Executive Summary at p. 5).

clearly recognizes the importance of transmission to export surplus renewable energy resources

produced through aggressive renewable energy production targets:

lowa is among the most progressive states in the country in terms of renewable energy generation and, given its vast availability of wind, solar, and biomass resources, it is well positioned to achieve aggressive clean energy goals within the next 15 to 20 years. As reflected by the input received from the Iowa Energy Plan working group members and from the public, it is recommended that Iowa adopt voluntary, non-binding targets for renewable energy generation to continue its renewable energy success. The goals should be sensitive to the risk of jobs leakage, and allow for excess renewable energy resources to be sold and moved through the regional transmission organization's footprint. The goals could be adopted through a variety of pathways.<sup>15</sup>

The Iowa Energy Plan also emphasizes the importance of high-voltage transmission lines

to ensure reliable electric service for the residents of Iowa and those in surrounding states:

Iowa is connected to and served by two regional transmission organizations (RTO) - the Midwest Independent System Operator (MISO) and Southwest Power Pool (SPP) that are critical structural components of the electricity grid operations. Utilities in Iowa and in our neighboring states are connected to and supported by this network. Electricity is moved from where it is generated to, from, or within Iowa, and then moved along high-voltage transmission lines to the area needing power.<sup>16</sup>

Finally, the Iowa Energy Plan notes that, "as new areas of wind or distributed energy are

being developed within the state, it is important to identify areas where existing transmission

and distribution capacity is limited."<sup>17</sup> Here and elsewhere Iowa's Energy Plan envisions new

transmission lines to interconnect new distributed energy systems.

### III. Is a statewide [transmission] plan feasible and, if so, what should a statewide plan

include?

<sup>&</sup>lt;sup>15</sup> <u>Iowa Energy Plan</u>, p. 56.

<sup>&</sup>lt;sup>16</sup> *Id.* p. 65.

<sup>&</sup>lt;sup>17</sup> Id.

The short answer here is that, while an Iowa-only "comprehensive transmission plan" is not feasible given federal jurisdiction, the Board does have significant opportunity to participate more fully in the regional MISO-MTEP transmission planning process, which currently meets the Board's obligation to consider franchise applications within the context of such a "comprehensive plan".

As noted above, and in the Board's Order opening this docket, various provisions of the lowa Code refer to one or more forms of transmission planning. Such planning is vital to expand the generation of renewably-produced electricity in a cost-effective and technologically-efficient manner that also increases grid optimization and reliability. How this planning is undertaken and by whom is complicated, however. Some entities have primary, and sometimes exclusive, responsibility for parts of the electric transmission grid, including the Department of Energy, the Federal Energy Regulatory Commission, and, in our region, the Midwest Independent System Operator.

CEDI has had an opportunity to review the discussion of transmission planning in draft comments produced by the Joint Parties as well as draft joint comments by the Iowa Environmental Council and the Environmental Law and Policy Center. We believe both sets of comments accurately describe the various responsibilities and authority for transmission planning accorded to states and the various entities mentioned above.

We also found it helpful to read the Board's own discussion about transmission planning in the report the Board submitted to the Members of the Government Oversight Committee in December 2006. The report was the Board's response to a section in Senate File 2399, the

Renewable Energy Tax Credit Bill, which required the Board to prepare "a proposal to conduct a study on the transmission of electricity in Iowa."<sup>18</sup>

In the report, the Board emphasized the importance of FERC Order 2000, "which outlined a vision of a small number of large, multi-state Regional Transmission Organizations (RTOs) that would operate and manage the electric grid to create and maintain competitive regional power markets at the wholesale level while continuing to maintain the reliability of the electric system."<sup>19</sup>

MISO began coordinating wholesale electricity markets as an RTO in the Midwest region

in 2005. The Board's report notes that MISO is "heavily involved in transmission system

planning... These planning activities are performed collaboratively between MISO planning

staff and the planning staffs of the transmission owners, with regular input from stakeholder

groups" like the Iowa Utilities Board and its staff.<sup>20</sup>

The following excerpt from the Board's 2006 report is most germane to the Board's

Order in Docket INU-2021-0001:

MISO uses this collaborative process, combined with numerous studies, to develop a MISO Transmission Expansion Plan (MTEP) that is designed to ensure the reliability of the regional transmission system. The MTEP is also used to identify system expansion that is critically needed to support the competitive supply of electric power by this system. The MTEP considers all market perspectives, including demand-side options, generation location, and transmission expansion.

Here and elsewhere in the report the Board clearly recognizes and affirms MISO's

primary authority for regional planning and transmission expansion, while noting that MISO

<sup>&</sup>lt;sup>18</sup> Iowa Utilities Board, "A Proposal for a Study of Iowa's Electric Transmission System," December 27, 2006.

<sup>&</sup>lt;sup>19</sup> *Id.* p. 6.

