

STATE OF NORTH DAKOTA

PUBLIC SERVICE COMMISSION

Dakota Gasification Company :  
10" Natural Gas Pipeline - : Case No. PU-13-22  
Mercer County Siting :  
Application :

TRANSCRIPT OF HEARING

Taken At  
Mercer County Courthouse  
Stanton, North Dakota  
June 13, 2013

BEFORE BONNY M. FETCH  
-- ADMINISTRATIVE LAW JUDGE --

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**COMMISSIONERS PRESENT:**

COMMISSIONER KALK, CHAIR  
COMMISSIONER FEDORCHAK  
COMMISSIONER CHRISTMANN

**A P P E A R A N C E S**

MR. R. RUSSELL MATHER  
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FOR THE APPLICANT.

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FOR THE COMMISSION.

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ALSO PRESENT: MS. SARA CALDWELL  
MS. ANINE LAMBERT

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1           (The following proceedings herein were had  
2 and made of record, commencing at 1:05 p.m.,  
3 Thursday, June 13, 2013, as follows:)

4           JUDGE FETCH: Good afternoon, everyone.  
5 Let the record show that it is one o'clock p.m.,  
6 Central Time, on June 13th, 2013. And we're present  
7 at the Mercer County Courthouse in Stanton, North  
8 Dakota, for the public hearing scheduled in the  
9 matter of applications from Dakota Gasification  
10 Company for a certificate of corridor compatibility  
11 and a route permit and waivers of procedures and  
12 time schedules for the construction of a 3.5 mile  
13 ten-inch diameter natural gas pipeline in Mercer  
14 County, North Dakota. This is Public Service Case  
15 Number PU-13-22.

16           On March 6th, 2013, the Public Service  
17 Commission requested the Office of Administrative  
18 Hearings provide a procedural administrative law  
19 judge to preside in this matter. My name is Bonny  
20 M. Fetch, and I'm the duly designated procedural  
21 administrative law judge.

22           At this time we will take appearances for  
23 the record, and I'm going to begin by asking who is  
24 representing Dakota Gasification Company?

25           MR. MATHER: Your Honor, my name is

1 Roderick Russell Mather, and I am staff counsel for  
2 Dakota Gasification Company and Basin Electric Power  
3 Cooperative.

4 JUDGE FETCH: Thank you. And who is  
5 appearing as legal counsel on behalf of the  
6 Commission?

7 MR. ARMSTRONG: Mitch Armstrong, Special  
8 Assistant Attorney General, Your Honor, and with me  
9 is Sara Cardwell, public utility analyst. I move  
10 that Ms. Cardwell be allowed to ask questions at the  
11 hearing today.

12 JUDGE FETCH: Granted. Mr. Mather, do you  
13 want to say who is present with you?

14 MR. MATHER: Present with us is Anine  
15 Lambert, who is our summer legal intern.

16 JUDGE FETCH: Welcome. All right. At  
17 this time I'm going to ask, Mr. Armstrong, will  
18 advocacy staff be presenting any testimony?

19 MR. ARMSTRONG: No, Your Honor.

20 JUDGE FETCH: All right. Is there anyone  
21 present, besides witnesses for Dakota Gasification,  
22 who is going to be presenting testimony today? Any  
23 members of the public here? All right. There are a  
24 number of people present, but nobody is raising  
25 their hand at this juncture. I will ask again,

1       however.

2                       Members of the Public Service Commission  
3 present today are Brian Kalk, Commission Chairman,  
4 Randy Christmann, and Julie Fedorchak. And at this  
5 time, I will ask for the Commissioners' opening  
6 comments, beginning with Commissioner Fedorchak, who  
7 holds the portfolio in this matter.

8                       COMMISSIONER FEDORCHAK: Good afternoon,  
9 everybody. Thanks for coming. I appreciate you  
10 participating here, especially members of the  
11 public. If any of you choose to jump in later and  
12 speak up, we'd be happy to hear from you on this  
13 project.

14                      My only opening comments would be that on  
15 the drive here from Bismarck, I came through  
16 Washburn and then across the river and drove past  
17 the former Glenharold Mine that was officially, I  
18 guess, decommissioned or whatever you call it when  
19 you close a mine down last year. And I had to call  
20 the office to find out exactly where it was because  
21 the land had been reclaimed so nicely that you  
22 really cannot distinguish where that mine was. And  
23 I had to note that that mine produced enough coal  
24 for 30 years to heat one million homes. And so it's  
25 just a point of great pride, I think, that I have

1 serving on the Commission and being involved in the  
2 licensing and permitting of the lands and, also, the  
3 companies that are converting that energy into, you  
4 know, electricity for people, that I think we do it  
5 well and we do it right in North Dakota. And it's a  
6 great badge of honor that I carry, and I hope all of  
7 you do as well.

8 And these types of projects are where we  
9 analyze every project, small or large, and make sure  
10 that we're constantly being diligent about taking  
11 care of the environmental and cultural and other  
12 resources that we have and make sure that every  
13 project we do is carried out and follows these rules  
14 and guidelines to the maximum. So proud to be here  
15 and part of this process and look forward to hearing  
16 more about this project today.

17 JUDGE FETCH: Thank you, Commissioner  
18 Fedorchak. Commissioner Kalk.

19 COMMISSIONER KALK: Thank you, Your Honor.  
20 Just to kind of continue with Commissioner  
21 Fedorchak's comments, thank you all for hosting us  
22 today, if you will. Thanks for letting us adjust  
23 the time. The Commission usually does their  
24 hearings in the morning, but because the  
25 Commission's schedule just couldn't quite work out

1 this morning, I think this afternoon is going to  
2 work out very well.

3 Commissioner Christmann and I just got  
4 back yesterday from a Midwestern Energy Conference  
5 and, actually, Commissioner Fedorchak and I were out  
6 for a national convention a while ago, and everyone  
7 knows what is going on in North Dakota with all the  
8 wind, all the gas, all the oil. Everybody is always  
9 asking questions to make sure we're doing the right  
10 thing like Commissioner Fedorchak said, and I think  
11 that's one of the things that today in your  
12 testimony if you could just talk a little bit about  
13 your emergency response plans, a little more detail  
14 on the protocols that you might use for the soil  
15 separation, how you're going to put that back in  
16 there. I know you guys have a very full record.

17 Other than that, I really don't have  
18 anything else, other than I have to acknowledge  
19 Ms. Lambert for full disclosure. When I was  
20 teaching at North Dakota State, she was there. I am  
21 glad to see she's completed. I am somewhat troubled  
22 that she chose a different school than NDSU, but I  
23 guess they don't have a law school. It is good to  
24 see you.

25 COMMISSIONER FEDORCHAK: It's tough to be

1 a lawyer from NDSU.

2 COMMISSIONER KALK: I know.

3 MR. MATHER: Very limited career path.

4 COMMISSIONER FEDORCHAK: Even if you are a  
5 very determined NDSU graduate, that's a very  
6 difficult thing to accomplish.

7 JUDGE FETCH: Thank you, Commissioner  
8 Kalk. Commissioner Christmann.

9 COMMISSIONER CHRISTMANN: Thank you, Your  
10 Honor.

11 Usually I'm pretty short with these  
12 opening comments, but even though we're starting  
13 later in the day than we normally would, I beg your  
14 indulgence, because this is kind of old home week  
15 for me because this is my home county and this is  
16 the first time as a public service commissioner  
17 where I'm able to participate in one of our hearings  
18 right here in the county.

19 I look at the map of this project and even  
20 though it's only 3.2 miles, it brings back a lot of  
21 memories. You know, about a third of the way from  
22 the north end of it, it's not so many years ago when  
23 there was a ground breaking for a carbon dioxide  
24 pipeline. And this plant, a Basin Electric plant,  
25 became the first in the nation to burn coal and

1 capture that CO2 and make use of it for enhanced oil  
2 recovery.

3 And then I look down further and about a  
4 third of the way from the bottom, from the south end  
5 of it, is where in 1994 the first time that I went  
6 around and around and around this county asking for  
7 votes. There was a big ceremony. The mine had  
8 placed some old mine buckets and such there and  
9 there were a lot of dignitaries there, and I was  
10 there. Anyway, it was a huge deal.

11 And at that time in 1994, the big  
12 conversation was whether or not DGC was even going  
13 to survive and, in fact, a lot of the conversation  
14 was held under the assumption that it would not  
15 survive. Many times the conversations revolved  
16 around how big an impact does it have on the mine  
17 and on AVS when it falls apart.

18 And this whole thing and the reason I  
19 bring this up, these various things that have  
20 happened over the years and all in the process of  
21 these plants not only surviving, but thriving, is  
22 that I think there's a history here of 30 years of  
23 problems and solutions to those problems because  
24 there was a lot of perseverance by the people  
25 involved and they've persevered and continued to

1 provide good jobs and provide the energy resources  
2 that have been a wonderful thing for this area and  
3 for the state and for the nation. And now we have a  
4 new issue with the missions when AVS is restarted  
5 after a shutdown, and it's a new problem and people  
6 are continuing, as they have for 30 years, to  
7 persevere and look for solutions to those problems.  
8 And I'm kind of honored to be a part of this process  
9 to make sure that this solution is, in fact, a  
10 responsible one and doesn't bring any kind of  
11 adverse impact. So thank you.

12 JUDGE FETCH: Thank you, Commissioner  
13 Christmann.

14 All right. For the record, the issues to  
15 be considered in the application for waiver of  
16 procedures and time schedules include: 1. Are  
17 proposed facilities of such length, design,  
18 location, or purpose that they will produce minimal  
19 adverse effects and that adherence to applicable  
20 procedures and time schedules may be waived? And,  
21 2. Is it appropriate for the Commission to waive  
22 any procedures and time schedules as requested?

23 And the issues to be considered in the  
24 applications for certificate of corridor  
25 compatibility and route permit include: 1. Will

1 the location, construction and operation of the  
2 proposed facilities produce minimal adverse effects  
3 on the environment and upon the welfare of the  
4 citizens of North Dakota? 2. Are the proposed  
5 facilities compatible with the environmental  
6 preservation and efficient use of resources. And,  
7 3. Will the proposed facility locations minimize  
8 adverse human and environmental impact while  
9 ensuring continuing system reliability and integrity  
10 and ensuring that energy needs are met and fulfilled  
11 in an orderly and timely fashion?

12 This is the hearing procedure that we will  
13 follow today. The applicant, Dakota Gasification,  
14 has the burden to show that the applications should  
15 be approved by the North Dakota Public Service  
16 Commission. I will call on the company shortly to  
17 produce its evidence. And each witness called by  
18 Dakota Gasification will be subject to cross-  
19 examination by Mr. Armstrong. And, thereafter, I  
20 will call on the Commission to see whether  
21 Commissioners have any questions, and following  
22 their questioning, I will entertain any further  
23 questions from the Commission's attorney. And then  
24 I will ask whether there is anyone present here  
25 today who wishes to testify, either in support or

1 opposition to the applications, and that will be a  
2 chance for members of the public to come forward.

3 Documentary evidence must be introduced  
4 and marked as an exhibit and admitted into the  
5 record in order to be considered in this matter.  
6 The proceedings are being recorded.

7 After the hearing, any party not agreeing  
8 with the final decision of the Public Service  
9 Commission has the right to request a rehearing,  
10 reopening, or appeal the decision to District Court  
11 under North Dakota Century Code Chapter 28-32. The  
12 expense of transcribing the proceedings is the  
13 responsibility of the party appealing the decision.

14 Are there any questions, counsel,  
15 regarding these procedures to be followed today?

16 MR. MATHER: No, Your Honor.

17 MR. ARMSTRONG: No.

18 JUDGE FETCH: Thank you. Then, Dakota  
19 Gasification, you may now proceed to present the  
20 company's case in this matter.

21 We're present at a county courtroom and so  
22 it's not the most conducive setup to an  
23 administrative hearing, but we'll call on the  
24 witness to actually take the witness stand here in  
25 the center. Don't be intimidated. This is an

1 administrative proceeding. Nobody is going to haul  
2 you off to jail.

3 All right. Mr. Mather.

4 MR. MATHER: Thank you, Your Honor. As  
5 our first point we will have 12 exhibits. I've  
6 given them to the court reporter and she has marked  
7 them. And for expediency, I would like to move for  
8 their admission all at once at this point in time.

9 JUDGE FETCH: Okay. I have an exhibit  
10 list in front of me listing 12 exhibits.

11 Mr. Armstrong, do you have a list of the  
12 exhibits as well and those exhibits?

13 MR. ARMSTRONG: Yes, Your Honor.

14 JUDGE FETCH: Is there any objection to  
15 any of these?

16 MR. ARMSTRONG: No objection.

17 JUDGE FETCH: All right. Then Exhibits 1  
18 through 12 are contained, I believe, in the binder  
19 which was provided?

20 MR. MATHER: Correct. The exhibits are  
21 exact replicas of the documents that were produced  
22 at the back of the binders that you have.

23 JUDGE FETCH: Thank you. Exhibits 1  
24 through 12 are admitted.

25 MR. MATHER: Thank you, Your Honor.

1                   In addition to the documentary exhibits,  
2 we will call three witnesses this afternoon to prove  
3 our case. And the first witness that I would like  
4 to call is Mr. Kevin Solie.

5                   JUDGE FETCH: I'm sorry. What was the  
6 name?

7                   MR. MATHER: Kevin Solie.

8                   JUDGE FETCH: Mr. Solie, would you please  
9 come forward? You indicated three witnesses --  
10 please have a seat -- and for the benefit of all  
11 three witnesses, I'm going to give this instruction  
12 one time.

13                   All witness testimony at this hearing is  
14 taken under oath and is subject to penalties for  
15 perjury. By law, I'm required to inform witnesses  
16 of those penalties. Perjury in the State of North  
17 Dakota is a class C felony, which is punishable by a  
18 maximum fine of \$5,000, maximum five years  
19 imprisonment, or both.

20                   All right. Mr. Solie, please raise your  
21 right hand.

22                   Do you solemnly swear the testimony you're  
23 about to give shall be the truth under pains and  
24 penalties of perjury?

25                   THE WITNESS: Yes, I do.

1 JUDGE FETCH: Thank you. Go ahead,  
2 Mr. Mather.

3 KEVIN SOLIE,  
4 being first duly sworn, was examined and testified  
5 as follows:

6 DIRECT EXAMINATION

7 BY MR. MATHER:

8 Q. Mr. Solie, will you please state your  
9 name, address, and occupation?

10 A. My name is Kevin Solie. My business  
11 address is 1717 East Interstate Avenue, Bismarck,  
12 North Dakota. I am employed at Basin Electric Power  
13 Cooperative as a senior environmental coordinator.

14 Q. Will you please describe your educational  
15 background and professional experience?

16 A. I earned a Bachelor of Science degree from  
17 the University of North Dakota, Grand Forks, in 1987  
18 with a major in geology. In 1995 I received a  
19 Master of Science degree from the University of  
20 North Dakota, with a major in geology with a special  
21 emphasis on hydrogeology. In 2008 I earned a degree  
22 in geological engineering, again, from the  
23 University of North Dakota.

24 I was hired by Basin Electric in 2007 and  
25 have been responsible for securing permits and

1       approvals for numerous projects, including two 230  
2       kV transmission lines and a 115.5 MW wind farm in  
3       North Dakota, two 230 kV transmission lines and a  
4       162 MW wind farm in South Dakota, and a 100 MW  
5       simple cycle combustion turbine in Montana.

6                JUDGE FETCH: Mr. Solie, I'm sorry. Could  
7       you please speak a little more slowly? The court  
8       reporter needs to be able -- she's very good, but  
9       she, you know, needs to be able to keep up.

10               THE WITNESS: Yes, Your Honor.

11               Prior to my employment at Basin Electric,  
12       I worked as an environmental scientist for the North  
13       Dakota State Department of Health, Division of Waste  
14       Management. I am also a retired commissioned  
15       officer of the North Dakota Army National Guard,  
16       having served a one-year tour of duty in Iraq.

17               Q.     (MR. MATHER CONTINUING) Mr. Solie, can  
18       you please describe your responsibilities in  
19       connection with this project?

20               A.     I am responsible for the overall  
21       coordination of the environmental analysis and  
22       permit acquisition for this project. This involves  
23       working with an interdisciplinary team of  
24       consultants, contacting and meeting with public  
25       officials, coordinating activities with other Basin

1 Electric departments and preparing permit  
2 application materials for submittal to the North  
3 Dakota Public Service Commission and other  
4 interested agencies.

5 Q. What is the purpose of your testimony in  
6 this proceeding?

7 A. I will provide a brief project  
8 description, the project purpose and need, and to  
9 demonstrate, with respect to the environmental  
10 considerations and the applicable siting laws and  
11 regulations, that the proposed corridor and route  
12 are in accordance with the North Dakota Energy  
13 Conversion and Transmission Facility Siting Act and  
14 the North Dakota Public Service Commission rules. I  
15 will also describe the justification for our waiver  
16 requests. A more detailed project description with  
17 details regarding facility operation and maintenance  
18 will be addressed by subsequent witnesses.

19 Q. Mr. Solie, were you personally involved  
20 with the preparation and submission of the  
21 application?

22 A. Yes.

23 Q. Are you aware that the application  
24 originally was submitted naming Basin Electric Power  
25 Cooperative as the applicant?

1           A.     Yes.

2           Q.     Would you please describe Basin Electric?

3           A.     Basin Electric is a regional wholesale  
4     electric generation and transmission cooperative,  
5     organized under the laws of the State of North  
6     Dakota and headquartered in Bismarck, North Dakota.  
7     Basin Electric provides power to 136 member  
8     cooperatives serving more than 2.6 million customers  
9     in nine states, including North Dakota.

10          Q.     Mr. Solie, are you aware that the  
11     application later was amended to name Dakota  
12     Gasification Company as the applicant?

13          A.     Yes.

14          Q.     Would you please describe Dakota  
15     Gasification Company?

16          A.     Dakota Gasification Company, or DGC, is a  
17     North Dakota corporation and is a wholly owned  
18     subsidiary of Basin Electric. Dakota Gasification  
19     Company owns and operates a gasification facility  
20     located near Beulah, North Dakota. The primary  
21     business of DGC is making synthetic natural gas from  
22     lignite coal using a proprietary gasification  
23     process.

24          Q.     Will you please describe the reasons for  
25     the amendment?

1           A.     Originally, since the project was  
2           established to meet the needs of Antelope Valley  
3           Station, or AVS, which is operated by Basin  
4           Electric, it was thought that Basin Electric should  
5           own and operate the pipeline. Accordingly, it would  
6           be the applicant for all permits as the sponsor of  
7           the project. Further evaluation resulted in the  
8           determination that it would be more appropriate for  
9           DGC to own and operate the pipeline since it already  
10          owns a natural gas pipeline and a CO2 pipeline and  
11          has the facilities, staff and expertise to deal with  
12          the new pipeline.

13          Q.     Mr. Solie, is your testimony today given  
14          on behalf of DGC in your capacity as an authorized  
15          representative of DGC, as well as an employee of  
16          Basin Electric?

17          A.     Yes.

18          Q.     Mr. Solie, could you please describe the  
19          project as well as the purpose and need for the  
20          pipeline?

21                    JUDGE FETCH:   Excuse me one moment.   I  
22          have looked at, you know, the outline or I should  
23          say basically the transcript of this witness's  
24          testimony. I don't know that we need to read this  
25          word for word into the record, Mr. Mather. Can the

1 witness just give a summary of the salient points?  
2 And the Commission has this in front of them.

3 Mr. Armstrong, maybe you want to weigh in.  
4 Is it necessary to read all this into the record?

5 MR. ARMSTRONG: Your Honor, as I  
6 understand it, the transcription of the testimony is  
7 not part of the exhibits in this matter and, to be  
8 honest with you, I haven't -- I just got it before  
9 the hearing today so I haven't heard it or read it  
10 myself.

11 JUDGE FETCH: So you probably want to hear  
12 the testimony.

13 MR. ARMSTRONG: In order to question him,  
14 I would need to hear his testimony.

15 JUDGE FETCH: Okay. Please continue.

16 Q. (MR. MATHER CONTINUING) Please continue,  
17 Mr. Solie.

18 A. The project would include construction of  
19 a ten-inch diameter natural gas pipeline,  
20 approximately 3.5 miles long, from Dakota  
21 Gasification Company to the Antelope Valley Station  
22 in central Mercer County. The pipeline would be  
23 constructed of steel pipe with a minimum of  
24 10.75-inch outside diameter and rated for a maximum  
25 operating pressure of 1440 psi. The corridor and

1 route, as well as the location of the aboveground  
2 facilities, are shown on the project overview map  
3 listed as Applicant's Exhibit 3, and it's tab 3 in  
4 your binder.

5 I'll take a minute to go through the  
6 features on the map. I guess, first of all, let me  
7 orient you to the map. As with any map, north is  
8 towards the north -- excuse me. North is towards  
9 the top of the map. South is towards the bottom of  
10 the map. This direction is east. This direction is  
11 west. The major features that appear on the map are  
12 the Antelope Valley Station, Dakota Gasification  
13 Company, and this is one of the lignite mines, one  
14 of the surface mines of Dakota Properties Company.

15 Some of the other things that pop out at  
16 you are this linear feature here that runs north and  
17 south. It looks a little bit like a mine haul road,  
18 but it's actually a road that Coteau constructed to  
19 walk a dragline from north to south. Other  
20 interesting features are County Highway 26, which  
21 comes in from the bottom here and out, and then  
22 County Road 15 then proceeds to the north past DGC  
23 and AVS. For scale, from this point to this point  
24 is approximately one mile, so it's about 15 inches  
25 per mile is the scale on this map. The map, and

1 again, it's one of your exhibits, it shows the  
2 property ownership, shows, again, the properties  
3 owned mostly by Basin Electric and DGC. There's  
4 some small chunks of Coteau as well.

5 Directing you to the map legend and the  
6 marginal information, the pipeline route is shown  
7 with this bright yellow line. The corridor is shown  
8 in the pink crosshatching. This green box here is a  
9 site that we'll discuss later. It's site 32ME767.  
10 Wetlands and water bodies are shown in blue in and  
11 along the corridor. And the areas that would be  
12 constructed using the horizontal directional drill  
13 boring method are shown in yellow and black  
14 crosshatching.

15 So starting at the gas yard on the south  
16 end of the map for DGC, the pipeline comes out,  
17 horizontal bored underneath Highway 26 and  
18 essentially parallels Highway 26 until the junction  
19 of Highway 26 and 15 where the pipelines takes a  
20 curve and heads essentially straight north. You can  
21 see the bore of Highway 15 -- or excuse me -- 26  
22 again as we go under it. There's a stream with an  
23 associated wetland that's bored, and up here there's  
24 a long boring to get underneath the haul road, as  
25 well as another water body to come across

1 diagonally, again, boring underneath the county  
2 highway and beneath a concrete-lined ditch. The  
3 west branch of Antelope Creek is actually  
4 channelized, is in a concrete-lined ditch. And  
5 then, finally, ending in the gas yard here at AVS.

6 It should be noted that the corridor and  
7 route presented in the original application has been  
8 updated as represented in filings to the PSC, dated  
9 April 19th, 2013 and June 10th, 2013. Exhibit 3  
10 depicts the up-to-date corridor and route for which  
11 we seek approval today. The refinements have  
12 negligible impact on the environmental analysis for  
13 the project and no new exclusion or avoidance areas  
14 are present in the updated corridor or route.

15 The pipeline would be buried at a minimum  
16 depth of four feet. At certain points, such as  
17 crossing under roadways, the pipeline would likely  
18 be buried deeper, to assure it can safely handle the  
19 anticipated ground pressure at those points. The  
20 project would include ancillary facilities, such as  
21 pig launching and receiving stations, cathodic  
22 protection, communication systems, buildings, fence,  
23 and miscellaneous minor structures. We would like  
24 to begin construction of the proposed pipeline in  
25 late summer or early fall of 2013.

1           The purpose of the pipeline is to provide  
2 natural gas to AVS to replace the No. 2 fuel oil  
3 that is currently used as an ignition and preheating  
4 boiler startup fuel.

5           In the past, common utility practice  
6 during startup of coal-fired plants such as AVS was  
7 to bypass the baghouse, which is part of the air  
8 pollution control equipment, until a critical  
9 temperature is reached and coal is used for  
10 combustion in the boiler.

11           In February of 2012, the U.S.  
12 Environmental Protection Agency promulgated a new  
13 rule, the EGU- MATS, which is Electric Generating  
14 Units Mercury and Air Toxics Standards Rule, which  
15 redefines "startup" as any time steam is used to  
16 generate electricity. Therefore, at startup, all  
17 pollution control technology, with the exception of  
18 dry scrubbers and Selective Catalytic Reduction  
19 Units, or SCRs, including baghouses like we have at  
20 AVS must be engaged. However, if the baghouse was  
21 engaged sooner than current normal practice to  
22 comply with this new rule, there is substantial  
23 concern that unburned carbon from the fuel oil will  
24 collect in the baghouse and increase the risk of  
25 fire. On the other hand, if we continue to bypass

1 the baghouse, it would be difficult, or probably  
2 impossible, to achieve compliance with the new rule  
3 during startup, especially for particulate matter  
4 and sulfur dioxide 2. If AVS could not use DGC  
5 natural gas for startup to achieve compliance with  
6 the new EPA rule, we would have to find an  
7 alternative means to achieve compliance. We have  
8 not found a reasonable alternative.

9           Given AVS's proximity to the existing DGC  
10 pipeline, natural gas is readily available and is  
11 proposed for use as a clean startup fuel. This  
12 project allows for compliance with the EGU-MATS rule  
13 and continued operation of AVS and utilizes existing  
14 facilities to the maximum extent reasonably  
15 possible.

16           Q.     (MR. MATHER CONTINUING) Mr. Solie, what's  
17 the size of the proposed corridor in this project?

18           A.     The corridor is approximately 3.5 miles in  
19 length and the route and corridor widths are the  
20 same, at 100 feet.

21           Q.     And why is that?

22           A.     Since the overall pipeline length for this  
23 project is very short, a corridor width equal to the  
24 route width was used. Given the dense development  
25 of infrastructure in the project area, there was

1 little opportunity to vary the route within a wider  
2 corridor as one would normally do in linear projects  
3 of this nature. Accordingly, the applicant has  
4 requested the Commission waive any minimum corridor  
5 width requirements.

6 Q. Mr. Solie, can you please describe the  
7 land use in the corridor and along the route?

8 A. Land use throughout the corridor and along  
9 the route was historically agricultural, consisting  
10 of both cropland and rangeland. Since the  
11 construction of AVS and DGC, along with the  
12 associated lignite surface mining by the Coteau  
13 Properties Company at the Freedom Mine, the project  
14 area is intensely developed and predominantly  
15 subject to heavy industrial uses.

16 Since the surrounding areas are previously  
17 disturbed, there are few environmentally sensitive  
18 areas present in the project area except for  
19 seasonal wetlands or streams along and within the  
20 corridor. The Inventory of Exclusion and Avoidance  
21 Areas, presented in Chapter 2 of our application,  
22 indicate there are few environmental constraints in  
23 the project area.

24 Q. Please describe the general philosophy and  
25 objectives used in the delineation of the proposed

1 corridor and the selection of the proposed route.

2 A. The approach entails starting with an  
3 appropriate study area between the pipeline  
4 endpoints, and then narrowing and refining it by  
5 incorporating data and other input gathered from  
6 landowners, public agencies, and environmental  
7 databases to a point where a defined corridor and  
8 route are identified.

9 The ultimate goal of the corridor and  
10 route selection process was to locate a suitable  
11 pipeline route between two endpoints, while adhering  
12 to the PCS's exclusion and avoidance criteria.

13 Q. Mr. Solie, were there other alternatives  
14 considered for this project?

15 A. Yes, a number of engineering alternatives  
16 were considered to comply with the EGU-MATS rule, as  
17 well as alternate routes on the east side of the AVS  
18 and DGC plant sites.

19 Q. Please describe the alternatives that were  
20 analyzed.

21 A. Route alternatives to the east of the AVS  
22 plant site were evaluated and rejected due to the  
23 presence of solid waste landfill facilities and  
24 other existing infrastructure. Engineering  
25 solutions such as using alternate fuels for startup,

1 modifications to plant emission control systems, and  
2 operational changes were investigated. These  
3 engineering alternatives were eliminated from  
4 further consideration because of fuel storage  
5 issues, high cost, poor environmental performance,  
6 and/or poor energy efficiency.

7 Q. So, Mr. Solie, then in summary, why were  
8 the proposed route and corridor chosen?

9 A. The final corridor and route was chosen  
10 after careful analysis related to the environmental,  
11 construction, and operational requirements.  
12 Further, the route is consistent with the planned  
13 and anticipated needs, avoids and minimizes impacts  
14 to environmental resources and, finally, is  
15 technically feasible and economically viable.

16 Q. And who participated in the corridor and  
17 route development process?

18 A. A multidisciplinary team of individuals  
19 employed by the applicant and Basin Electric,  
20 including environmental, engineering, and lands and  
21 right-of-way personnel, worked together in the  
22 corridor and route development process. In  
23 addition, consultants to the applicant played a  
24 large role in the corridor and route refinement  
25 processes, such as staff from Lake Superior

1 Consulting of Duluth, Minnesota.

2 Q. Mr. Solie, did the applicant incorporate  
3 public input in the corridor and route selection  
4 process?

5 A. Yes. We incorporated data and input from  
6 public agencies, representative officials, and  
7 private industry. In total, 37 agencies,  
8 organizations or officials were contacted in writing  
9 to provide early input for this project.

10 Q. Mr. Solie, Section 49-22-09 of the North  
11 Dakota Energy Conversion and Transmission Facility  
12 Siting Act lists 11 factors to be considered in the  
13 evaluation of sites, corridors and routes. I am  
14 going to ask you a series of questions directed at  
15 those factors.

16 Did the applicant evaluate the potential  
17 impacts to public health and welfare and natural  
18 resources that could be expected from the project?

19 A. Yes, the application addresses these  
20 issues. Construction, operation and maintenance  
21 techniques for the pipeline are addressed in  
22 Chapter 3. Impacts to the environment and  
23 mitigation measures for the project are addressed in  
24 Chapters 4 and 5. The project would not have any  
25 significant adverse impacts on public health and

1 welfare, natural resources, or the environment. The  
2 pipeline and associated facilities will be operated  
3 in accordance with all applicable state, federal and  
4 local pipeline safety rules and regulations.

5 Further, the project would provide environmental  
6 benefits by supplying a clean fuel source for the  
7 startup of the AVS boiler, which will, in turn,  
8 lower air emissions.

9 Q. Mr. Solie, did the applicant evaluate  
10 technologies to minimize adverse environmental  
11 impacts?

12 A. The project utilizes best practices with  
13 respect to pipeline construction technologies and  
14 systems that minimize impacts to the environment.  
15 Specifically, horizontal directional drilling, or  
16 HDD, would be used to avoid impacts to wetlands, as  
17 well as to avoid damage to existing public roadways.

18 Q. Did the applicant's investigation identify  
19 any unavoidable, adverse environmental effects with  
20 respect to the corridor and the route evaluated?

21 A. There would be some minor unavoidable  
22 adverse effects in the form of minor visual and  
23 physical impacts to the land associated with  
24 pipeline construction. We would implement the  
25 mitigation discussed in the application and as

1 identified by regulatory agencies in order to  
2 minimize these effects. No other adverse  
3 environmental effects associated with the project  
4 have been identified.

5 Q. Were potential irreversible and  
6 irretrievable commitments of natural resources for  
7 the project considered and evaluated?

8 A. Yes. Resources used during construction,  
9 such as steel, concrete, aggregate, and hydrocarbon  
10 fuel would generally be irreversible and  
11 irretrievable uses. None of these resources,  
12 however, are in short supply, and their use for the  
13 project would not have an adverse effect on the  
14 availability of these resources.

15 Q. Were direct and indirect economic impacts  
16 evaluated?

17 A. Direct and indirect economic impacts are  
18 primarily positive. To the extent that local  
19 contractors are used for portions of the  
20 construction, total wages and salaries paid to  
21 contractors and workers will contribute to the total  
22 personal income of the region. Expenditures made  
23 for equipment, energy, fuel, operating supplies, and  
24 other products and services would also benefit  
25 businesses nationally, as well as within the State

1 of North Dakota. Most importantly, the project is  
2 necessary to facilitate compliance with the new  
3 EGU-MATS rule, thereby allowing to continue the  
4 efficient and economical operation of AVS.

5 Q. Mr. Solie, does the project impact  
6 existing development plans of any state or local  
7 government entities or any other private entities at  
8 or in the vicinity of the corridor and route?

9 A. No conflicts with existing development  
10 plans were identified. The applicant coordinated  
11 closely with Coteau Properties Company to ensure the  
12 route would not be in conflict with future mining  
13 plans. We received a conditional use permit for the  
14 project from the Mercer County Commission on April  
15 3rd, 2013.

16 Q. Please describe the effects of the project  
17 on cultural and paleontological resources.

18 A. The research and fieldwork conducted by  
19 Metcalf Archaeological Consultants, or MAC, on  
20 behalf of the applicant -- and I should mention the  
21 report is Appendix D of the Permit application --  
22 identified no cultural resources other than one  
23 previously recorded site designated as 32ME767,  
24 located within the project area. A picture and  
25 description of that site is included in Appendix D

1 of the application. No avoidance of the site and no  
2 further work were recommended by MAC. The ND SHPO,  
3 in a letter dated December 21st, 2012, accepted the  
4 MAC report, concurred with the MAC recommendations  
5 and issued a No Historic Properties Affected  
6 Determination. That letter is found at Appendix C  
7 of the application.

8 The project corridor is located in an area  
9 affected by Pleistocene glaciation; as such,  
10 paleontological resources would be extremely rare  
11 since the bedrock is covered by glacial sediments.

12 An Unanticipated Discovery Plan will be  
13 developed before project construction begins. The  
14 plan would detail steps to take if previously  
15 unknown archaeological resources or human remains  
16 are encountered during construction. In the  
17 unlikely event that human remains are discovered,  
18 appropriate authorities would be notified in  
19 accordance with local and state rules, laws and  
20 guidelines.

21 Q. What are the anticipated effects of the  
22 project on biological resources within the corridor  
23 and route?

24 A. Chapters 2 and 4 of the application  
25 discuss potential impacts to biological resources,

1 such as wetlands, vegetation, wildlife and rare and  
2 unique species. The applicant has identified and  
3 will implement measures to avoid and minimize  
4 effects on biological resources. The impact of the  
5 project on biological resources is expected to be  
6 minimal.

7 Q. Has the applicant addressed issues raised  
8 by agencies?

9 A. The project was reviewed by state and  
10 federal agencies as part of the applicant's scoping  
11 efforts for the project. Agency comments varied  
12 according to agency function and jurisdiction, but  
13 agency comments generally emphasized a desire to  
14 minimize impacts to environmental resources, which  
15 the applicant is committed to do.

16 Q. Mr. Solie, I'm going to ask you a series  
17 of questions regarding the transmission facility  
18 corridor and route criteria exclusion areas.

19 Do the proposed corridor and route contain  
20 any designated or registered national parks,  
21 memorial parks, historic sites and landmarks,  
22 natural landmarks, monuments, or wilderness areas?

23 A. No.

24 Q. Any designated or registered state parks,  
25 historic sites, monuments, historical markers,

1 archaeological sites, or nature preserves?

2 A. No.

3 Q. Any county parks and recreation areas,  
4 municipal parks or parks owned or administered by  
5 other governmental subdivisions?

6 A. No.

7 Q. Any areas critical to the life stages of  
8 threatened or endangered animal or plant species?

9 A. No.

10 Q. Are there any areas where animal or plant  
11 species that are unique or rare to this state would  
12 be irreversibly damaged?

13 A. No.

14 Q. So is it true, Mr. Solie, that the  
15 corridor and the route proposed do not contain any  
16 exclusion areas as described in Section  
17 69-06-08-02-01 of the North Dakota Administrative  
18 Code?

19 A. That is correct. There are no exclusion  
20 areas within the route or corridor.

21 Q. Mr. Solie, does the proposed route and  
22 corridor contain any avoidance areas and is there  
23 any point within the route and corridor at which an  
24 avoidance area encompasses more than 50 percent of  
25 the corridor width?

1           A.     Yes, we believe so. We took a very  
2 conservative position in the application with regard  
3 to the farmstead site, and that's when I mentioned  
4 the 32ME767, since it appears to meet the definition  
5 in the rules for "historical resources not  
6 specifically designated as exclusion or avoidance  
7 areas." While the site was greater than 50 years  
8 old and was thus recorded during a prior cultural  
9 resources survey, not all sites are significant  
10 enough to be recommended for preservation. In fact,  
11 the ND SHPO has indicated that no avoidance of the  
12 site is necessary. Moving the corridor and route to  
13 the east would impact the existing county road  
14 right-of-way, while moving the corridor and route to  
15 the west would impact future operations at Coteau.  
16 Avoiding the farmstead site would cause the route to  
17 become longer and more complex, resulting in  
18 additional impact and cost. Since the site does not  
19 require preservation and impacts would occur to  
20 other important infrastructure or facilities if the  
21 corridor and route is moved, we believe there is no  
22 reasonable alternative to the corridor and route as  
23 proposed.

24                     Additionally, the DGC and AVS plant sites  
25 are both within 500 feet of the pipeline route.

1 Since the pipeline must connect to AVS, maintaining  
2 a 500-foot setback is not possible. Three of the  
3 buildings on the DGC plant site are within the  
4 500-foot setback distance, but all are at least 400  
5 feet from the route. DGC and Basin Electric do not  
6 have any objections to the route. Moving the route  
7 west, away from DGC, would impact future operations  
8 at Coteau. Again, the route would become longer and  
9 more complex, resulting in additional impacts and  
10 cost. Given the density of development along the  
11 corridor and route, we believe there is no  
12 reasonable alternative to the route as it is  
13 proposed.

14 Q. Mr. Solie, I'm going to ask you a series  
15 of questions regarding the transmission facility  
16 siting criteria.

17 How does the proposed corridor and route  
18 demonstrate significant adverse impacts upon  
19 agriculture, if any, will be kept to an acceptable  
20 minimum? Please address this issue in terms of  
21 farmsteads, cropland, and interference with  
22 irrigation.

23 A. There are no active farmsteads in the  
24 corridor. The land in the corridor is not used for  
25 crops, and no irrigated land occurs within or

1 adjacent to the proposed corridor.

2 Q. Mr. Solie, is there any anticipated  
3 impacts on the surface drainage patterns or  
4 groundwater flow patterns if the pipeline were to be  
5 routed through the proposed corridor?

6 A. The west branch of Antelope Creek, which  
7 at the AVS plant site is conveyed in a concrete-  
8 lined ditch, and two additional small stream  
9 crossings are necessary to construct the pipeline.  
10 These crossings will be constructed using the HDD  
11 method in order to avoid impacts to surfacewater  
12 drainage patterns. No impacts are anticipated to  
13 either surface or groundwater flow patterns.

14 Q. Do you anticipate any significant adverse  
15 effects on noise-sensitive land uses resulting from  
16 the location, construction or maintenance of the  
17 proposed facility?

18 A. No significant adverse effects are  
19 anticipated. As the proposed pipeline route is  
20 located between two major heavy industrial  
21 facilities and a surface coal mining operation,  
22 there are no sensitive noise receptors in the  
23 immediate vicinity. The nearest occupied rural  
24 residence is greater than one mile from any part of  
25 the pipeline route.

1           Q.     Will the pipeline have any visual impacts  
2 to the adjacent areas?

3           A.     The landscape has been significantly  
4 altered due to the previous development in the  
5 project area as I described earlier. The pipeline  
6 would be buried adjacent to these intensely  
7 developed industrial land uses. Visual impacts  
8 would be minimal.

9           Q.     Do you anticipate any significant impacts  
10 on areas of extractive or storage resources?

11          A.     No. While the excerpt of the 1980 7.5  
12 Minute USGS topographic map, which is included as  
13 Figure 3 in the application, indicates a gravel pit  
14 is located in the NE/4, NE/4 of Section 23, Township  
15 145 North, Range 88 West, the gravel pit is no  
16 longer in use and has been reclaimed. Further, the  
17 applicant coordinated with the Coteau Properties  
18 Company to ensure the project would not be in  
19 conflict with the future development of its mine.

20          Q.     Do you anticipate any significant impacts  
21 on wetlands, woodlands or wooded areas?

22          A.     The few trees present within the corridor  
23 are generally associated with intermittent or  
24 ephemeral stream crossing along the route. To a  
25 great extent, these trees would be avoided as a

1 result of the HDD construction techniques used for  
2 the stream crossings. No impacts to streams or  
3 wetlands are anticipated. Impacts to trees would be  
4 minimal.

5 Q. Do you expect any significant adverse  
6 effect on human and animal health and safety or  
7 plant life?

8 A. No.

9 Q. On radio and television reception or other  
10 communications or electronic control facilities?

11 A. No impacts to radio and television  
12 reception or other communications or electronic  
13 control facilities are expected.

14 Q. Mr. Solie, will the proposed route comply  
15 fully with all applicable county zoning ordinances?

16 A. Yes. Mercer County has a zoning ordinance  
17 applicable to this project. The Mercer County  
18 Planning Commission unanimously recommended approval  
19 of the conditional use permit application for the  
20 project on March 21st, 2013. The Mercer County  
21 Commission issued an approval of the conditional use  
22 permit at their April 3rd, 2013 meeting. There were  
23 no objections to the project raised by the public at  
24 either meeting.

25 Q. Mr. Solie, is it your opinion that the

1 proposed corridor and route will fully comply with  
2 all applicable state laws, regulatory rules and  
3 regulations relating to this project?

4 A. Yes.

5 Q. Mr. Solie, please describe the right-of-  
6 way arrangements that are necessary to enable DGC to  
7 construct, operate and maintain the pipeline.

8 A. There are only three landowners impacted  
9 by this project. The proposed route and corridor  
10 will be located primarily on land owned by Basin  
11 Electric and DGC, both of whom have approved the use  
12 of their lands for this purpose. The route also  
13 will travel for a distance across land owned and/or  
14 leased by the Coteau Properties Company, the entity  
15 that extracts and sells lignite coal for use at DGC  
16 and AVS. All required easements have been secured  
17 for the project.

18 Q. Mr. Solie, does this conclude your direct  
19 testimony?

20 A. Yes, it does.

21 MR. MATHER: Your Honor, I have no further  
22 questions and would tender the witness.

23 JUDGE FETCH: Thank you, Mr. Mather.

24 Mr. Armstrong.

25 MR. ARMSTRONG: Thank you, Your Honor.

CROSS-EXAMINATION

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BY MR. ARMSTRONG:

Q. Mr. Solie, being the first witness, you usually get asked questions by me that may be coming up with a witness following you. If I ask you something that's better addressed by a later witness, just let me know. Okay?

A. Absolutely.

Q. I'm going to jump around a little bit here. You discussed meetings with public officials about this project. Could you tell us a little bit more what kind of meetings you had with public officials?

A. The meetings -- two individuals from Basin Electric met with the County Commission early on, the whole County Commission early on in the project. I was at a county planning and zoning. There's two steps that occur here in Mercer County. First, is approval by the County Planning and Zoning Board and then it goes to the full County Commission.

Q. And it's my understanding that Mercer County has approved a conditional use permit?

A. That is correct.

Q. And that was originally in the name of Basin, but is it valid for DGC also to operate the

1 pipeline?

2 A. That is correct. I had a conversation  
3 with Gary Emter, who is the land use administrator  
4 for Mercer County, and described the situation with  
5 the change in ownership. And he bounced it off the  
6 state's attorney here and kind of the path forward,  
7 course of action forward, was for Basin Electric to  
8 submit a letter indicating or essentially notifying  
9 the county of the change in ownership and they would  
10 put that with the permit.

11 Q. And I believe that letter has been  
12 submitted, has it not?

13 A. That's correct.

14 Q. And that's included in our exhibits here  
15 today?

16 A. That's correct.

17 Q. You talked a little bit about noise from  
18 the pipeline. You said there were no noise-  
19 sensitive activities around the pipeline, but what  
20 in the pipeline will cause noise?

21 A. I think Mr. Tyler Schilke, the project  
22 manager, would be best to address that question.

23 Q. And as I understand it -- well, why don't  
24 you just tell me, what are the aboveground  
25 structures involved?

1           A.     Again, I would defer to Mr. Schilke.

2           Q.     The application -- I think your testimony  
3 indicated that the pipeline would generally be  
4 buried approximately five feet below ground. Is  
5 there any areas where it won't be at least five feet  
6 below ground?

7           A.     My understanding, our application lays out  
8 at least four feet as the minimum depth, and my  
9 understanding of the applicable law is that it has  
10 to be a minimum of three, so we would be exceeding  
11 the minimum. Four feet deep would be our priority.

12          Q.     So in all places it's anticipated it will  
13 be at least three feet from the surface?

14          A.     More than four. Four or more.

15          Q.     Okay. Is there any places where it  
16 wouldn't be?

17          A.     Only where it comes up out of the ground,  
18 obviously.

19          Q.     Yeah. And then it looks to me, looking at  
20 the map, Exhibit 3, that's the final project route  
21 and corridor that DGC is seeking proposal for; is  
22 that correct?

23          A.     That is correct.

24          Q.     And it's a 100-foot wide corridor and 100-  
25 foot wide route, I think you said?

1           A.     That's correct.

2           Q.     I know there's been some adjustments to it  
3 through the application process.  Could you just  
4 maybe walk us through what adjustments have been  
5 made to it since the original application?

6           A.     Sure.  The -- well, let me refer to --  
7 might as well use the board.  The major difference  
8 in this route from the original application is a  
9 slight shift east/west of the pipeline, kind of  
10 through this area.  And, again, that was mainly at  
11 the request of Coteau Properties.  They were  
12 concerned about -- well, while they might not mine  
13 coal all the way to the pipeline, they might add  
14 other facilities, topsoil stockpiles, surfacewater  
15 storage, things like that, so they, in a way, pushed  
16 us a little bit farther to the east.

17          Q.     And just for the record, Mr. Solie, that's  
18 the area along 61st Avenue Southwest where it starts  
19 heading north above the word "Coteau" on the map?

20          A.     Right, from this point north.  So I  
21 think --

22                   JUDGE FETCH:  Mr. Solie, what  
23 Mr. Armstrong is attempting to do, is to make this  
24 as descriptive as possible verbally for the record.

25          Q.     (MR. ARMSTRONG CONTINUING)  So that you're

1 talking north of, I think that says, Fourth Street  
2 Southwest?

3 A. I guess I would call that out as County  
4 Road 26. County Road 26 heads off to the west at  
5 this intersection. And so that's correct. The  
6 route north of that intersection was adjusted a bit.  
7 Other things, again, and this was in consultation  
8 with Lake Superior Consulting, who had, I guess,  
9 some -- had a clear picture on how construction  
10 might occur. And to facilitate construction, we  
11 have this diagonal segment here. So that was one of  
12 the things that changed between the original  
13 application and what we're looking at today.

14 Q. And that's the diagonal segment on the  
15 northwest portion of the map by Coteau where it  
16 indicates that it will be bored?

17 A. Right. It's at the very -- essentially  
18 the north end of the pipeline route.

19 Q. And just so I understand, the map  
20 indicates "bored." You used "bored" and "horizontal  
21 directional drilling" synonymously?

22 A. Interchangeably, that's correct. So,  
23 again, those were the major changes. Again, there's  
24 a diagonal boring, again, at the very south end of  
25 the route. When I say "diagonal," kind of goes --

1       instead of kind of a 90-degree corner, it sort of  
2       cuts a 45 and gets into the DGC gas line. Again,  
3       that was another kind of construction enhancement  
4       that was suggested by our engineering consultant.

5               And then, finally, the last slight tweak  
6       was right up here in this area (indicating). And  
7       this is the area depicted by this long horizontal  
8       bore that's north and south along the Coteau haul  
9       road or dragline walk. And, again, this small  
10      change in the route was to take out a bend and  
11      essentially straightens out the route. And,  
12      interestingly, there's no surface expression of that  
13      change in the route because it's all underground.

14             Q.     Mr. Solie, I think you can have a seat  
15      just so we're on the record recording here.

16               And I'd like to talk to you now about that  
17      area where you were just talking about the change  
18      that goes under the dragline road. Dragline is  
19      probably one of the heavier things that would drive  
20      on anything, and I'm wondering if anything special  
21      is being done to evaluate, you know, how deep the  
22      pipe will be for safety as far as the dragline  
23      passing over the -- potentially passing over the  
24      pipeline?

25             A.     I guess, with regard to that question, I

1 would defer to Mr. Schilke.

2 Q. In these areas where you're directional  
3 drilling with either crossing wetlands or the roads,  
4 is the depth determined as of now, or is that  
5 something that's determined in the course of  
6 construction?

7 A. Again, I will defer to the project  
8 engineer, Mr. Schilke.

9 Q. In the area where -- the southeast where  
10 it's crossing Highway 26, is there a permit or  
11 something that needs to be obtained in order to do  
12 that?

13 A. That is correct. There would be county  
14 crossing permits for the road crossings.

15 Q. What is the status of that?

16 A. We have not yet applied for those. Those  
17 are, I guess, what we would consider to be -- all  
18 permits are important, but it's a minor, low-risk  
19 permit. We have been in contact with the county.  
20 Mr. Ken Miller is the acting highway superintendent,  
21 so we have talked to him in concept about the road  
22 crossings and there's been no issue, but we will  
23 need to apply for those permits and receive them  
24 before we can begin construction.

25 Q. In looking at that same area on the map

1 where -- I don't know if you would consider that  
2 where -- I think that would be where the pipeline  
3 begins; is that correct?

4 A. Yes.

5 Q. And how does the -- what's already on that  
6 site to get, I guess, gas to the pipeline?

7 A. I guess I would defer again to either  
8 Mr. Schilke or Mr. O'Berry who would be better able  
9 to answer that question.

10 Q. Are there any other permits outstanding to  
11 be obtained for the pipeline?

12 A. There are a couple. There would be two  
13 that are associated with the North Dakota Department  
14 of Health. They are NPDES permits, discharge  
15 permits, and one is for construction stormwater  
16 discharge permit, which is a fairly standard permit,  
17 and that has a seven-day notice requirement, and we  
18 would anticipate or we would insist that our  
19 construction contractor applies for and receives  
20 that permit because they would have to implement the  
21 best management practices on the ground.

22 In addition to the discharge permit for  
23 construction stormwater, there would be a permit  
24 potentially for the discharge of hydrostatic testing  
25 water and, again, it sort of falls in the same

1 division at the Health Department. It would be  
2 another NPDES permit and that one has a 30-day kind  
3 of cook-off point, that they have 30 days to issue  
4 it.

5 Q. And then the application talks about a  
6 Little Weather Army Corps of Engineers 404 permit  
7 will be needed. Do you know if one will be  
8 required?

9 A. Well, no, if there are no impacts to  
10 wetlands or water bodies, then there is no 404  
11 permit required.

12 Q. So your understanding is for this project  
13 there will be no --

14 A. Right, that is how our project is  
15 designed.

16 Q. And as far as testing and safety of the  
17 pipeline, I'm gathering that's for another witness.

18 A. Absolutely. Yeah. I would defer to  
19 Mr. O'Berry.

20 Q. As well as for construction methods, too?

21 A. Perhaps Mr. Schilke, yes.

22 Q. Just so I'm clear, is it your  
23 understanding the pipelines does not cross any  
24 mining areas or areas that will potentially be mined  
25 in the future?

1           A.     That's correct.

2           Q.     You talked about in the -- I think it's  
3 the -- well, kind of just where it goes east and  
4 west at the beginning up there, the concrete ditch  
5 on AVS's property, is that an area where you will be  
6 drilling below the concrete ditch?

7           A.     Yes.

8           Q.     And what's that ditch for?

9           A.     It's actually the west branch of Antelope  
10 Creek, so it's a stream that's been channelized when  
11 the plant was put into service.

12          Q.     Can you show us where that is on the map  
13 real quick?

14          A.     Sure.

15                 JUDGE FETCH: Try to be as descriptive  
16 verbally as possible.

17                 THE WITNESS: Okay. This area is  
18 immediately west -- or excuse me -- immediately east  
19 of Mercer County Highway 15. Again, essentially at  
20 the north -- almost the northernmost limit of the  
21 pipeline route. So it's right here (indicating).  
22 And, actually, on Exhibit 3 it shows up -- there's a  
23 blue and white dashed line, so that's the ditch.

24          Q.     (MR. ARMSTRONG CONTINUING) What type --  
25 you can have a seat. What type of stream is that?

1 Is it a river stream? Is it full of water all the  
2 time?

3 A. No. No, it's an intermittent stream. And  
4 it certainly -- yeah, it's an intermittent stream.

5 Q. Sometimes with pipeline siting or any  
6 transmission facility siting, there's changes to  
7 routes or corridors after the certificate could be  
8 granted by the Commission. I'm kind of gathering  
9 this project, it looks like you've kind of narrowed  
10 it down and this is pretty final; would you agree  
11 with that?

12 A. There can always be changes if there are  
13 difficult conditions. Say, large rocks or something  
14 unexpected is discovered during construction, there  
15 might have to be some change to the route. You  
16 know, we certainly hope not.

17 Q. And with this one with the route requested  
18 being the same width as the -- as the corridor --  
19 excuse me -- any potential change later would take  
20 it outside both the route and the corridor? Do you  
21 understand what I'm saying?

22 A. Well, so the route and the corridor width  
23 are 100 feet. I guess the actual physical pipeline,  
24 of course, is much smaller. We would be working  
25 with a 75-foot construction right-of-way and a

1 50-foot permanent easement, eventually, or permanent  
2 right-of-way, I should call it. And so, I guess,  
3 I'm not -- as I would see it, anywhere within that  
4 100-foot wide corridor, then, would be an  
5 appropriate place for the pipeline.

6 Q. And if the route or the corridor needs to  
7 be adjusted post permit, if granted, would DGC be  
8 willing to supply the Commission with any additional  
9 information, at the request of the Commission, to  
10 evaluate all the criteria in the Transmission  
11 Facility and Siting Act?

12 A. Yes, we would comply with whatever  
13 requirement and process is necessary.

14 MR. ARMSTRONG: That's all the questions I  
15 have.

16 JUDGE FETCH: Did Ms. Cardwell have any  
17 questions?

18 MS. CARDWELL: Yes, I have a few.

19 EXAMINATION

20 BY MS. CARDWELL:

21 Q. When I look at the map, just not that far  
22 above where the green site is, the historical site,  
23 there is a boring site there and I don't know how  
24 close we can compare maps, but within the update  
25 that was provided on June 10th, it says there are

1 157 shrubs and trees along the route and that looks  
2 to be close to an area where there were some shrubs  
3 and trees noticed. And I was just curious as to if  
4 that was related at all to the reasons for boring  
5 that area?

6 A. No. The trees and shrubs weren't enough  
7 of a reason. The wetlands are -- the wetlands and  
8 water bodies, of course, we would avoid with the HDD  
9 method. So you're saying just south of the green  
10 box?

11 Q. No, just north.

12 A. Okay. There's a water body crossing there  
13 and, in fact, when we were out on the site with the  
14 Lake Superior Consulting folks and other people from  
15 Basin Electric, there was water flowing there, so  
16 there's a stream.

17 Q. Okay. In your testimony I thought I heard  
18 you say something about limited amounts of shrubs  
19 and trees?

20 A. Well, yeah, the maximum number, I guess,  
21 the total population in the corridor is 157, and so  
22 post construction we'll be able to kind of do the  
23 difference. So we'll know how many trees and shrubs  
24 are required for the PSC's shrub mitigation. We  
25 have a preconstruction survey, so it's a simple

1 matter to calculate the difference.

2 Q. Okay. And it's my understanding from  
3 reading your original application, that you wanted  
4 to be able to test the pipeline on or about  
5 November, sometime in November 2013, but the in-  
6 service date was planned for April?

7 A. That's correct. And I guess I would defer  
8 to Mr. Schilke on that, the project engineer.

9 Q. Okay. And is it my understanding that  
10 your only aboveground items are going to be at the  
11 beginning and the ending of the pipeline?

12 A. That's correct.

13 MS. CARDWELL: Okay. That's all.

14 JUDGE FETCH: Thank you.

15 Anything further, Mr. Armstrong?

16 MR. ARMSTRONG: No.

17 JUDGE FETCH: Mr. Mather, any further  
18 questions?

19 MR. MATHER: Nothing further, Your Honor.

20 JUDGE FETCH: All right. At this time,  
21 I'm going to open it up to the Commissioners.

22 Commissioner Fedorchak, do you have any  
23 questions?

24 COMMISSIONER FEDORCHAK: I do have a  
25 couple questions.

EXAMINATION

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BY COMMISSIONER FEDORCHAK:

Q. My questions are mostly regarding the driving force of this project, and I think you're the appropriate person to discuss those.

First of all, Mr. Solie, if you can tell me, how often is this startup process used?

A. Well, I guess I would defer --

Q. Guesstimate. Once a year --

A. It's really just a couple times a year, yeah. Normally, the plants run 24/7. You would take an outage in the spring to do routine maintenance. There can be other things that happen. Something breaks and you have to fix it so there's an outage, but, generally, just a couple times per year.

Q. Okay. Cool. Prior to the EGU-MATS ruling, what was considered startup?

A. Well, startup was -- the startup is when you start preheating the boiler with the fuel oil and at a certain point then the pulverized coal can be added in. So the difference now in startup is that sometime during that period you'll start generating electricity because there's enough heat energy in the boiler to make steam, so now as soon

1 as you're making electricity, that's considered  
2 startup. So that's the difference.

3 Q. And previously you had how long before you  
4 had to turn the baghouse on and convert, or do they  
5 define that?

6 A. I don't know. I couldn't tell you  
7 exactly.

8 Q. Okay. Do you have any estimated  
9 improvements in emissions, the reductions in, like,  
10 the particulate matter and SO2 that this conversion  
11 will result in?

12 A. I don't have those figures.

13 Q. Does somebody track -- is somebody  
14 tracking that, you know, we're doing this to reduce  
15 the emissions, how much are we actually  
16 accomplishing?

17 A. I guess I don't know the answer  
18 specifically. I would say that there was a fairly  
19 lengthy rulemaking process and Basin Electric  
20 submitted comments to the U.S. EPA about the rule,  
21 but I guess I can't answer that.

22 Q. Okay. Who pays -- this project is  
23 estimated to cost \$9 million. Who is ultimately  
24 going to absorb that cost?

25 A. It would go into the rate base ultimately.

1           Q.     Okay.  So electricity users will be paying  
2 for it?

3           A.     Yes.

4           Q.     Okay.  And how much -- do you know  
5 approximately how much the old startup method cost?

6           A.     I do not know that number.

7           Q.     Any guesses?

8           A.     I don't.

9           Q.     It was just fuel oil; right?

10          A.     Right.  I would be afraid to guess.

11          Q.     Okay.  And what was the next closest  
12 alternative costwise to meeting the guidelines?  
13 This \$9 million project was the most affordable, it  
14 sounds like, from your application.  What was the  
15 next closest cost estimate?  Did you go that far to  
16 get the cost?

17          A.     I would defer to Mr. Schilke regarding the  
18 engineering analysis.

19          Q.     Okay.  And what's your timeline for  
20 complying with the EGU-MATS?

21          A.     I'm sorry.  I should know this, but it  
22 escapes me right now.  But we are looking to do the  
23 changeover at the AVS plant during the next spring  
24 outage, so the outage in 2014.

25          Q.     Okay.  Let's see here.  Just as a point of

1 personal interest, I am interested if there's  
2 someone at Basin who could tell me how much is going  
3 to be saved in terms of the reductions in  
4 particulate matter and SO2 and the emissions  
5 reductions as a result of this project, not as part  
6 of the record.

7 A. Sure.

8 COMMISSIONER FEDORCHAK: And then we just  
9 kind of hit on this, but I did want to just formally  
10 make the request to keep the record open for a  
11 late-filed exhibit that would be an additional  
12 certification document that would include provisions  
13 that we're in the process of developing right now to  
14 implement House Bill 1147 passed by the 2013  
15 Legislature, which changes some of the requirements  
16 for companies if you have a route deviate during  
17 construction. And we're in the process of putting  
18 that together and the Commission will see a draft  
19 next week. It will be quickly -- developed fairly  
20 soon. So that's the end of my questions.

21 JUDGE FETCH: Commissioner Fedorchak, as I  
22 understand your last comment, then, you want the  
23 record held open for a late-filed exhibit?

24 COMMISSIONER FEDORCHAK: Correct.

25 JUDGE FETCH: So noted. Thank you.

1 Commissioner Kalk.

2 COMMISSIONER KALK: Your Honor, what are  
3 we going to call that late-filed exhibit?

4 JUDGE FETCH: That probably would be  
5 Exhibit 13.

6 MR. ARMSTRONG: It will be Exhibit 13, but  
7 it will just be a certification addressing 1147  
8 issues.

9 JUDGE FETCH: Okay. Thank you.

10 Commissioner Kalk, questions?

11 COMMISSIONER KALK: Thank you, Your Honor.  
12 Always, Your Honor.

13 JUDGE FETCH: I know. Always welcome,  
14 Commissioner.

15 EXAMINATION

16 BY COMMISSIONER KALK:

17 Q. Kevin, thank you for your testimony.  
18 You're not the first witness that's struggled with  
19 located stuff on the map, but with your National  
20 Guard background, I think we should put an  
21 eight-digit grid on all the maps and you could say  
22 right away what grid.

23 A. Yep, very good.

24 Q. I think that would help all of us.

25 Mr. Armstrong and Commissioner Fedorchak

1 asked all the good questions. I think they're both  
2 on the mark on a lot of them. I just have a couple  
3 followups.

4 This is an only a three-mile pipeline, so  
5 it's going to be pretty easy to get done, but the  
6 backdrop of pipeline safety in the country is  
7 becoming more and more important with some big  
8 incidents in gas pipelines in the western part of  
9 the country and all of the country, and so the  
10 questions we're asking maybe wouldn't have been  
11 asked two years ago, getting down to the point there  
12 is a lot of small micro issues on this pipeline, if  
13 you will.

14 I guess the one that Commissioner  
15 Fedorchak was onto a little bit and I agree with her  
16 on, is that I sensed the cynicism of this MATS being  
17 able to make the air better under some of these  
18 rules, but is this rule under appeal; do you know?

19 A. I don't believe so. The rule is  
20 finalized.

21 Q. So you're forced to do this. There's no  
22 more -- okay. There's a later witness that can  
23 confirm that it is, but you're saying it's  
24 finalized?

25 A. Yeah, I understand it's finalized.

1       Otherwise, we wouldn't be going ahead.

2           Q.     And then the part about -- Mr. Armstrong  
3       was asking about the corridor width and the route  
4       width. How far outside -- or did you study anything  
5       outside the proposed corridor and route that you  
6       submitted today as far as environmental and all  
7       those such things?

8           A.     Yes, we did. I guess at the onset we had  
9       a couple of different corridors that show up in the  
10      original cultural resources report that Metcalf  
11      prepared, so there were a couple of alternate routes  
12      along the south.

13          Q.     So just to get to what I'm going to get to  
14      here is, would you have a problem if the Commission  
15      ended up approving a wider corridor than the 100  
16      feet, which would give you potentially more  
17      flexibility down the road?

18          A.     I think that would be great.

19          Q.     Because that's one of the things that  
20      we'll have to talk about, the three of us, when we  
21      get back. That was some of the intent is, you get a  
22      wider corridor, gives you more flexibility as those  
23      things pop up. Because today you're thinking they  
24      don't, but it will probably. How far out -- can you  
25      say we studied within 300 feet out?

1           A.     Actually, no. We were fairly limited.

2           Q.     By terrain, roads?

3           A.     By terrain and roads and just by kind of  
4 practical matters, I guess, but the corridor that  
5 was surveyed is 100 feet wide so there might be a  
6 couple or multiple locations where more than one  
7 corridor adjacent to each other were surveyed.  
8 Other things that we surveyed beyond the route and  
9 corridor that shows up on the map are the string-out  
10 areas for the pipe, because, you know, we don't  
11 permit those. It's not part of the route, but they  
12 would be areas potentially impacted by construction  
13 activity, so we did look at those for archeology,  
14 cultural resources and for wetlands.

15          Q.     Okay. Thank you. The following witness  
16 will talk about emergency response and operations  
17 and all that; correct?

18          A.     The third witness, yes, Mr. O'Berry will  
19 speak to that issue.

20          Q.     Do you know anything about the -- you  
21 talked about the 500 feet there was a couple areas.  
22 What would be the closest office space to the  
23 proposed route?

24          A.     There are -- the buildings that showed up  
25 closest are kind of along the north end of DGC. The

1 long rectangular building with a white roof and  
2 these buildings in here. And so the one thing, I  
3 guess, is that we talked -- I guess I spoke about  
4 the buildings and, actually, probably the avoidance  
5 criteria is probably the plant site because that's  
6 the place of business so it's actually closer than  
7 that in the parking lot, but, you know, I'm just  
8 kind of thinking about what we would be concerned  
9 about would be the closest building where people  
10 would normally be.

11 Q. To your knowledge, the office space would  
12 be outside that 500 feet?

13 A. No. No, Commissioner, there are at least  
14 three buildings that are within 500 feet. One of  
15 the other things --

16 Q. I guess those buildings people are sitting  
17 in a cubicle somewhere, it's not a truck being  
18 stored somewhere?

19 A. Yes. Yes. The one thing that we should  
20 mention is that there's something called PIR impact,  
21 potential impact radius, is far shorter than that,  
22 and Mr. Schilke can correct me in his testimony, but  
23 I think it's about 80 meters, which is 200-some  
24 feet, so it's less than where the buildings are.

25 Q. And the last, I guess, that I have, do you

1 know why this pipe has no jurisdiction under FERC,  
2 this pipeline?

3 A. I do not know.

4 Q. Maybe that's something that a future  
5 witness could talk about, because that's one thing  
6 that I've asked our staff to look at, because I do  
7 have some question myself about what makes a  
8 pipeline FERC jurisdiction, because FERC carries a  
9 lot of jurisdiction on natural gas, and there are  
10 pipelines that other companies have that look very  
11 similar to this pipeline that are considered FERC  
12 jurisdiction, so I don't see anything in the record  
13 that said why this wasn't FERC jurisdictions, so  
14 that will be one. Actually, on a break, I want to  
15 make a call back to one of our other attorneys and  
16 see if they can shed some light on that. That's one  
17 concern, and it's pretty big, that there needs to be  
18 something in the record that says why this isn't  
19 FERC jurisdiction, because that's a big question I  
20 have right now.

21 COMMISSIONER KALK: That's all I have.

22 Thank you.

23 JUDGE FETCH: Thank you, Commissioner  
24 Kalk.

25 Commissioner Christmann.



1 separate area then, a small one that would be the  
2 sacrificial portion, so that would be a possibility  
3 if you didn't use natural gas or propane.

4 Q. Okay. Now, back to the pipeline. The two  
5 ponds that are between the buildings of AVS and DGC,  
6 straight west of those two ponds, the pipeline takes  
7 a bend, looks like 150 to 200 feet or something like  
8 that?

9 A. (Nods.)

10 Q. Why is that doglegged?

11 A. Let me take a look. I'm not sure I'll be  
12 able to answer. The one thing that I can tell you  
13 is that there's heavy, heavy infrastructure in this  
14 area. There's a CO2 pipeline. There's the raw  
15 water supply line from Lake Sakakawea. And I think,  
16 for the most part, this stays to the west of those  
17 pipelines until we get past where they cut in.  
18 That's where that dogleg is.

19 Q. Okay. Then down south a little bit  
20 farther where County Highway 26 makes that curve, it  
21 looks like you're getting closer and closer to the  
22 road there around that curve. Do you know about how  
23 close you are to the road? Is it down in the road  
24 ditch, or is it up on that hill where those dragline  
25 buckets are, or what?

1           A.     I guess I can't answer. I'd have to look  
2     at the plan and some more detailed drawings to  
3     answer that, but it's -- our general approach is not  
4     to have our easement overlapping the roadway  
5     easement, so --

6           Q.     When you talked about potential agreements  
7     with the County Highway Department, are there  
8     provisions in there -- if that highway has to be  
9     reconstructed and this causes additional costs, is  
10    that something that Basin is responsible for or DGC,  
11    or is this a risk that the county is kind of taking  
12    that it is going to be close to the road now and we  
13    have to deal with it?

14          A.     I guess the question hasn't come up  
15    before, so I guess I don't know what -- who would  
16    necessarily be responsible for that.

17          Q.     Okay. And then way down toward the far  
18    south end of the project, you talked about that it  
19    should be a pretty simple process, most likely,  
20    getting the easement from the County Highway  
21    Department, but what about the railroad, sometimes  
22    it's a little more difficult to get easements from  
23    them? Who owns this railroad up there, anyway?

24          A.     It's my understanding that Basin Electric/  
25    DGC owns that portion of that track there.



1 site that you described as 32ME767, which is in the  
2 green portion on the exhibit map, my understanding  
3 from your testimony is that that is a cultural site,  
4 a prior farmstead site, but is not being actively  
5 farmed; is that accurate?

6 A. Well, that's correct. It's an old  
7 farmstead site, and just by virtue of it being more  
8 than 50 years old, it was recorded in a cultural  
9 resource survey. So there is a site number and a  
10 site description.

11 Q. But nothing occurring there in terms of  
12 active agriculture --

13 A. That's correct.

14 Q. -- at this time?

15 A. That's correct. Yes, Your Honor.

16 Q. Okay. And SHPO indicated it wasn't  
17 culturally significant and so it did not need to be  
18 avoided; is that correct?

19 A. That's absolutely correct, yeah. There's  
20 correspondence in the application and in the file to  
21 reflect that.

22 Q. Okay. So you'll be going through that and  
23 any cultural significance will then be lost?

24 A. I guess I'm not sure that there is any  
25 cultural significance. Sites are designated based

1 on, really, four criteria and one of them might be  
2 if somebody important was born there or if an  
3 important event occurred at the site or kind of my  
4 favorite one, if it's like an outstanding example of  
5 a certain type of architecture or design, and the  
6 last one is kind of a catchall for we don't know.  
7 If a site doesn't meet any of those criteria, it's  
8 not eligible for listing on the National Register  
9 and it's really not significant. There are  
10 hundreds, if not thousands, of farmsteads across  
11 North Dakota, and it's -- they may not all be  
12 important or significant with respect to cultural  
13 resources.

14 JUDGE FETCH: Thank you. Commissioners,  
15 any other questions? Commissioner Fedorchak.

16 FURTHER EXAMINATION

17 BY COMMISSIONER FEDORCHAK:

18 Q. Sir, you're saying that isn't Commissioner  
19 Christmann's birth site? Because we would certainly  
20 have to protect it then.

21 A. Right. Right. That would be a huge  
22 mistake.

23 Q. Just one quick follow-up question. I  
24 apologize if Commissioner Christmann asked this.  
25 Commissioner Kalk and I were having a brief side

1 conversation on FERC jurisdiction. Did you point on  
2 the map where the CO2 pipeline to Canada is located?

3 A. I can give you the general area. It's not  
4 depicted on the map. But, as I discussed, the  
5 pipeline kind of moves towards the west to avoid --  
6 there's some transmission line structures, but it's  
7 my understanding the CO2 pipeline, AVS raw water  
8 supply line is in this area here. And the AVS water  
9 supply line ends right here and then our line gets  
10 closer to the road again (indicating).

11 COMMISSIONER FEDORCHAK: Okay. Thank you.

12 JUDGE FETCH: Any other questions from the  
13 Commissioners? Everybody is shaking their head no.

14 Mr. Mather, any further questions?

15 MR. MATHER: None, Your Honor.

16 JUDGE FETCH: Mr. Armstrong.

17 RE CROSS-EXAMINATION

18 BY MR. ARMSTRONG:

19 Q. Just a followup on one quick area,  
20 Mr. Solie, and that's this farmstead site. I was  
21 just looking at Metcalf's report. Metcalf is who  
22 conducted the culture resources inventory for DGC or  
23 Basin?

24 A. Correct.

25 Q. And I understand their report, correct me

1 if I'm wrong, that was a site that was originally  
2 recorded as a historical site, but then the nature  
3 of the site kind of changed so it's no longer even  
4 eligible to be a historical site?

5 A. I think that in the course of  
6 archeologists doing their work, they record  
7 everything that's older than 50 years old, because  
8 anything older than 50 years could be or would have  
9 the potential for listing on the National Register.  
10 So just by virtue of its age it was recorded.

11 Q. But I'm gathering with the water pipe and  
12 possibly the CO2 pipe, it looks to me like from  
13 Metcalf they say that site was actually relocated  
14 and I'm thinking it may have been as a result of the  
15 other pipelines in the area; do you know?

16 A. The farmstead? I'm sorry.

17 Q. It says, "The site was relocated during  
18 the project and updated to reflect the fact that the  
19 integrity of the property has been destroyed and no  
20 avoidance is necessary." Do you know what that  
21 means? That's basically my question.

22 A. I need to --

23 Q. Page 6 of Appendix D of the application.  
24 It's the second paragraph. The second paragraph.

25 A. (Witness reviews document.) Oh, I think

1 "relocated" in this case means they found it again.  
2 So it was on a previous survey. And so I think with  
3 Metcalf surveying, they kind of maybe refined the  
4 borders of it. That's what "relocated" means in  
5 that case.

6 JUDGE FETCH: In other words, re-located,  
7 not relocated?

8 THE WITNESS: Right. They found again.

9 Q. (MR. ARMSTRONG CONTINUING) But, anyway,  
10 as I understand, it's not eligible for historical  
11 significance?

12 A. That's correct.

13 Q. And SHPO concurs there's no avoidance  
14 necessary?

15 A. That's correct.

16 Q. And I'll just note part of the question  
17 that Commissioner Fedorchak was asking about the  
18 1147 issues and similar to what I had been asking  
19 you, it looks like there were a number of  
20 prehistoric sites located within a proximity within  
21 a quarter mile of the site and those would be the  
22 type of information we would want if there's any  
23 changes to the actual identifying information to  
24 sites of that nature.

25 A. I understand.

1 MR. ARMSTRONG: Nothing further.

2 JUDGE FETCH: Any further questions of  
3 this witness?

4 MR. MATHER: None for me, Your Honor.

5 MS. CARDWELL: I have one more question.

6 FURTHER EXAMINATION

7 BY MS. CARDWELL:

8 Q. I was just re-looking at the June -- is it  
9 June 10th or 11th update that was provided. And the  
10 map that you show for the survey addendum on page 4  
11 of -- I think it's the Metcalf Addendum Survey  
12 Report, I'm wondering if that line, that southern  
13 line that says "project corridor," way down at the  
14 south, that new piece, looks to be outside previous  
15 surveys, and you indicated earlier to Commission  
16 Kalk that everything had been surveyed. And so I'm  
17 wondering why that particular new line looks like  
18 it's outside survey boundaries? This purple line.

19 A. So this is --

20 JUDGE FETCH: We need to either have you  
21 closer to one or the other microphones so we can  
22 pick you up for the record.

23 THE WITNESS: Okay. We are looking at Map  
24 2 of the addendum survey report and it shows  
25 multiple corridors in green and those are areas of

1 the previous surveys and previous corridor, because  
2 these, you know, are the work that we had done  
3 earlier. And so this purple here, these are the  
4 deviations that were surveyed during Metcalf's last  
5 survey, and this area here kind of goes out beyond.  
6 And, again, it's not part of the corridor that we're  
7 applying for or route we're applying for, but that  
8 would be one of those string-out areas that I  
9 mentioned because we might have to be on the ground  
10 there so we wanted to make sure there were no  
11 cultural resources located there.

12 MS. CARDWELL: Thank you.

13 JUDGE FETCH: Any further questions?

14 MR. MATHER: None for me, Your Honor.

15 JUDGE FETCH: All right. Thank you,  
16 Mr. Solie, you are excused. And it's almost 2:30  
17 p.m., Central Time. We are going to take a 15-  
18 minute break.

19 (Recess was taken.)

20 JUDGE FETCH: Okay. We are back on the  
21 record. The time is 2:46 p.m., by my watch, Central  
22 Time. And we'll proceed at this time, Mr. Mather,  
23 with your next witness.

24 MR. MATHER: Your Honor, before we proceed  
25 with that, just a point of order. There was a

1 question raised earlier about potential jurisdiction  
2 for the gas line and I was wondering how -- whether  
3 you would like to handle that through a late-filed  
4 exhibit or whether you would like to approach it  
5 some other way. We do have a witness that we would  
6 be able to sort of address that, but we actually do  
7 have a formal legal opinion. I can't testify. And  
8 I'd like to know how you think we can best share  
9 that information for purposes of the record.

10 JUDGE FETCH: Is it one of the witnesses  
11 coming up?

12 MR. MATHER: The last witness that we put  
13 on, Mr. O'Berry, will be able to address it, to some  
14 extent, but I think we also have the legal  
15 background, and he's not a lawyer so he can't speak  
16 to that.

17 JUDGE FETCH: Why don't we do it this way,  
18 Mr. Mather. We'll hear from the witness in terms of  
19 testimony about that. If the Commission then wishes  
20 the exhibit to be produced as a late-filed exhibit,  
21 we'll do that in addition.

22 MR. MATHER: That would be acceptable to  
23 us. Thank you, Your Honor.

24 JUDGE FETCH: All right. Thank you.  
25 Please call your witness.

1 MR. MATHER: The next witness for Dakota  
2 Gasification Company will be Tyler Schilke.

3 JUDGE FETCH: Good afternoon, Mr. Schilke.  
4 You heard me advise as to penalties for perjury  
5 earlier?

6 THE WITNESS: (Nods.)

7 JUDGE FETCH: You're nodding your head  
8 yes?

9 THE WITNESS: Yes, I did.

10 JUDGE FETCH: Thank you. Obviously, all  
11 responses need to be verbal.

12 THE WITNESS: Yep.

13 JUDGE FETCH: Please raise your right  
14 hand.

15 Do you solemnly swear the testimony you're  
16 about to give shall be the truth under pains and  
17 penalties of perjury?

18 THE WITNESS: Yes, I do.

19 JUDGE FETCH: Thank you. Mr. Mather.

20 TYLER SCHILKE,

21 being first duly sworn, was examined and testified  
22 as follows:

23 DIRECT EXAMINATION

24 BY MR. MATHER:

25 Q. Mr. Schilke, will you please give us your

1 name, your business address, and your occupation?

2 A. My name is Tyler Schilke. I'm employed as  
3 a Mechanical Engineer III by Basin Electric Power  
4 Cooperative. My work address is 1717 East  
5 Interstate Avenue, Bismarck, North Dakota.

6 Q. What is your employment history with Basin  
7 Electric?

8 A. I have been a mechanical engineer at Basin  
9 Electric for six years. Prior to that, I worked for  
10 Applied Engineering, Inc., as a test engineer for  
11 three years.

12 Q. Please describe your educational  
13 background.

14 A. I received a Bachelor of Science degree in  
15 mechanical engineering from North Dakota State  
16 University, in Fargo, North Dakota, and am a  
17 professional engineer registered in the State of  
18 North Dakota.

19 Q. Mr. Schilke, what have your  
20 responsibilities been in connection with the natural  
21 gas pipeline project?

22 A. I am the project manager. As project  
23 manager, I am responsible for coordination of all  
24 aspects of the project, including routing, right-of-  
25 way, engineering, construction and permitting.

1           Q.     Mr. Schilke, is your testimony today given  
2           on behalf of DGC in your capacity as an authorized  
3           representative of DGC, as well as an employee of  
4           Basin Electric?

5           A.     Yes.

6           Q.     And what is the purpose of your testimony  
7           at this proceeding?

8           A.     The purpose of my testimony is to provide  
9           a summary description of the project, a description  
10          of the pipeline and a general explanation of Dakota  
11          Gasification Company's efforts to comply with the  
12          applicable PSC Transmission Facility Corridor and  
13          Route Policy Criteria.

14          Q.     Mr. Schilke, please describe generally the  
15          proposed AVS natural gas pipeline project.

16          A.     The project consists of the design,  
17          procurement, construction and operation of a ten-  
18          inch diameter natural gas pipeline that will be  
19          approximately 3.5 miles in length, commencing at a  
20          point of interconnection at the outlet of the DGC to  
21          Hebron gas pipeline and terminating at a point of  
22          interconnection with the yet to be constructed gas  
23          conditioning facility of AVS. Lake Superior  
24          Consulting, a company with substantial expertise in  
25          natural gas pipeline design and construction, has

1       been retained to provide technical assistance with  
2       the project. We anticipate that we will hire a  
3       company with expertise in the construction of  
4       natural gas pipelines to construct the pipeline and  
5       associated facilities.

6           Q.     Mr. Schilke, please refer to what's been  
7       marked as Exhibit 4. Can you please describe it?

8           A.     Yes, it is the project schedule. Dakota  
9       Gasification Company is planning to start  
10      construction of the pipeline in the summer of 2013  
11      and complete the project by the end of 2013. The  
12      start date is largely dependent upon receiving all  
13      required approvals and permits. Our intent is to  
14      begin construction as soon as possible to take full  
15      advantage of the summer construction season, which  
16      will help avoid the additional costs associated with  
17      winter construction.

18          Q.     And what's the current estimated cost of  
19      the project?

20          A.     The total cost of the project is estimated  
21      to be \$6.5 million.

22          Q.     Mr. Schilke, please describe the design of  
23      the natural gas pipeline that DGC intends to  
24      construct.

25          A.     The pipeline will be designed for a

1 maximum allowable operating pressure, or MAOP, of  
2 1440 psi. This is the same as the MAOP of the  
3 existing DGC gas line that will supply this  
4 pipeline. The pipeline is designed for a maximum  
5 flow rate of 125 million standard cubic feet per  
6 day. The combination of pressure and flow rate, in  
7 addition to design factors listed in 49 CFR 192, are  
8 used to determine the pipe diameter and the pipe  
9 wall thickness. The pipeline design also includes  
10 cathodic protection for additional protection  
11 against pipeline corrosion.

12 Q. What standards has and will DGC employ in  
13 the design and construction of the pipeline?

14 A. The design and construction of the  
15 pipeline will meet or exceed the requirements of  
16 49 CFR 192.

17 Q. Mr. Schilke, please describe the basic  
18 specifications for the pipe that will be used in  
19 this project.

20 A. The pipe used in this project will  
21 primarily be ten-inch nominal diameter pipe. This  
22 pipe will comply with the American Petroleum  
23 Institute Specification 5L, which specifies  
24 properties such as material composition and  
25 strength. The underground pipe will be coated with

1 fusion bond epoxy, and in locations where the pipe  
2 will be installed by means of horizontal directional  
3 drilling, or HDD, an abrasion resistant coating will  
4 be applied over the fusion bond epoxy.

5 Q. Will you please describe the associated  
6 structures to be built as a part of this project?

7 A. The existing station at DGC will be  
8 utilized at the interconnection point to the DGC 24-  
9 inch gas pipeline. A station will be constructed at  
10 the AVS plant site. The station will be surrounded  
11 by a chain-link fence with locked gates for security  
12 and will have gravel surfacing. In addition to the  
13 pipeline itself, the project will consist of various  
14 valves and instrumentation, a pig launcher and  
15 receiver for use while performing pipeline  
16 inspections, a filter/separator vessel for capturing  
17 debris or liquids present in the gas stream, and two  
18 meters for measuring gas flow. The meters will be  
19 contained within a pre-engineered metal building. A  
20 separate building will be constructed at the AVS  
21 station to house electrical and communications  
22 equipment necessary for remotely monitoring and  
23 operating the pipeline.

24 Q. Mr. Schilke, please generally describe the  
25 phases in which the construction of the pipeline

1 will proceed and what each of those phases will  
2 involve.

3           A.     Construction will consist of the following  
4 steps, which will occur sequentially in the order  
5 listed. The first step is to hire a qualified  
6 contractor. Next is surveying the pipeline route  
7 and marking the limits of easements and wetlands.  
8 Once this is complete, One-Call will be contacted  
9 and existing utilities will be located and marked.  
10 The next step is clearing the route and separating  
11 the topsoil from the rest of the soil. After the  
12 topsoil is removed, construction of temporary access  
13 approaches and excavation for the pipeline will  
14 begin. This includes trenching for open trench  
15 installations, as well as excavating at the  
16 beginning and ending of each horizontal directional  
17 drill. Next is pipe stringing, which consists of  
18 staging the pipe along the route in preparation for  
19 lineup and welding. Pipe will be field bent with a  
20 bending machine as necessary to accommodate slight  
21 adjustments to the route or changes in elevation.  
22 Most bends will be shop fabricated and shipped to  
23 the site for installation. Individual lengths of  
24 pipe will be welded together by certified welders.  
25 Following welding, x-ray examination will be

1 performed on all field welds. Also following  
2 welding, the pipe will be field coated at the welds  
3 and the entire pipe coating will be inspected using  
4 a process call jeeeping. Any defects or holidays  
5 found in the coating will be repaired and retested.  
6 Before lowering into the trench, inspectors will  
7 search for any objects in the trench that may damage  
8 the pipe and remove them. The welded pipeline will  
9 then be lowered into the trench and backfilled.  
10 After backfilling, the pipeline will be hydrotested  
11 at a pressure equal to 1.5 times the maximum  
12 allowable operating pressure. If hydrotesting  
13 reveals any defects, they will be repaired and  
14 hydrotesting will be repeated.

15 Finally, the topsoil will be replaced and  
16 reseeded with approved seed mixture.

17 Q. Mr. Schilke, what is the minimum depth at  
18 which the pipeline will be buried along the proposed  
19 route?

20 A. The pipeline will be buried at a minimum  
21 of four feet deep measured to the top of the pipe  
22 exceeding 49 CFR 192 which requires a minimum of 36  
23 inches of coverage.

24 Q. Mr. Schilke, please describe the  
25 fundamental factors considered in selection of the

1 corridor and route for the pipeline.

2 A. When selecting the corridor and route, we  
3 focused on identifying the most direct route to  
4 minimize both impacts and costs. The route selected  
5 parallels existing linear facilities which minimizes  
6 the potential to impact future land development.

7 Q. Mr. Schilke, please describe some of the  
8 procedures that will be followed before and during  
9 construction to ensure safety of construction  
10 personnel, members of the general public, and the  
11 integrity of the pipeline.

12 A. The pipe will be inspected and hydrotested  
13 at the mill. During construction, inspectors will  
14 be onsite to verify that the contractor is following  
15 the construction specifications and that all work is  
16 performed safely. All welded joints will be  
17 x-rayed, which is a form of nondestructive  
18 examination used to determine the quality of the  
19 weld. Before and during backfilling, inspectors  
20 will be looking for any rocks or other debris in the  
21 trench or in the spoil that have the potential to  
22 damage the pipeline. After installation, the  
23 pipeline will be hydrotested at a pressure 1.5 times  
24 the MAOP. After all installation work has been  
25 completed, a smart pig will be sent through the line

1 to record the exact installed location of the  
2 pipeline and to obtain baseline data, such as pipe  
3 wall thickness, to compare against future inspection  
4 data.

5 Q. Mr. Schilke, do you have any information  
6 regarding the health risks to people in the vicinity  
7 of the pipeline?

8 A. Explosion is the only known health risk.

9 Q. What steps are you taking to mitigate that  
10 risk?

11 A. The potential impact radius, or PIR, as  
12 defined in 49 CFR 192, is the radius of a circle  
13 within which the potential failure of a pipeline  
14 would have significant impact on people or property.  
15 For this pipeline, the PIR is less than 282 feet.  
16 The pipeline has been routed and designed to  
17 minimize potential health risks. The pipeline route  
18 currently includes no areas frequently occupied or  
19 intended to be occupied within the PIR. The design  
20 includes line break detectors, which automatically  
21 shut down the pipeline if a line break is detected.  
22 Additionally, the pipeline will be capable of remote  
23 operation from the DGC control room so an operator  
24 is not required to travel to close isolation valves.  
25 Claude O'Berry will be discussing DGC's procedures

1 for maintaining the pipeline integrity after the  
2 pipeline is in operation.

3 Q. Mr. Schilke, are you aware of any other  
4 potential hazards to humans, animal life or the  
5 environment posed by the proposed pipeline?

6 A. No.

7 Q. Please describe generally how the corridor  
8 and route selected for the pipeline maximize economy  
9 and efficiency.

10 A. The gas source nearest to AVS is DGC. To  
11 maximize economy and efficiency, a pipeline from a  
12 point of interconnection on DGC's existing gas line  
13 to AVS was selected. This resulted in the shortest  
14 reasonable pipeline length, which minimizes both  
15 impacts and costs. Additionally, the route  
16 parallels existing linear facilities on previously  
17 disturbed land.

18 Q. Will another individual provide testimony  
19 with respect to operation, maintenance, safety and  
20 emergency response?

21 A. Yes, Claude O'Berry will provide testimony  
22 on those matters.

23 Q. Mr. Schilke, DGC has applied for a waiver  
24 of procedure and time schedules, as well as a  
25 consolidated certificate of corridor compatibility

1 and a route permit. Please explain the likely  
2 impact of a denial of the waiver on the construction  
3 schedule and the AVS plant operations.

4 A. If the waiver were denied, the  
5 construction start date would be delayed. Any delay  
6 in the start of construction would likely increase  
7 construction costs associated with a compressed  
8 schedule, winter construction, or a combination of  
9 both. Additionally, equipment has been procured for  
10 converting the Unit 1 boiler at AVS to start up on  
11 natural gas and must be installed during the  
12 scheduled maintenance outage in the spring of 2014.  
13 If the pipeline construction and commissioning were  
14 not completed before that time, Unit 1 would not be  
15 able to start up until pipeline construction and  
16 commissioning were complete.

17 Q. Mr. Schilke, based on your knowledge of  
18 the project, do you believe that the location,  
19 construction, and operation of the proposed  
20 facilities produce minimal adverse impacts on the  
21 environment and upon the welfare of the citizens of  
22 North Dakota?

23 A. Yes.

24 Q. Are the proposed facilities compatible  
25 with environmental preservation and the efficient

1 use of resources?

2 A. Yes.

3 Q. Will the proposed facility locations  
4 minimize adverse human and environmental impact  
5 while ensuring continuing system reliability and  
6 integrity, as well as ensuring that energy needs are  
7 met and fulfilled in an orderly and timely fashion?

8 A. Yes.

9 Q. Does this complete your direct testimony?

10 A. Yes, it does.

11 MR. MATHER: Your Honor, no further  
12 questions. I tender the witness.

13 JUDGE FETCH: Thank you, Mr. Mather.  
14 Mr. Armstrong.

15 MR. ARMSTRONG: Thank you.

16 CROSS-EXAMINATION

17 BY MR. ARMSTRONG:

18 Q. Mr. Schilke, the application says the  
19 project will cost \$9 million and you just testified  
20 it would be \$6.5 million. Do you know what the  
21 change is from?

22 A. The change -- I don't know for sure. The  
23 change may have been from the original application  
24 said \$9 million where Basin Electric owned the  
25 entire thing. There may have been other pieces of

1 equipment that were purchased and would be included  
2 as part of this, which are not at this time.

3 Q. And those aren't necessary because DGC  
4 will now be operating it?

5 A. Yeah, basically, they're just not going to  
6 be part of the equipment that DGC owns. I guess  
7 they include things like the gas line heater,  
8 regulators, things of that sort that AVS needs in  
9 order to condition the gas for use in their boilers.

10 Q. Do you know -- and you heard the question  
11 earlier so you know, I think, all the questions I'm  
12 going to ask you and the Commissioners, some of them  
13 will ask you. But do you know what the cost of the  
14 alternatives to this pipeline were?

15 A. The one that would have been the most  
16 likely candidate, which would have been to add a  
17 sacrificial baghouse, would have been around \$30  
18 million.

19 Q. You heard me ask Mr. Solie about the  
20 noise. What are the noise generators from the  
21 pipeline?

22 A. The pipeline itself, once it's in  
23 operation, there will be really no major sources of  
24 noise. The equipment that AVS will own will include  
25 regulators, which will be the primary noise source.

1 Those will be located within a building to minimize  
2 how much of that noise is transmitted to the  
3 surrounding area.

4 Q. Do you know if the noise from those  
5 regulators will be less or more than is already kind  
6 of the standard noise at AVS?

7 A. I don't have any information on, I guess,  
8 the noise around that plant site, but --

9 Q. Are any residents located very close to  
10 the AVS facility?

11 A. I believe the nearest residence is  
12 approximately one mile away.

13 Q. You heard me talk with Mr. Solie about  
14 crossing the dragline road. Do you know what's  
15 being done to make sure that, you know, if a  
16 dragline goes over that road, the pipe is deep  
17 enough so something that heavy won't impact it?

18 A. Yeah, we've been working with Coteau very  
19 closely on that and they've provided us with the  
20 ground pressure for the equipment that they would  
21 expect to travel along that road, so we have  
22 performed calculations determining what pressure or  
23 what stress, excuse me, would be experienced on that  
24 line. And at the depth that we are currently  
25 planning, there should be no issues for any of their

1 equipment to travel over the top of that pipeline.

2 Q. And that goes into kind of my next  
3 question. How do you determine how deep to put the  
4 pipeline, say, underneath the water bodies or  
5 underneath that road in the boring process?

6 A. For the boring process, in determining  
7 depth, a large part of it is just the angles that  
8 they're actually able to perform that drilling at.  
9 I guess, I'm not aware of any specific minimum below  
10 what we're -- you know, say, below the water body  
11 that we're trying to cross.

12 Q. Did the study with the -- or evaluating  
13 the information on the dragline, did you have to go  
14 deeper or anything, or did you determine that the  
15 depth you had already planed was deep enough?

16 A. Yeah, the depth that we were going to end  
17 up being at, which I think the minimum was around 15  
18 feet, at least that's the plan right now, and that  
19 was just the result of the angle necessary to get  
20 underneath that and Highway 15 and across the ditch  
21 on the other side. So the evaluation was just based  
22 on that plan. We didn't have to adjust the depth at  
23 all.

24 Q. Just to make sure I'm hearing you  
25 correctly, you had kind of a minimum depth because

1 of the angle you needed to go under anyway, and  
2 based on the information you got from Coteau, you  
3 determined that was fine based on the weight of what  
4 was expected to use that road?

5 A. That's correct. We did not have to go any  
6 deeper than what we were already planning for Coteau  
7 to be able to travel across that road.

8 Q. And then you heard Commissioner Kalk's  
9 opening remarks about separating soils during  
10 construction. Can you tell us a little bit about  
11 what will be done during construction to separate  
12 the topsoil from the surface soil?

13 A. Yeah. Primarily use a two-step procedure.  
14 You'll go through and remove the topsoil all along  
15 the route and then you'll have a separate pile for  
16 that along the route, so when trenching actually  
17 begins, there will be -- that soil pile will be kept  
18 separate from the topsoil. And the same when you're  
19 going through at the end and backfilling, they will  
20 backfill from the one soil pile and do the surfacing  
21 work with the topsoil pile.

22 Q. And then once you're done, what do you do  
23 to reclaim the surface, if you will?

24 A. They will level off the surface, grade it  
25 off, and then go back and reseed it.

1 Q. And what will be in place so that people  
2 know there's a pipeline there?

3 A. We will have markers on top of the  
4 pipeline indicating its location.

5 Q. Do you know how close they'll be?

6 A. I don't know.

7 MR. ARMSTRONG: That's all the questions.

8 JUDGE FETCH: Thank you.

9 Ms. Cardwell, do you have any questions?

10 MS. CARDWELL: Yes, I have a couple.

11 EXAMINATION

12 BY MS. CARDWELL:

13 Q. On page 3 of your testimony you talk about  
14 a gas conditioning facility that will be part of the  
15 project per se, but is it my understanding that that  
16 will be AVS's responsibility?

17 A. That's correct.

18 Q. And so that won't be part of the pipeline  
19 per se?

20 A. Correct.

21 Q. And in the original application, on page  
22 3, it talks about having buildings at both the  
23 beginning and the end of the route, but on page 7  
24 I'm not seeing that you're discussing a building at  
25 the beginning of the route. Is that true or not

1 true?

2 A. The original route, when the application  
3 was originally submitted, it was anticipated that we  
4 would not be tying into DGC's pipeline in their  
5 existing gas yard. It was expected that we would  
6 have to build a separate site for that. And, now,  
7 we were able to tie into their line aboveground so  
8 we could avoid having to do that. That's the reason  
9 that we're not going to need any extra buildings at  
10 that site.

11 Q. And I'm also understanding that the need  
12 to fire the boilers will only be a couple of times a  
13 year for startup?

14 A. Yeah, the average -- on average they'll be  
15 -- I guess they'll be operating about 220 hours a  
16 year total, that would be the part where you would  
17 actually be using gas in the boilers, so a total of  
18 about 220 hours per year.

19 Q. So then does the gas -- is there a certain  
20 amount of gas that just will be in the pipeline  
21 ready to use if needed?

22 A. Yes, that's correct.

23 Q. And then is this interfering with any of  
24 the other customers of the pipeline?

25 A. No.

1 Q. Dakota Electric?

2 A. No, it is not.

3 MS. CARDWELL: That's it. Sorry. No more  
4 questions.

5 JUDGE FETCH: All right. Thank you.

6 Mr. Mather, anything else?

7 MR. MATHER: Nothing else.

8 JUDGE FETCH: All right. At this time  
9 we'll go to the Commissioners. Commissioner  
10 Fedorchak:

11 COMMISSIONER FEDORCHAK: Thank you, Judge.

12 EXAMINATION

13 BY COMMISSIONER FEDORCHAK:

14 Q. Tell me more about the automatic shutdown  
15 safety feature that's included in here. There's the  
16 line break detectors. How do those work and result  
17 in a pipeline automatically shutting down?

18 A. The way those operate is they  
19 have monitor -- monitoring pressure the entire time  
20 that the pipeline is in operation, and I'm not  
21 exactly sure of the rate, but any -- if the pressure  
22 were to drop at a certain rate, that would cause  
23 those valves to shut down. It's all electronically  
24 controlled, so there's no operator input required  
25 for that to happen.

1           Q.     Okay.  So if the line was struck, that  
2 would result in pressure decreasing and then the  
3 valves would shut down?

4           A.     That's correct.  So that would prevent any  
5 gas from our point of interconnection at DGC going  
6 into the gas line there that would have the rupture  
7 in it.

8           Q.     If there was a spark at the point of the  
9 strike, the gas would be there and it would probably  
10 -- that would result in explosion, but there  
11 wouldn't be additional fuel fed to it?

12          A.     Correct.

13          Q.     Okay.  Are there other lines under that  
14 road, other gas or water or CO2 lines under that  
15 haul road where the dragline travels; are you aware?  
16 Is this kind of the first time for doing that?

17          A.     No, the CO2 line does go underneath that.  
18 That's the largest other line, that I'm aware of,  
19 that crosses that road.  There are other utilities  
20 in that area, but they are not this large.

21          Q.     Okay.  And is this line buried at about  
22 the same depth?

23          A.     I believe that line is buried at about 15  
24 feet.

25          Q.     Obviously, there's been no problems with

1 that?

2 A. Not that I'm aware of.

3 Q. Okay. And are there any additional safety  
4 implications or concerns that you had to look at  
5 with the presence of that CO2 line so close to this  
6 in your planning and engineering design?

7 A. No, not really. The primary thing from  
8 the construction of this line, the primary concern  
9 was making sure that we knew the exact location of  
10 that and indicated it on drawings and could mark  
11 that for the construction crews so that they're  
12 aware what's going to be on in the area when they  
13 start excavating in that area.

14 Q. And if there were an explosion, would  
15 there be concerns with the CO2 line as well, or not?

16 A. Not that I'm aware of.

17 Q. I'm not aware if that would be explosive  
18 or how that is pressurized, et cetera, so --

19 A. Yeah, the -- yeah, if there were anything,  
20 I do not believe that it would damage the CO2 line.  
21 I don't anticipate that, anyway.

22 Q. And then, finally, in kind of the more  
23 random side of things, do you have any idea how many  
24 welds there will be on this pipeline? I love stats  
25 like that.



1           A.     Yes, that's correct.

2           Q.     Do you know what the FIMSA standard -- so,  
3 obviously, you're within the FIMSA standards?

4           A.     Yes.

5           Q.     And Sara asked this question about the  
6 gas. How long, roughly, would it take the gas to  
7 flow from the southern end to the northern end under  
8 normal pressure? Are we talking about a minute run,  
9 20-minute run, two-hour run?

10          A.     I'm not exactly sure how long that would  
11 be.

12          Q.     What I'm trying to get to, is when the gas  
13 is not operating -- when the gas is not being used,  
14 the line will be full of gas, I presume, is the way  
15 it's scheduled to be?

16          A.     Yes.

17          Q.     What I'm wondering is, if there's a change  
18 in protocol, if that gas wasn't being used, if that  
19 line was empty, is that something that was ever  
20 looked at to reduce -- increase safety, or is that  
21 maybe not good for pipelines to have them sit empty?

22          A.     We haven't really looked much into the  
23 operation of it. With the unknowns associated  
24 with -- you know, with unit trips, we want to make  
25 sure it's available as needed, so preference would

1 be to minimize the amount of time, I guess, we would  
2 have to wait for it.

3 Q. So the point is you want it there  
4 immediately, whether it be ten minutes or two hours,  
5 you want it to be there right away?

6 A. Correct.

7 Q. Okay. Fair enough. Why did you pick this  
8 size, a ten-inch diameter? I guess the flow rate  
9 was to match the other pipeline flow rate. But why  
10 ten inch? That seems like a pretty big line.

11 A. We selected a ten-inch line because it  
12 will meet our needs for today, obviously, but in  
13 case there were any future needs at the plant site,  
14 it was just selected based on that.

15 Q. So there has been discussion to use this  
16 gas for something else down the road?

17 A. Nothing really planned. There have been  
18 discussions about if anything were there, you know,  
19 I guess it would most likely be something that would  
20 use gas, but that's about the extent of the  
21 discussions. Nothing very detailed at all.

22 Q. So gas, electricity plant somewhere down  
23 the road?

24 A. Not that I'm aware of.

25 Q. Because the current footprint law, it

1 would be interesting to see if when these plants  
2 were sited -- I don't know. Were these plants even  
3 sited back when they were initially built, or is  
4 that before the siting law?

5 A. I'd have to defer that.

6 Q. That's not relevant to this, I guess, but  
7 just it will be interesting to see down the road if  
8 that is decommissioned to come back and site  
9 generation in there or not. It's contained in the  
10 area now, so I don't think that would be that big of  
11 a deal.

12 COMMISSIONER KALK: I believe that was all  
13 that I had. Thank you.

14 JUDGE FETCH: Thank you, Commissioner.  
15 Commissioner Christmann.

16 EXAMINATION

17 BY COMMISSIONER CHRISTMANN:

18 Q. Pretty much all my questions have been  
19 asked and answered, except for when you cross the  
20 CO2 pipeline, do you go above it or below it?

21 A. We go below it. I believe we're about 20  
22 feet below it at that point, at about 37 feet below  
23 the surface.

24 COMMISSIONER CHRISTMANN: Nothing further.

25 JUDGE FETCH: Anything further from the

1 Commission? Thank you.

2 Mr. Mather, any further questions?

3 MR. MATHER: None, Your Honor.

4 JUDGE FETCH: Mr. Armstrong?

5 MR. ARMSTRONG: No, Your Honor.

6 JUDGE FETCH: Ms. Cardwell?

7 MS. CARDWELL: No, Your Honor.

8 JUDGE FETCH: All right. Thank you,  
9 Mr. Schilke. You're excused.

10 And, Mr. Mather, I believe you have a  
11 third witness?

12 MR. MATHER: Yes, Your Honor. We have one  
13 more witness, Mr. Claude O'Berry.

14 JUDGE FETCH: Mr. O'Berry, were you here  
15 before and heard me instruct as to penalties for  
16 perjury?

17 THE WITNESS: Yes.

18 JUDGE FETCH: All right. Thank you.  
19 Please raise your right hand.

20 Do you solemnly swear the testimony you're  
21 about to give shall be the truth under the pains and  
22 penalties of perjury?

23 THE WITNESS: I do.

24 JUDGE FETCH: Thank you. Please speak up  
25 nice and loudly so the court reporter can hear you

1 back here.

2 THE WITNESS: Yes, ma'am.

3 JUDGE FETCH: Thank you. Mr. Mather.

4 MR. MATHER: Thank you, Your Honor.

5 CLAUDE O'BERRY,

6 being first duly sworn, was examined and testified  
7 as follows:

8 DIRECT EXAMINATION

9 BY MR. MATHER:

10 Q. Mr. O'Berry, please give us your name,  
11 your business address, and your occupation.

12 A. My name is Claude O'Berry. I work with  
13 Dakota Gasification Company. My work address is 420  
14 County Road 26, Beulah, North Dakota. And I am the  
15 pipeline superintendent.

16 Q. And what is your employment history with  
17 DGC, Mr. O'Berry?

18 A. I have worked at Dakota Gasification for  
19 29-and-a-half years. Of that time, the last 17  
20 years has been in a managerial capacity. During  
21 that time also I was involved with the commissioning  
22 and startup of our 205-mile CO2 pipeline.

23 Q. And how long have you been in your current  
24 position as a pipeline superintendent?

25 A. We had a reorganization, so I have been

1 currently in this position for one year.

2 Q. Okay. And could you please generally  
3 describe your responsibilities as a pipeline  
4 superintendent.

5 A. I'm responsible for the safe operation,  
6 maintenance, and the regulatory compliance of two  
7 pipelines, a 34-mile SNG pipeline and a 205-mile  
8 carbon dioxide pipeline.

9 Q. Mr. O'Berry, could you please describe the  
10 nature of your participation in this pipeline  
11 project to date?

12 A. Currently, I'm involved just kind of as an  
13 advisor to help out, to make sure the pipeline will  
14 meet regulatory compliances.

15 Q. Could you please describe the  
16 responsibilities that you anticipate you will assume  
17 when the pipeline construction has been completed?

18 A. DGC will own and operate the pipeline. We  
19 will operate the pipeline and maintain it according  
20 to 49 CFR 192. DGC will be the owners of the  
21 construction records, will also have the  
22 hydrotesting charts. Once the as-built drawings  
23 have been finalized, when the line is in, we will be  
24 able to contact the ND One-Call system and get the  
25 line into the system. Also, shortly after it's

1 done, before placing it in service, we are going to  
2 run an MFL tool, smart pig, and that way we can get  
3 an early baseline. We would be able to get where  
4 all the weld locations are, the metal thicknesses  
5 and we can implement that in our GPS system and have  
6 a good mapping system.

7 Q. Okay. Mr. O'Berry, could you please  
8 describe how the pipeline generally will be operated  
9 after it's been constructed and placed into service?

10 A. Yeah, it will provide gas to Antelope  
11 Valley Station for their startup.

12 Q. And could you please describe DGC's  
13 maintenance program for its pipelines?

14 A. Okay. On our pipelines monthly we go out  
15 and we check all the signages, make sure at road  
16 crossings and all fence lines. Every other month we  
17 check the rectifiers to ensure the cathodic  
18 protection is correctly working. Twice a year we go  
19 out and lubricate and stroke all the valves to make  
20 sure that they're properly working. Annually, we do  
21 a leak survey on our pipeline. We do a right-of-way  
22 inspection to check for erosion. We also do what's  
23 called a population density survey where we go out  
24 along the route to see if there's any new homeowners  
25 or businesses along the route. We also calibrate

1 all the transmitters to make sure that they're  
2 working correctly. And for corrosion control, we  
3 inspect our aboveground piping for atmospheric  
4 corrosion. And then we have corrosion coupons, we  
5 check those twice a year looking for any type of  
6 internal corrosion. We also every five years run  
7 what's called a smart pig.

8 Q. Could you please describe DGC's pipeline  
9 emergency response and safety program?

10 A. DGC has prepared an emergency response  
11 plan to deal with the unlikely event of a pipeline  
12 emergency. We use the nationally recognized  
13 Incident Command System, that all of the emergency  
14 responders around the country, they also use the  
15 same thing. If there was an incident, the shift  
16 superintendent on the plant site would assume the  
17 incident commander role and he would set up the  
18 command center and would most likely be in our  
19 protection services control center. We have a fully  
20 equipped ambulance and fire department. We have a  
21 staff of EMTs that help with the first-aid and  
22 medical transport. We currently provide all these  
23 services to the AVS facility and we will just expand  
24 that support to the new infrastructure. At DGC we  
25 also have a reverse 911 system. We have entered the

1 phone numbers of all what we call receptors that  
2 live within a mile of our pipeline. In case of an  
3 emergency, the reverse 911 can be activated and 24  
4 calls will instantly go out to call all landowners  
5 within that section to give them information on what  
6 the emergency is and what kind of instructions. And  
7 then this reverse 911 system, we also have all the  
8 plant workers and people that are off plant site,  
9 but on call, they will also get a call if we need  
10 extra support.

11 Q. And is it correct that you are a member of  
12 the North Dakota Pipeline Association?

13 A. Oh, yes, we are a member of the North  
14 Dakota Pipeline Association. And part of that, what  
15 they do, is they go out and do annual banquets with  
16 excavators and emergency responders and provide them  
17 information where our pipeline is at and just kind  
18 of get a good rapport with the locals.

19 Q. Mr. O'Berry, could you describe the safety  
20 systems built into the pipeline design of the  
21 natural gas pipeline?

22 A. Yes. The new pipeline will be equipped  
23 with three line break isolation valves and an  
24 emergency shutdown system at the end point on the  
25 AVS property. The valve outputs and the pipeline

1 pressure and the flow rate will also be continuously  
2 monitored by the control room operators at the DGC  
3 plant.

4 Q. Mr. O'Berry, will all aspects of the  
5 operation, maintenance, safety and emergency  
6 response relating to this proposed pipeline comply  
7 with all federal, state and local laws, rules and  
8 regulations?

9 A. Yes.

10 Q. Mr. O'Berry, does this conclude your  
11 testimony?

12 A. Yes, it does.

13 MR. MATHER: Your Honor, I tender the  
14 witness. No further questions.

15 JUDGE FETCH: Thank, you Mr. Mather.  
16 Mr. Armstrong.

17 MR. ARMSTRONG: Thank you, Your Honor.

18 CROSS-EXAMINATION

19 BY MR. ARMSTRONG:

20 Q. Mr. O'Berry, it sounds to me like as part  
21 of DGC's normal operation it already has a fairly  
22 sophisticated emergency response system onsite?

23 A. Yes.

24 Q. Is there anything different or being added  
25 for this pipeline or anything new that needs to be

1 done?

2 A. The only thing we would do is, we have an  
3 emergency response plan. We have one for CO2, and  
4 we have one specifically for a natural gas line. So  
5 what we would do is, we would add this to the extra  
6 three-and-a-half miles of our pipeline and if  
7 there's any receptors we needed to add because of  
8 the different route. Our natural gas line runs  
9 south, so if there's any added receptors, we would  
10 add them to it. We would still be within the same  
11 county, so we still have the same training with the  
12 emergency responders and within a year we would  
13 inform them of the new pipeline.

14 MR. ARMSTRONG: Okay. That's all the  
15 questions I have.

16 JUDGE FETCH: Ms. Cardwell, any questions?

17 EXAMINATION

18 BY MS. CARDWELL:

19 Q. I have just one. I'm a little bit  
20 confused about your testimony on page 4. You talked  
21 about a one-mile radius of your pipeline where you  
22 have the phone numbers. And the pipeline corridor  
23 discussed on page 2 of your pipeline emergency  
24 response plan, page 2 of Exhibit 12, says the  
25 pipeline corridor is two miles in width.



EXAMINATION

1  
2 BY COMMISSIONER FEDORCHAK:

3 Q. Yeah, Mr. O'Berry, one question for you.  
4 Any time -- so if there were an explosion on the  
5 site where there's a lot of explosive material  
6 nearby, especially at DGC, it seems to me plausible  
7 that you could have an explosion triggering a whole  
8 bunch of other explosions. So speaking to an  
9 average consumer or somebody concerned about safety,  
10 tell me what kind of precautions are in place to  
11 prevent that type of domino effect and explosions  
12 from happening.

13 A. Well, our line break valves, they're  
14 designed to -- if we had a one-inch hole in the  
15 line, the pressure would drop faster than 25 to 30  
16 pounds a minute, these valves could go shut, which  
17 would isolate the gas source. The firefighting  
18 techniques, residential firefighting is you go in  
19 and put the fire out. Industrial firefighting  
20 techniques are you keep the area around it cool and  
21 safe, so if that was to happen, we would make sure  
22 that the surrounding areas were safe and kept cooled  
23 off so you wouldn't have a meltdown or anything like  
24 that.

25 Q. And at DGC some of the other by-products

1 that are produced are -- is anhydrous ammonia one of  
2 them?

3 A. Yes, ma'am.

4 Q. Where is that stored on that map in  
5 relation to this line? