

From: [Bowker, Alexandria C. \(SPC\)](#)
To: [Ashley Ross](#); [Mikayla Boche](#)
Cc: [Wash, Elizabeth H. \(SPC\)](#)
Subject: Ruso PSC Permit-NTIA Update
Date: Wednesday, April 24, 2019 2:37:31 PM
Attachments: [image001.gif](#)
[RE EXTERNAL Ruso turbine layout 21 for Fresnel analysis.msg](#)
[Ruso turbine layout 21 for Fresnel analysis.msg](#)
[RE Ruso - NTIA Response WAPA Coordination.msg](#)
[Ruso turbine coordinates.msg](#)

Ashley and Mikayla,

On January 29, 2019, representatives from Ruso Wind Partners, LLC spoke with Scott Johnson at WAPA regarding the studies Commsearch performed for us that they coordinated with with the National Telecommunications and Information Administration. We sent the layout to Scott for review. He stated that none of the primary turbine locations posed a problem for their radio system, but alternate location #12 did. He requested that if alternate turbine location #12 is utilized, that we move it from its current location. Ruso Wind Partners, LLC does not plan to utilize this location unless necessary. We recognize this location will need more work on micro siting if we were going to use it.

Thanks,

Alex

Alex C. Bowker

Business Development

Southern Power

O: 205.992.0163

M: 205.915.9519

southernpowercompany.com



69 **PU-19-29** Filed: 6/17/2019 Pages: 13
Exhibit 24 - WAPA correspondence

Ruso Wind Partners, LLC

77 **PU-19-28** Filed: 6/17/2019 Pages: 13
Exhibit 24 - WAPA correspondence

Ruso Wind Partners, LLC

From: [Johnson, Scott](#)
To: [Miller, Bill Joseph \(SPC\)](#)
Cc: [Berry, Morgan L. \(SPC\)](#); [Bowker, Alexandria C. \(SPC\)](#); [Mohon, Kristin B. \(SPC\)](#); [Nunez, Edgar \(SPC\)](#)
Subject: RE: [EXTERNAL] Ruso turbine layout 21 for Fresnel analysis
Date: Wednesday, January 30, 2019 11:23:57 AM
Attachments: [image002.jpg](#)
[image003.gif](#)
[Ruso Wind Turbines 11x17 Landscape.pdf](#)
[Ruso Wind 11x17 Landscape.pdf](#)
[Ruso Wind 12A 8x11.pdf](#)

EXTERNAL MAIL: Caution Opening Links or Files

Bill,

Thanks for the turbine information. Our GIS technicians have entered the data into our GIS program and I have attached plots of the turbines with respect to our microwave path. You provided 53 primary turbine locations with 13 alternate locations. None of the primary locations pose a problem for our radio system, however, alternate location # 12 did as seen in the attached documentation. If you need to utilize location 12A, it will need to be moved from its current location. It is currently 24 feet from our second Fresnel zone and would need to be at least 238 feet.

Let me know if you have any questions.

Thanks,

Scott E. Johnson | Sr. Telecommunications Engineer | Spectrum Management

Western Area Power Administration | Headquarters | Lakewood, CO

Department of Energy

(O) 720.962.7380 | (F) 720.962.4080 | sjohnson@wapa.gov



From: Miller, Bill Joseph (SPC) [mailto:BMILLER@SOUTHERNCO.COM]

Sent: Tuesday, January 29, 2019 8:37 AM

To: Johnson, Scott <SJohnson@WAPA.GOV>

Cc: Berry, Morgan L. (SPC) <MLBERRY@southernco.com>; Bowker, Alexandria C. (SPC) <acbowker@southernco.com>; Mohon, Kristin B. (SPC) <KBRODEUR@SOUTHERNCO.COM>; Nunez, Edgar (SPC) <ENUNEZ@southernco.com>

Subject: [EXTERNAL] Ruso turbine layout 21 for Fresnel analysis

Scott,

Thank you for speaking with us on the phone this morning. Morgan asked me to get this to you, as I am the one doing our turbine layouts internally. Attached is our latest turbine layout with coordinates and dimensions.