<sup>&</sup>lt;sup>20</sup> *Id.* p. 8.

invites and takes seriously the input of multiple stakeholders--including the Iowa Utilities Board. In fact, MISO's current Business Practice Manual clearly invites the input of state regulatory commissions regarding projections of load growth, resource requirements, transmission siting, and environmental concerns.<sup>21</sup>

It is important to note that, while MISO bears ultimate responsibility for regional transmission planning, and FERC governs wholesale interstate electricity sales, the Board retains its authority over siting and construction of transmission facilities. In addition, each county has broad latitude to determine via ordinance what amount of renewable development is appropriate for them.

FERC's recent issuance of a draft advanced notice of proposed rulemaking ("ANOPR") invites comments from entities like the Board on potential reforms to FERC's existing regulations governing regional transmission planning, cost allocation, and generator interconnection processes.<sup>22</sup> Along with the Joint Parties, the Iowa Environmental Council, and the Environmental Law and Policy Center, CEDI encourages the Board to engage more actively in the MTEP process and in FERC's recent issuance of its draft ANOPR--and to use this docket to gather the information it needs to do so.

#### IV. Have the rewards of renewable energy led to lower energy costs for lowa consumers?

The answer to this question is complex. On the one hand, since renewably-produced electricity has no fuel costs, and because such projects generate various tax benefits, both factors have reduced energy costs--especially in terms of energy charges passed on to

<sup>&</sup>lt;sup>21</sup> <u>MISO Business Practice Manual (BPM)-020 Section 2.6.7</u>.

<sup>&</sup>lt;sup>22</sup> <u>Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator</u> Interconnection, 176 FERC ¶ 61,024 (July 15, 2021).

ratepayers via the Energy Adjustment Clause (EAC). On the other hand, Board approval of these costly projects accompanied by high returns on equity (ROE) for shareholders has led to some base rate increases. At the same time, there are disparities in transmission costs that impact some ratepayers more than others. We discuss these matters further below, beginning with the latter since it is directly relevant to regional consultations with MISO about cost containment and allocation.

Disparities in transmission service cost to Iowa ratepayers are significant and are having economic impacts on Iowa communities. For example, MidAmerican Energy's ("MEC") current Transmission Cost Adjustment ("TCA") for residential customers is \$ 0.00271 per kilowatt-hour (kWh) and \$ 0.00238/kWh for small general service customers.<sup>23</sup> By comparison, Interstate Power and Light's ("IPL") current Regional Transmission Service Clause (RTS) rider is more than eleven times greater for residential customers at \$0.03065/kWh and nearly fifteen times greater for non-residential general service customers at \$0.03521/kWh.<sup>24</sup>

There are similar differences in transmission service costs for Large General Service customers. Based on each utility's current tariff sheets, MEC's current TCA is \$ 0.98 per kW while IPL's current RTS is \$7.71 per kW. This significant difference largely explains the 38.4% difference between MEC's \$0.0553/kWh average cost to serve Large General Service (LGS) customers and IPL's average cost of \$0.0765/kWh in 2020.<sup>25</sup> This issue is of particular concern to CEDI because most of our energy districts are in counties served predominantly by Interstate Power and Light.

 <sup>&</sup>lt;sup>23</sup> <u>MidAmerican Energy, Rates and Tariffs, Iowa Electric</u>. See "Clause TCA-Transmission Cost Adjustment," p. 401.
<sup>24</sup> <u>Alliant Energy, Iowa Rates for Electricity and Natural Gas</u>. See "Electric Bill Overview, Regional Transmission Service Charge-Rider RTS".

<sup>&</sup>lt;sup>25</sup> Iowa Utilities Board, IUB 24/7, (<u>IE-1 Part A</u>) <u>Annual Report for Rate-Regulated Electric Utilities, for year ended</u> <u>December 31, 2020</u>. Average cost calculated by dividing LGS revenues by megawatt-hour (MWh) LGS sales.

Lower transmission (and demand) costs are especially important for large users, which also tend to be large employers. The high percentage of renewables in MidAmerican's electricity mix, combined with their very low rates, has helped MidAmerican attract more industrial customers. The opposite combination has led to very different results for Interstate Power and Light. Based on information gleaned from each utility's annual electric reports,<sup>26</sup> from 2009-2020 MidAmerican gained 302 industrial customers and Alliant lost 221 customers.



It is hard to know how many of these industrial customers decided to close their doors in Alliant's service territory and then set up operations in MidAmerican's service territory. What we do know for certain is that Amazon, Apple, Google, and Facebook have all opened large facilities in communities served by MidAmerican Energy. For MidAmerican, the result has been

<sup>&</sup>lt;sup>26</sup> Iowa Utilities Board, "Information from Utility Annual Report Filings".

a 76% increase in sales to industrial customers. For the communities served by MidAmerican,



the result has been an increase in jobs and economic vitality.

