

**House Energy and Natural Resources Committee
Hearing on HB1315: Factors to be Considered When Evaluating Applications and
Designation for Sites, Corridors, and Routes
February 2, 2023**

Chairman Porter, members of the committee, my name is **Mark Pierce**. I live in **Beulah, ND**. I am writing **in favor** of House Bill 1315 which would grant the North Dakota Public Service Commission (“NDPSC”) the authority to consider impacts on reliability, integrity, or resilience of the existing electric supply and distribution system during their permitting oversight.

There is currently a gaping hole in our regulatory system in which no one has the authority/responsibility of ensuring reliability of our electric grid. Electric grids are dodging bullets of energy insufficiency with greater and greater frequency. The trend of retiring baseload dispatchable generation sources and replacing them with intermittent generation sources is not sustainable in a world that is supposedly concerned with “sustainability”. North Dakota’s commerce and livelihoods depend on safe, reliable, and affordable electric power. It is a necessity of the Northern Plains.

On June 28, 2022, I testified in Wishek, ND at the public hearing in opposition to the Badger Wind Project (Attachment 1). There is no doubt in my mind that if the NDPSC had the tools to consider reliability during this approval process, this project would have been denied. Adding additional generation with no stated customer in an area of known transmission congestion is a recipe for failure.

This bill is a good start in the right direction for the State of North Dakota. I encourage a **“Do-Pass”** recommendation. Thank you for your consideration.

Badger Wind, LLC: Public Service Commission Testimony – 6/28/2022

Submitted by: Mark L. Pierce
Faces of North Dakota Coal
1024 Cherry Lane
Beulah, ND 58523

My name is Mark Pierce. I am a coal miner from Beulah, ND. Starting off, I would like to thank you all for the opportunity to testify today on behalf of thousands of coal miners and plant workers in ND Coal Country.

We are currently living in history. These are truly very interesting and challenging times. We owe much of this to the uncertainty of Federal Policy coming out of Washington, DC. Inflation, interest rates, commodity prices, etc. are hurting good people more and more as each day passes. Sadly, this is the exact environment that my livelihood has been dealing with for over a decade. Yet, we are still here today doing the same work to provide energy our society needs. How long will we be able to continue to provide the critical baseload electricity? Honestly, I don't know, but a lot of that depends on decisions made regarding issues like we are testifying on here today. Today is the most important day for my livelihood, and tomorrow maybe for yours. Access to affordable, reliable electric power is the single greatest eradicator of poverty in human history. This project and many others proposed like it threaten the very electric grid stability we have all grown to take for granted. We as a society are no longer able to ignore the reality of what we have allowed to happen to our grid. We are sacrificing our one last global competitive advantage.

I have devoted a lot of my personal time over the last several years to advocating for my industry. I have found our coal industry is one of the most misunderstood industries. People do not understand what they don't know. Unfortunately, our story of prosperity in Coal Country and the vast benefit we provide society is rarely told. If told, it is seldom told accurately in today's hyperpolarized world.

This led me in 2019 to start "Faces of North Dakota Coal". We are a grassroots organization dedicated to telling the great story of Coal Country from the perspective of those of us who live and breathe it each and every day. Humanizing our industry and putting a "face" to the black rock and electron we produce is an aspect that most never even consider. Our motto is "People, Families, Communities". It is far reaching from ours to yours.

Over a decade ago, our industry began to question the direction federal policy was taking our electric grids with the never ending subsidization of intermittent energy. Many spoke about the potential consequences replacing baseload energy with intermittent energy would likely bring to our electric grids. It fell on deaf ears for years because nothing happened. Our electric grid infrastructure had excess capacity that was able to absorb the redundant buildout of generation. Today, that is no longer the case. We are now at the point of displacing baseload electrons with intermittent electrons. This displacement by subsidized energy has been undermining the economics of traditional energy putting our baseload plants at risk of closure. Many throughout the Midwest have succumbed to this economic pressure.

There is no doubt in my mind that this project if built as proposed would do irreparable harm to some of our critical baseload infrastructure in North Dakota. Fortunately for me, you don't have to rely on my words to see this quite clearly. It is plainly clear from the information the two (2) grid operators serving ND have on their respective public websites. Below is the detail of MISO's grid level notifications since May 13th. So far, MISO's 2022 has been quite interesting in their efforts to maintain the juggling act of grid stability that used to be an afterthought. Air Traffic Controllers have nothing over on MISO Grid Operators.