As mentioned we are evaluating switching turbines between locations, so please evaluate all the coordinates at the highest hub height (107.5 meters) and the largest rotor diameter (145 meters) (total tip height 180 meters) to identify any potential issues with microwave beam interference so we can address them.

Let us know if you need any additional information or have any questions.

Thanks,

Bill Miller

Fuel Resource Analyst

Southern Power

3535 Colonnade Pkwy

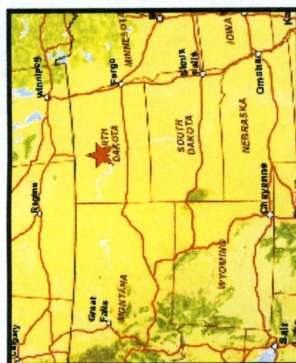
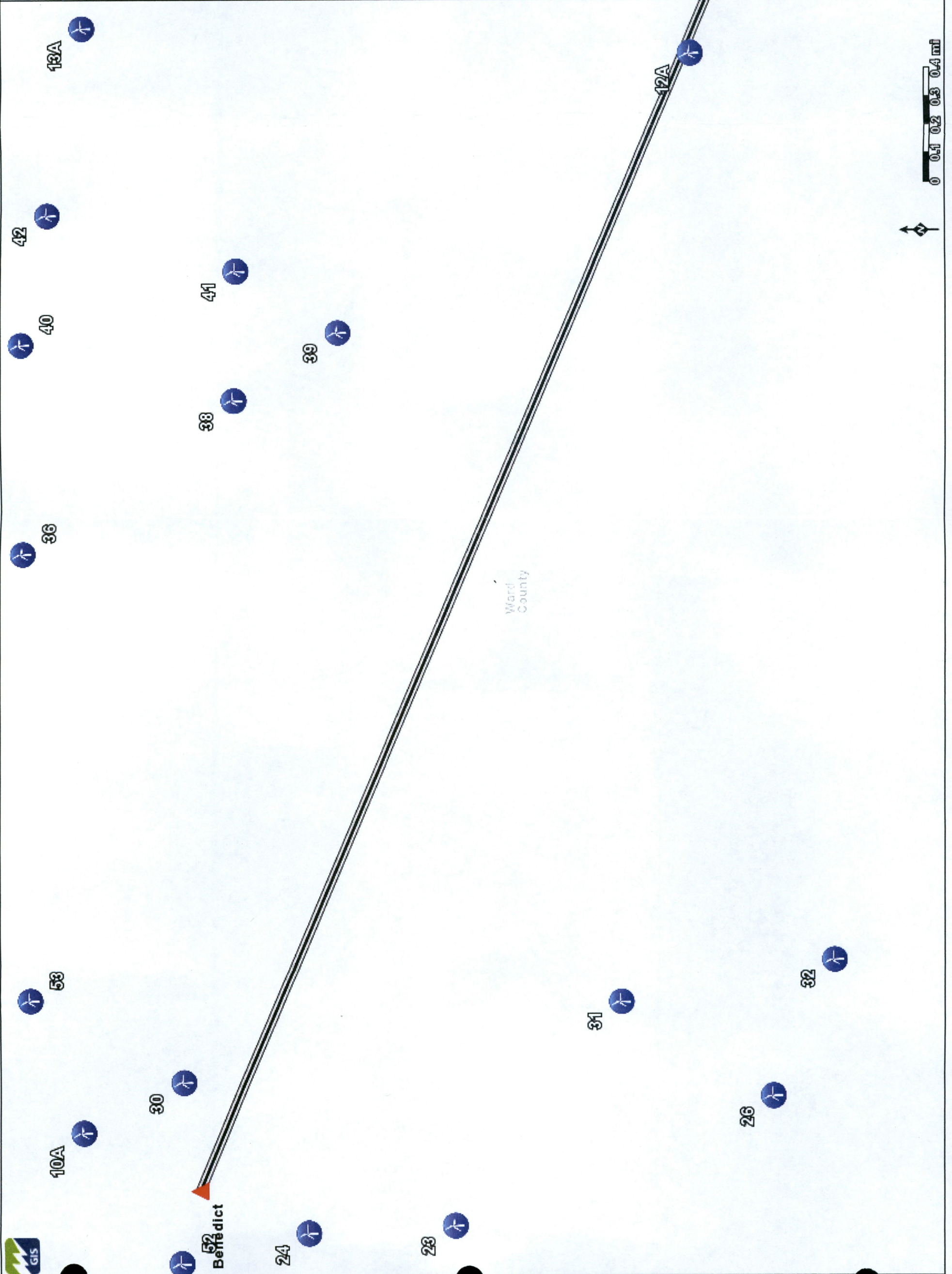
Birmingham, AL 35243

Tel 205.992.6716

Mobile 469.834.7603

southernpowercompany.com





Upper Great Plains Region
Western Area Power Administration
 An Agency of the U.S. Department of Energy

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Scale 1:23,171
 1/30/2019 10:05 A.M.

- Communication Sites --
- MW Site Active
- MW Site Passive
- UHF Site
- VHF Site
- MW Site Inactive
- Regen Site
- Radio Tower
- Wind Turbine
- Communication Paths --
- 900 MHz
- 7 GHz
- 6 GHz
- 4 GHz
- 400 MHz
- 2 GHz
- Worst Case Fresnel Zone
- Worst Case Fresnel Zone 2
- Meter Sites
- States
- Counties

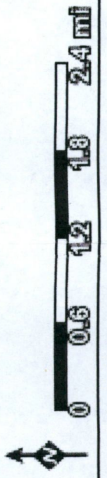
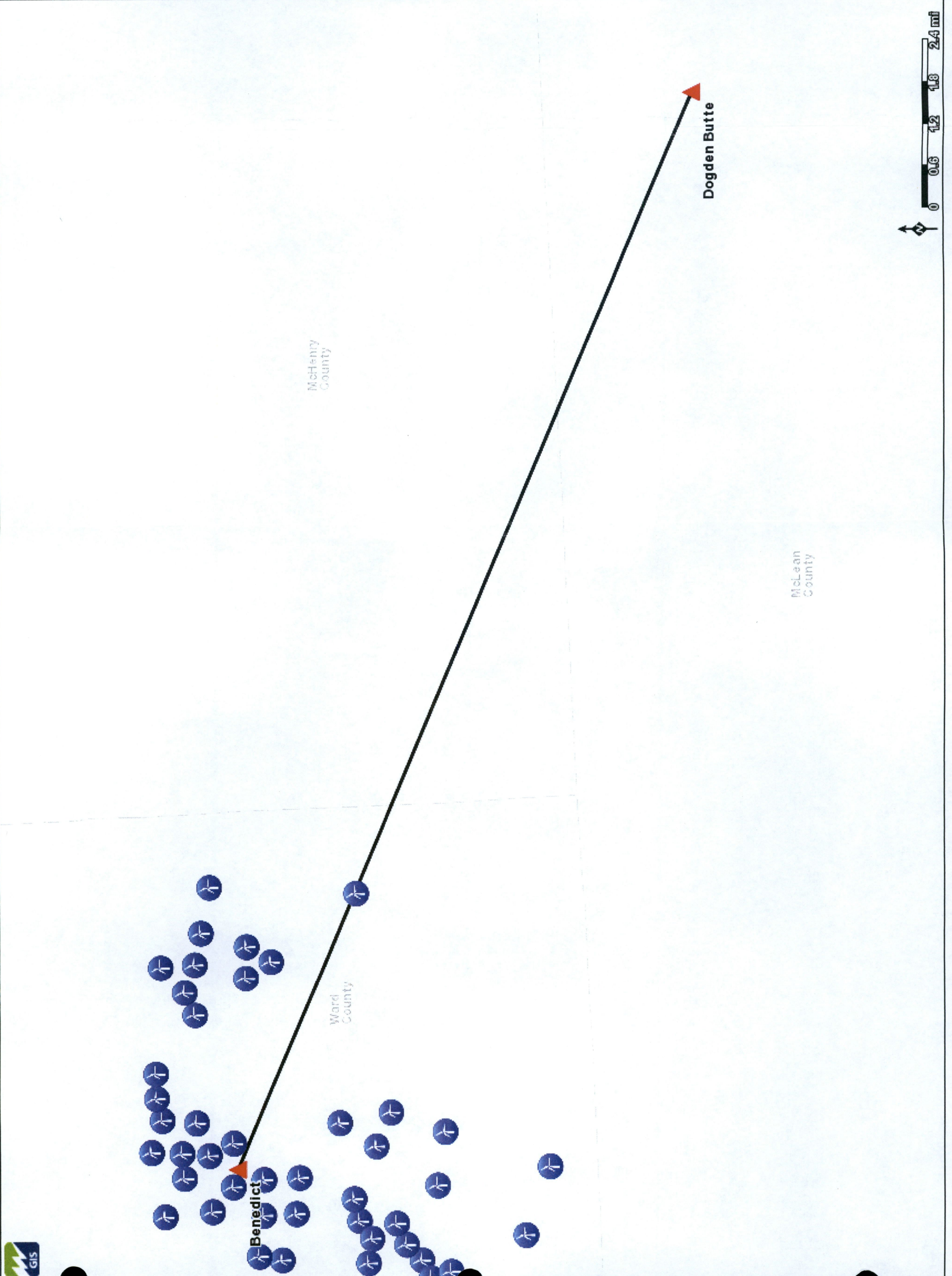


Upper Great Plains Region
Western Area Power Administration
 An agency of the U.S. Department of Energy

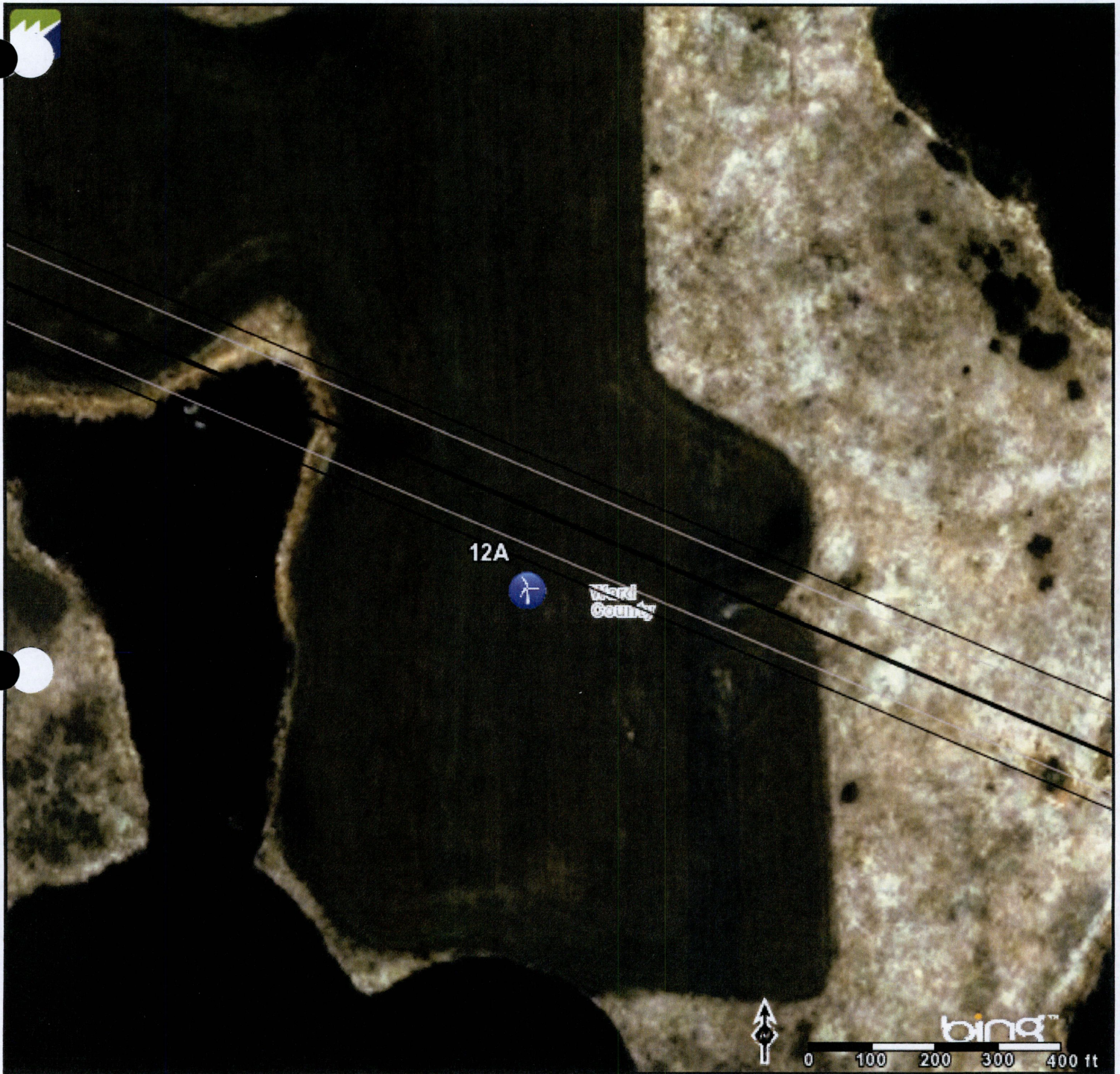
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Scale 1:95,963
 1/30/2019 9:16 A.M.

- Communication Sites --
- MW Site Active
- MW Site Passive
- UHF Site
- VHF Site
- MW Site Inactive
- Regen Site
- Radio Tower
- Wind Turbine
- Communication Paths --
- 900 MHz
- 7 GHz
- 6 GHz
- 4 GHz
- 400 MHz
- 2 GHz
- Worst Case Fresnel Zone
- Worst Case Fresnel Zone 2
- Meter Sites
- States
- Counties



Upper Great Plains Region



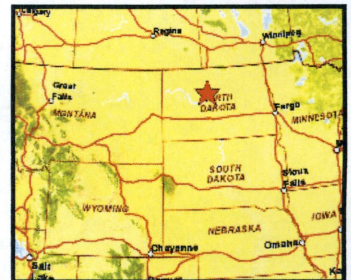
Legend

Scale 1:2,896
1/30/2019 9:57 A.M.









Western Area Power Administration

An agency of the U.S. Department of Energy

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-- Communication Sites --

-  M/W Site Active
-  M/W Site Passive
-  UHF Site
-  VHF Site
-  M/W Site Inactive
-  Regen Site
-  Radio Tower
-  Wind Turbine

-- Communication Paths --

-  900 MHz
 -  7 GHz
 -  6 GHz
 -  4 GHz
 -  400 MHz
 -  2 GHz
 -  Worst Case Fresnel Zone
 -  Worst Case Fresnel Zone 2
 -  Meter Sites
 -  States
 -  Counties
 -  Microsoft BING Aerials and Labels
-

From: [Miller, Bill Joseph \(SPC\)](#)
To: [Scott Johnson \(sjohnson@wapa.gov\)](mailto:sjohnson@wapa.gov)
Cc: [Berry, Morgan L. \(SPC\)](#); [Bowker, Alexandria C. \(SPC\)](#); [Mohon, Kristin B. \(SPC\)](#); [Nunez, Edgar \(SPC\)](#)
Subject: Ruso turbine layout 21 for Fresnel analysis
Date: Tuesday, January 29, 2019 9:37:16 AM
Attachments: [image001.gif](#)
[Ruso Layout 21 Coordinates and Picture 011418.xlsx](#)

Scott,

Thank you for speaking with us on the phone this morning. Morgan asked me to get this to you, as I am the one doing our turbine layouts internally. Attached is our latest turbine layout with coordinates and dimensions.

As mentioned we are evaluating switching turbines between locations, so please evaluate all the coordinates at the highest hub height (107.5 meters) and the largest rotor diameter (145 meters) (total tip height 180 meters) to identify any potential issues with microwave beam interference so we can address them.

Let us know if you need any additional information or have any questions.

Thanks,

Bill Miller
Fuel Resource Analyst
Southern Power
3535 Colonnade Pkwy
Birmingham, AL 35243
Tel 205.992.6716
Mobile 469.834.7603
southernpowercompany.com



From: [Berry, Morgan L. \(SPC\)](#)
To: [Mohon, Kristin B. \(SPC\)](#); [Gase, Katie](#)
Cc: [Wash, Elizabeth H. \(SPC\)](#); [Bowker, Alexandria C. \(SPC\)](#); [Miller, Bill Joseph \(SPC\)](#); [Nunez, Edgar \(SPC\)](#)
Subject: RE: Ruso - NTIA Response / WAPA Coordination
Date: Friday, January 4, 2019 9:02:20 AM
Attachments: [image001.jpg](#)
[image002.jpg](#)
[Digital Final Ruso Wind Partners LLC R.PDF](#)

Kristin / Katie,

One of the tasks that Commsearch performed for us (in addition to radio / TV / etc studies) was coordination with the National Telecommunications and Information Administration. Per the attached letter, WAPA responded with a request for coordination on Ruso and provided a contact at WAPA. Since you two have been interfacing directly with WAPA on Philip and have relationships in place, would you mind reaching out to Mr. Johnson? Let me know if you would prefer me to handle.

"The Ruso Wind Partners project has the potential to adversely affect Western Area Power Administration operations. Energy requests the developer coordinate turbine placement directly with our Western Spectrum Manager, whose contact details are noted below:

*Mr. Scott E. Johnson
US Department of Energy
Western Area Power Admin Headquarters
P.O. Box 281213, Lakewood, CO, 80228-8213
phone: (720)-962-7380
fax: (720) 962-4080
email: sjohnson@wapa.gov"*

Thanks,

Morgan Berry
mlberry@southernco.com
205.420.2139 (cell)

From: Bowker, Alexandria C. (SPC)
Sent: Friday, January 4, 2019 8:58 AM
To: Berry, Morgan L. (SPC) <MLBERRY@southernco.com>; Wash, Elizabeth H. (SPC) <ewash@southernco.com>
Cc: Senn, Laura Sims (SPC) <LSENN@southernco.com>; Caputo, Pascal B. (SPC) <PBCAPUTO@southernco.com>; Miller, Bill Joseph (SPC) <BMILLER@SOUTHERNCO.COM>; Nunez, Edgar (SPC) <ENUNEZ@southernco.com>
Subject: RE: Ruso - NTIA Response

Morgan,

Per our conversation, please have Kristin and Katie reach out to WAPA since they already have a relationship with the entity.

Thanks,
Alex

From: Berry, Morgan L. (SPC)
Sent: Friday, January 4, 2019 8:51 AM
To: Bowker, Alexandria C. (SPC) <acbowker@southernco.COM>; Wash, Elizabeth H. (SPC) <ewash@southernco.com>
Cc: Senn, Laura Sims (SPC) <LSENN@southernco.com>; Caputo, Pascal B. (SPC) <PBCAPUTO@southernco.com>; Miller, Bill Joseph (SPC) <BMILLER@SOUTHERNCO.COM>; Nunez, Edgar (SPC) <ENUNEZ@southernco.com>
Subject: RE: Ruso - NTIA Response

Alex / Elizabeth,

One of the tasks that Commsearch performed for us (in addition to radio / TV / etc studies) was coordination with the National Telecommunications and Information Administration. Per the attached letter, WAPA responded with a request for coordination on Ruso and provided a contact at WAPA. I wanted to check on the protocol for how we should handle this – i.e. who should reach out to Mr. Johnson at WAPA? Wanted to circle up before proceeding – let me know your thoughts.

“The Ruso Wind Partners project has the potential to adversely affect Western Area Power Administration operations. Energy requests the developer coordinate turbine placement directly with our Western Spectrum Manager, whose contact details are noted below:

*Mr. Scott E. Johnson
US Department of Energy
Western Area Power Admin Headquarters
P.O. Box 281213, Lakewood, CO, 80228-8213
phone: (720)-962-7380
fax: (720) 962-4080
email: sjohnson@wapa.gov”*

Thanks,

Morgan Berry
mlberry@southernco.com
205.420.2139 (cell)

From: O'Brien, Frank <Frank.OBrien@commscope.com>
Sent: Thursday, December 20, 2018 3:09 PM
To: Berry, Morgan L. (SPC) <MLBERRY@southernco.com>
Cc: Meyer, David <David.Meyer@commscope.com>; Jimeno, Dennis <DJimeno@comsearch.com>
Subject: **Turbine Response Letter** Ruso Wind Project: Ward, McLean & McHenry Counties, ND

EXTERNAL MAIL: Caution Opening Links or Files

Riley,

Attached please find the responses to your proposed Ruso Wind Project in North Dakota. **One Agency,**

the Department of Energy (DOE) identified potential issues with the project location and request direct consultation with the agency. Contact information in the attached response letter. If you have any questions or concerns please contact Dennis Jimeno <DJimeno@comsearch.com>, 703-726-5858.

Regards,

Frank O'Brien

GIS Analyst



[\[comsearch.com\]](http://comsearch.com)

19700 Janelia Farm Blvd | Ashburn VA 20147 USA
Office +1 703 726 5834



UNITED STATES DEPARTMENT OF COMMERCE
National Telecommunications and
Information Administration
Washington, D.C. 20230

Mr. Frank O'Brien
COMSEARCH
19700 Janelia Farm Blvd.
Ashburn, VA 20147

Re: Ruso Wind Project: Ward, McLean & McHenry Counties, ND

Dear Mr. O'Brien:

In response to your request on October 25, 2018, the National Telecommunications and Information Administration provided to the federal agencies represented in the Interdepartment Radio Advisory Committee (IRAC) the plans for the Ruso Wind Partners Project, LLC, located in Ward, McLean, and McHenry Counties, North Dakota.

After a 45+ day period of review, one federal agency, the Department of Energy (DOE), identified concerns with turbine placement in this area. Their concerns are noted below:

The Ruso Wind Partners project has the potential to adversely affect Western Area Power Administration operations. Energy requests the developer coordinate turbine placement directly with our Western Spectrum Manager, whose contact details are noted below.

Mr. Scott E. Johnson; US Department of Energy; Western Area Power Admin
Headquarters; P.O. Box 281213, Lakewood, CO, 80228-8213; phone: (720)-962-7380; fax:
(720) 962-4080; email: sjohnson@wapa.gov

While the other IRAC agencies did not identify any concerns regarding radio frequency blockage, this does not eliminate the need for the wind energy facilities to meet any other requirements specified by law related to these agencies. For example, this review by the IRAC does not eliminate any need that may exist to coordinate with the Federal Aviation Administration concerning flight obstruction.

Thank you for the opportunity to review this proposal.

Sincerely,

John R. McFall
Deputy, Frequency Assignment Subcommittee
Office of Spectrum Management

From: [Miller, Bill Joseph \(SPC\)](#)
To: [Mohon, Kristin B. \(SPC\)](#)
Cc: [Berry, Morgan L. \(SPC\)](#); [Bowker, Alexandria C. \(SPC\)](#); [Nunez, Edgar \(SPC\)](#)
Subject: Ruso turbine coordinates
Date: Tuesday, January 29, 2019 9:26:01 AM
Attachments: [image001.gif](#)
[Ruso Layout 21 Coordinates and Picture 011418.xlsx](#)

Kristin,

As was discussed on the call this morning, attached is a spreadsheet showing the coordinates and turbine details for Layout 21, which was used in the PSC permit, for WAPA to use to check any Fresnel zone impacts to their operations. As we will be moving turbine types around in the coming weeks, please ask them to evaluate all the coordinates based on the highest turbine hub height (107.5 meters) and the largest rotor diameter (145 meters) to identify any potential issues.

Regards,

Bill Miller

Fuel Resource Analyst
Southern Power
3535 Colonnade Pkwy
Birmingham, AL 35243
Tel 205.992.6716
Mobile 469.834.7603
southernpowercompany.com