This data demonstrates that there is no fundamental relationship between the installation of large amounts of renewable generation capacity and high energy and transmission costs. In fact, the opposite is the case. That is, MidAmerican Energy has the largest amount of renewable generating capacity in Iowa and very low energy and transmission costs compared to other electric utilities in the Midwest. Meanwhile Interstate Power and Light has far less installed renewable generating capacity but its transmission service provided via ITC-Midwest is much more expensive, which, together with other factors, results in higher costs to Iowa ratepayers. We encourage the Board to investigate this growing disparity and seek ways to remediate it, including via participation in the MTEP process and FERC's recent ANOPR. As noted above, another reason why energy costs have not declined as much as some would like is because large renewable energy projects are expensive. There is no question that the Production Tax Credits harvested from Iowa's large wind farms have reduced the cost of energy passed along to ratepayers via the EAC. That said, large renewable energy facilities are costly and have increased the rate base for the relevant utility companies. With regard to Interstate Power and Light, their new Renewable Energy Rider (RER) has resulted in a modest increase to ratepayer bills and the company noted in a recent customer webinar that the required annual "true-up" will result in an increase to the RER in 2022.<sup>27</sup> Another reason why ratepayer costs have not been reduced further is because the Board has approved generous returns on equity (ROE) for company shareholders. CEDI supports the construction of utility-scale renewable energy facilities owned by Iowa's electric utility companies and independent power producers, but it encourages the Board, where possible, to scrutinize related costs very carefully and to be less generous with regard to the ROE it provides shareholders.

Another way the Board could help lowans enjoy "the rewards of renewable energy" via reduced energy costs would be to use this docket to study how much utility-scale distributed renewable generation could be added at existing substations that transform high-voltage electricity for distribution in local communities. Information regarding substations is readily available in annual FERC Form 1 filings. Such facilities owned and operated by the relevant utility or by independent third party power providers would produce electricity for the local area that does not require high-voltage transmission service and related costs. The impact of

<sup>&</sup>lt;sup>27</sup> Alliant Energy, Iowa Energy Price Outlook, Energy Price Outlook Webinars: "Electric Cost Outlook for Communities, July 2021," pp. 19-20.

such "behind and near the substation" investments could be multiplied by other non-wires alternatives like widespread deployment of energy storage systems and other transmission optimization technologies. Such a focus is clearly within the Board's remit. As the Board notes in its Order in this docket, "the Utilities Board (Board) has broad general jurisdiction, which includes "general supervision of . . . all lines for the transmission, sale, *and distribution* of electrical current . . . ."<sup>28</sup> (Emphasis added) Maximizing the benefits of utility-scale solar at the local level is also supported by Iowa Code § 476.53A, which "encourage[s] the development of renewable electric power generation and . . . encourage[s] the use of renewable power to *meet local electric needs.*" (Emphasis added)

We hasten to add that some lowa municipalities and school districts in counties that have clean energy districts are, in fact, currently enjoying the rewards of renewable energy via lower energy costs because they have worked with lowa firms to install (primarily solar) renewable energy systems behind their meters. In some cases the municipalities and school districts own the systems outright; in other cases they lease the equipment or purchase the power under a third-party power purchase agreement. The same is true, of course, for thousands of lowa homeowners, businesses, and farms that have installed renewable energy systems behind their meters. The Board would do well in this docket not to lose sight of the significant value such systems provide these lowa homeowners, farms, and businesses and how they reduce demand on the transmission grid.

# V. Do Iowa farmers, other property owners, and city and county governments experience considerable benefits from renewable energy production?

<sup>&</sup>lt;sup>28</sup> Order, p. 1, (citing Iowa Code § 474.9)

We have reviewed and agree with the responses to this matter by the Joint Parties, the lowa Environmental Council, and the Environmental Law and Policy Center. They provide substantial evidence that Iowa farmers, other property owners, and city and county governments experience considerable benefits from renewable energy production. These benefits include direct payments to thousands of Iowa landowners through easements and other agreements as well as growing property tax payments to Iowa county governments. These tax payments lower the tax burden of other taxpayers and increase funding for vital services like schools. Another benefit of Iowa's commitment to renewable energy are the thousands of related jobs in the manufacturing, construction, installation, and maintenance of wind turbines and solar panels across the state.

That said, we offer the following additional comments to address additional concerns raised in the Board's Order in this docket.

With regard to land use issues, we first address the concern about loss of prime lowa farmland. While large wind farms do traverse thousands of acres across many farms, on average, the National Renewable Energy Laboratories ("NREL") estimates the direct impact of each wind turbine and its service road occupies only about one acre of cropland.<sup>29</sup> This is one reason why farmers have welcomed wind turbines on their land; they have a relatively small impact on farmed acreage. The other driving factor is that each farmer is paid an annual land lease fee that is either fixed at the outset and pegged to the rate of inflation or it is based on a percentage of production, or both. Either way, these annual land lease payments are an

<sup>&</sup>lt;sup>29</sup> Denholm, P., M. Hand, M. Jackson, and S. Ong. 2009. Land-use requirements of modern wind power plants in the United States. Golden, CO: National Renewable Energy Laboratory. Cited in <u>Union of Concerned Scientists</u>, <u>"Environmental Impacts of Wind Power," March 5, 2013</u>.

important additional revenue stream for these farmers--especially during poor economic periods due to low commodity prices and/or high input costs.

Similarly, large solar farms also occupy thousands of acres though typically on fewer farms. Here farmers are making rational decisions about how to get the best financial return from their land. Some farmers have concluded that it makes more sense to lease land to large solar farms to harvest the energy from the sun to generate electricity rather than to continue harvesting the energy from the sun to produce crops like soybeans and corn--over half of which is also currently used to produce energy in the form of biofuels. Utility-scale wind and solar is not a threat to lowa agriculture, but rather a tremendous opportunity for diversification, sustainability, and resilience.

According to the U.S. Department of Agriculture ("USDA"), Iowa farmers produce crops on 27.5 million acres (about 12.9 million of those are dedicated to corn).<sup>30</sup> If a megawatt of solar photovoltaic generation capacity requires roughly 7.5 acres, then installing 10 GW of solar (roughly equivalent to Iowa's installed wind generating capacity) would require 75,000 acres, or less than 0.3% of Iowa cropland. Roughly 64% of corn production acreage - or 8.3 million acres is dedicated primarily to energy/ethanol production.<sup>31</sup> This is not a question of biofuels versus renewable electricity, or food versus energy production - it is all sunshine farming. Iowa farmers and farmland can produce the full spectrum, and solar and wind represent a profitable and sustainable option for farmers, communities, and the state as a whole.

<sup>&</sup>lt;sup>30</sup> USDA-NASS, <u>2020 State Agricultural Overview: Iowa</u>.

<sup>&</sup>lt;sup>31</sup> Recent annual ethanol production ranges from 3.7 to 4.3 billion gallons. See Iowa Renewable Fuels Association, <u>Iowa Industry Statistics: At a Glance</u>. A bushel of corn yields 2.7 gallons of ethanol. See USDA, <u>Biofuels Data</u> <u>Sources</u>. Iowa corn producers average 178 bushels/acre. See USDA-NASS, <u>2020 State Agricultural Overview: Iowa</u>. In sum: 4 billion gallons \* 1 bushel/2.7 gallons \* 1 acre/178 bushels = 8.3 million acres.

In both cases (utility-scale wind and solar) it is important to recognize that these renewable energy systems are not permanent fixtures on the landscape. All of these large renewable energy facilities have decommissioning plans and escrow funds to restore the land to agricultural use at the end of the facility's life. It is also worth noting that solar farms create opportunities for different kinds of farming between the rows of panels as well as increased pollinator habitat for declining bee populations and to foster other biodiversity. In addition, insofar as solar arrays reduce fertilizer input, annual tillage, and the combustion of fossil fuels for farming, there are additional environmental benefits in addition to the generation of carbon-free electricity such as reduced soil erosion and water pollution, increased soil carbon sequestration, and improved rainfall infiltration into soil, thus reducing flooding risk.

Finally, it is our understanding that all easements for renewable generation facilities have been completely voluntary and that only a few transmission lines have required the right of eminent domain. This demonstrates that Iowa landowners have decided how they want to use their property for their own purposes and for the broader public interest. It should be expected that those who don't benefit financially from hosting renewable energy or transmission facilities will be disgruntled, but the Board should not give equal weight to the concerns of a non-participating party versus the preferences of the participating landowner.

#### VI. Conclusion

In closing, we thank the Board for the opportunity to offer these comments regarding the Board's investigation of a comprehensive plan for Iowa's transmission grid of the future. We summarize our comments below and encourage the board to consider these principles as it proceeds in the current docket:

- Iowa policy is clear on the need for continued development of the renewable energy industry at all scales, and transmission planning should operate with that overarching policy goal in mind.
- "Comprehensive transmission planning" is currently happening through a collaborative process within MISO-MTEP, which is the correct jurisdiction, satisfies the Board's obligation for franchise considerations, and presents significant opportunity for further Board engagement.
- 3. While renewable energy and transmission development deliver significantly greater positives than negatives to Iowa landowners, communities, and the state, significant opportunities exist for the Board to support non-transmission alternatives and to reduce transmission cost disparities among Iowa ratepayers.

We look forward to reviewing the responses of other commenters and to participating in the workshop the Board has scheduled for August 30.

Respectfully submitted,

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