<https://www.misoenergy.org/mcsnotification/?id=1322>

Current NERC EEA Level = 0
 Current MISO Max Gen Level = Alert
 Current Emergency Pricing Level = Tier 0

Reliability Actions:

The MISO Reliability Coordinator is declaring a Maximum Generation Emergency Alert effective from 05/13/2022 15:35 EST until 05/13/2022 19:00 EST for the following entities: Central Region area(s) of: ALT, ALTE, AMIL, AMMO, AMRN, ATC, BREC, CIN, CONS, CWLD, CWLP, DECO, GLH, HE, HMPL, IPL, ITC, MECS, METC, MGE, MIUP, NIPS, PION, RTX, SIGE, SIPC, UPPC, WEC, WPS

The reason for the Event is because of Forced Generation Outages, Higher than Forecasted Load, Above Normal Temps.

The MISO Reliability Coordinator instructs the following:

Stakeholder Major Actions	Max Gen Step Level
MPs communicate available Module E Resources	Alert
MPs update energy interchange transaction E-Tags of Capacity Resources	Alert
LBA/TOP provide potential exclusion of constrained pockets within the declaration area	Alert
TOPs coordinate with MISO RC to identify potential reconfiguration options	Alert
LBAs/MPs ensure accuracy of LMM/LMR availability and Self Scheduled values in MCS/DSRI	Alert
Affected GOPs communicate capacity limited facilities to MISO and update limits and offers	Alert
Prepare to implement this procedure and follow procedures for emergency conditions	Capacity Advisory
Follow instructions per Conservative System Operations procedure and declaration	Capacity Advisory
If notified by MISO, Implement LMRs	Capacity Advisory



<https://www.misoenergy.org/mcsnotification/?id=1325>

Current NERC EEA Level = 0
 Current MISO Max Gen Level = Alert
 Current Emergency Pricing Level = Tier 0

Reliability Actions:

The MISO Reliability Coordinator is declaring a Maximum Generation Emergency Alert effective from 05/18/2022 14:30 EST until 05/18/2022 20:00 EST for the following entities: South Region area(s) of: AXLT, CLEC, EAI, EES, EMBA, LAFA, LAGN, LEPA, SME

The reason for the Event is because of Forced Generation Outages, Above Normal Temps, Higher than Forecasted Load.

The MISO Reliability Coordinator instructs the following:

Stakeholder Major Actions	Max Gen Step Level
MPs communicate available Module E Resources	Alert
MPs update energy interchange transaction E-Tags of Capacity Resources	Alert
LBA/TOP provide potential exclusion of constrained pockets within the declaration area	Alert
TOPs coordinate with MISO RC to identify potential reconfiguration options	Alert
LBAs/MPs ensure accuracy of LMM/LMR availability and Self Scheduled values in MCS/DSRI	Alert
Affected GOPs communicate capacity limited facilities to MISO and update limits and offers	Alert
Prepare to implement this procedure and follow procedures for emergency conditions	Capacity Advisory
Follow instructions per Conservative System Operations procedure and declaration	Capacity Advisory
If notified by MISO, Implement LMRs	Capacity Advisory



<https://www.misoenergy.org/mcsnotification/?id=1333>

The MISO Reliability Coordinator (RC) is declaring Conservative Operations, effective from 05/31/2022 04:45 EST to 05/31/2022 20:00 EST for the following entities: Reliability Coordinator Footprint and instructs that:

- TOPs, GOPs and LBAs are to review outage plans to determine any maintenance or testing, scheduled or being performed on any monitoring, control, generation or transmission equipment that can be deferred, revoked or cancelled. Coordinate with MISO and LBA for completing any maintenance that may enhance BES reliability, monitoring and control. The return to service of equipment on outage should be coordinated between MISO and the applicable entity.



<https://www.misoenergy.org/mcsnotification/?id=1340>

Current NERC EEA Level = 0
 Current MISO Max Gen Level = Alert
 Current Emergency Pricing Level = Tier 0

Reliability Actions:

The MISO Reliability Coordinator is declaring a Maximum Generation Emergency Alert effective from 06/15/2022 13:00 EST until 06/15/2022 20:00 EST for the following entities: MISO Balancing Authority Area

The reason for the Event is because of Forced Generation Outages, Above Normal Temps, High Congestion.

The MISO Reliability Coordinator instructs the following:

Stakeholder Major Actions	Max Gen Step Level
MPs communicate available Module E Resources	Alert
MPs update energy interchange transaction E-Tags of Capacity Resources	Alert
LBA/TOP provide potential exclusion of constrained pockets within the declaration area	Alert
TOPs coordinate with MISO RC to identify potential reconfiguration options	Alert
LBAs/MPs ensure accuracy of LMM/LMR availability and Self Scheduled values in MCS/DSRI	Alert
Affected GOPs communicate capacity limited facilities to MISO and update limits and offers	Alert
Prepare to implement this procedure and follow procedures for emergency conditions	Capacity Advisory
Follow instructions per Conservative System Operations procedure and declaration	Capacity Advisory
If notified by MISO, Implement LMRs	Capacity Advisory



<https://www.misoenergy.org/mcsnotification/?id=1350>

Due to:

Extreme high temperatures and near record high loads, in order to maximize generation availability and transmission system transfer capability.

The MISO Reliability Coordinator (RC) is declaring Conservative Operations, effective from 06/21/2022 00:00 EST to 06/23/2022 22:00 EST for the following entities: Reliability Coordinator Footprint and instructs that:

- TOPs, GOPs and LBAs are to review outage plans to determine any maintenance or testing, scheduled or being performed on any monitoring, control, generation or transmission equipment that can be deferred, revoked or cancelled. Coordinate with MISO and LBA for completing any maintenance that may enhance BES reliability, monitoring and control. The return to service of equipment on outage should be coordinated between MISO and the applicable entity.



<https://www.misoenergy.org/mcsnotification/?id=1351>

Current NERC EEA Level = 0
 Current MISO Max Gen Level = Capacity Advisory
 Current Emergency Pricing Level = N/A

Reliability Actions:

The MISO Reliability Coordinator is declaring a Maximum Generation Capacity Advisory effective from 06/21/2022 06:00 EST until further notice.

MP's and TOP's please ensure outages are up to date in CROW and offers are up to date in the portal.

The MISO Reliability Coordinator instructs the following:

- Prepare to implement the MISO Market Capacity Emergency procedure and follow procedures for emergency conditions
- Ensure all market data is updated with best available information
- If notified by MISO, Implement LMRs



<https://www.misoenergy.org/mcsnotification/?id=1356>

All,

MISO currently has 3 declarations that includes all three regions:

- Hot Weather Alert
- Conservative Operations
- Capacity Advisory

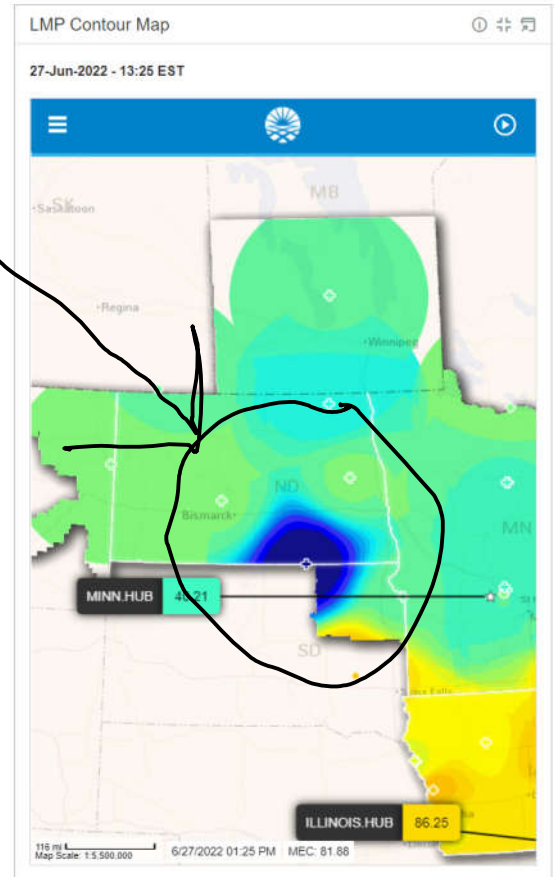
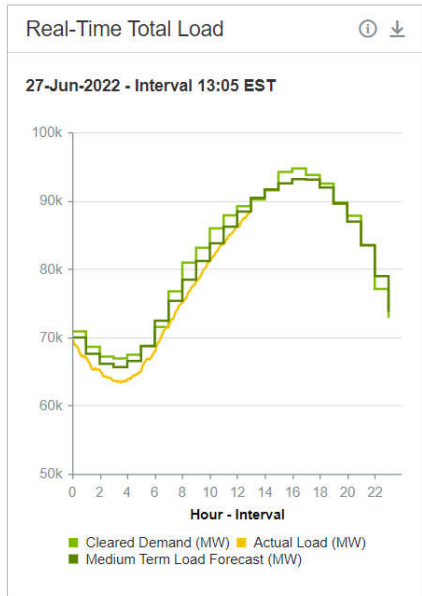
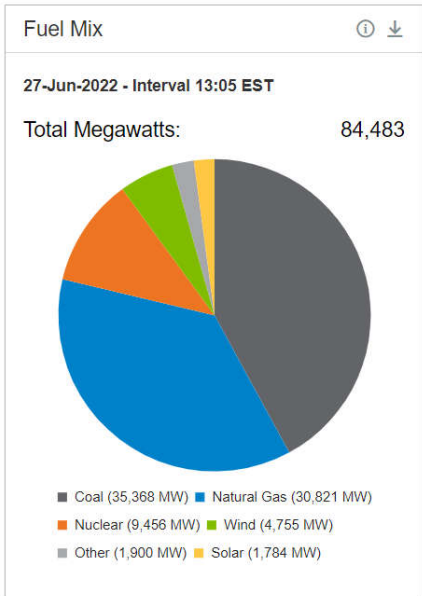
Please make extra efforts to have generation and other resource information updated in the portal accurately for today and tomorrow and keep your Regional operations staff updated with any changes.

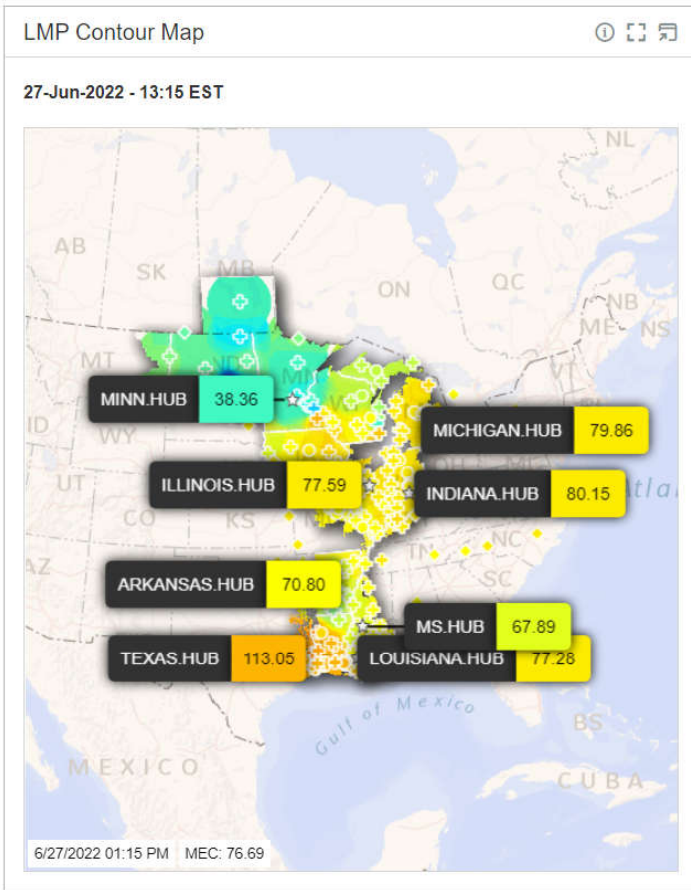
Thanks,

MISO Shift Manager

In addition, the proposed location for this wind farm would be in an area of MISO's footprint that is already known to be an area of high congestion and binding constraints. Without a significant investment in transmission infrastructure that is not disclosed currently, it is hard to fathom why anyone would propose this project in this location. Why would you develop and sell a product in a marketplace that frequently has negative pricing without a commitment of a power purchase agreement from a utility? The answer can only be to harvest the lucrative tax credits our federal policy provides in my opinion. Below is an example of the negative pricing in this area on June 27, 2022.

Area of negative locational marginal pricing on June 27, 2022 in ND's MISO footprint.





ExAnte LMP

27-Jun-2022 - Interval 13:15 EST

Name	LMP	MCC	MLC
ARKANSAS.HUB	51.19	-17.41	-2.19
ILLINOIS.HUB	74.23	3.11	0.33
INDIANA.HUB	77.66	2.61	4.26
LOUISIANA.HUB	73.25	1.58	0.88
MICHIGAN.HUB	77.15	2.62	3.74
MINN.HUB	37.58	-24.93	-8.28
MS.HUB	63.59	-6.54	-0.66
TEXAS.HUB	76.65	6.38	-0.52

Real-Time Binding Constraints

27-Jun-2022 - Interval 13:20 EST

Name	Shadow Price	Override	Curve Type	BP1	PC1	BP2	PC2
Butler_Bluemound_138_5061_fio_Arcadian_Granvil_3	-350.52	0	MW	0	2000		
El_Dorado_500_345_AT2_FLO_El_Dorado_Mount_Olive_	-222.57	0	MW	0	2000		
Ellendal_AberdeenJunction_115kV_fio_Ellendal_Oak	-46.11	0	MW	0	2000		
Prairiesland_NorthRochester_345_FLO_Hampton_Nor	-107.93	0	MW	0	2000		

To a lesser extent, ND's other grid operator struggles with much of the same dynamics. Below is a capacity advisory issued for the SPP on June 22, 2022. The Southwest Power Pool is a much smaller grid in terms of electric load and frequently experiences negative pricing throughout its footprint.

From: Southwest Power Pool <communications@spp.org>
 Date: Wed, Jun 22, 2022 at 9:55 AM
 Subject: **External Email** Grid Notice: SPP is issuing a Conservative Operations Advisory effective at 10 a.m. CT Wednesday, June 22, 2022
 To: SPP Grid Notice <gridnotice@spp.org>

This email originated from outside of the SPP network. Do not click links or open attachments unless you recognize or can verify the sender, or were expecting an email from the sender. The original sender of this email is communications@spp.org.

SPP is issuing a Conservative Operations Advisory for its entire 14-state Balancing Authority footprint in the eastern interconnection effective at 10 a.m. CT Wednesday, June 22, 2022, with an anticipated end at 10 p.m. CT Wednesday, June 22, 2022. Conservative Operations Advisories do not require the public to conserve energy.

This Conservative Operations Advisory is being declared due to high loads and wind generation output availability. As a result, the SPP Balancing Authority may use greater unit commitment notification timelines, including making commitments prior to Day-Ahead Market and/or committing Resources in Reliability Status.

SPP issues Conservative Operations Advisories when SPP there is a need to operate its system conservatively based on weather, environmental, operational, terrorist, cyber or other events. Generation and transmission operators have been provided instructions on applicable procedures, including to report any limitations, fuel shortages or concerns. SPP will send additional information if necessary. Conservative Operations Advisories do not require the public across our 14-state regional transmission organization (RTO) region to conserve energy. Individuals should contact their local utility for details specific to their area.

The following chart shows the relative severity of the Conservative Operations Advisory in effect from 10 a.m. CT Wednesday, June 22, 2022, through 10 p.m. CT Wednesday, June 22, 2022.



I understand there are many factors involved in a permit evaluation. In my opinion, my testimony and the information provided is as critical of a factor as any other, if not more so. Someone has to draw the line in the sand at some point, and say that we can't continue to serve the greater good of society if we continue down this path.

With all I have presented, too often our detractors paint our grassroots group as anti-wind and anti-business. Nothing could be farther from the truth. Yes, it is true that we dislike the unlevel playing field that Federal policy has created, giving wind developers an unfair advantage in the marketplace. Yes, it is true that we have supported county level policy that has restricted wind development in Coal Country to avoid the transmission congestion that has plagued many baseload plants throughout the Great Plains. Neither of those facts will change.

The honest truth, though, is that we support value-added wind development that is a true comprehensive energy solution for North Dakota...we always have and we always will. Wind has an opportunity to be a +1 for North Dakota, but most people don't understand the complexities required to make that happen. There is currently a McLean County Project that appears at face-value to be the prototype for the +1 model that will not displace coal-fired baseload electrons to accommodate the windblown intermittent electrons. It is a project that would feed and maximize the capacity of a HVDC line to Minnesota. It avoids the North Dakota AC grid in its entirety. Minnesota would get the intermittent renewables they want and more importantly, the baseload they need. All this will take place without negatively impacting the people, families, and communities in Coal Country or North Dakota.

You may hear "coexist", "grow the pie" and "all of the above" taglines often from elected officials. They sound great and make for good campaign slogans, but most don't understand the physics behind the rhetoric. In the last legislative session, sound energy policy bills that were designed to facilitate that rhetoric into becoming reality were killed before they were introduced in committee or watered-down in committee. The +1 opportunity slipped through North Dakota's fingers, in large part because of the powerful lobbyists representing the wind interests.

In summary, this project does not appear to fit the +1 economic model we advocate for benefitting North Dakota.

Respectfully submitted,

Mark L. Pierce, Founder

Faces of North Dakota Coal

Beulah, ND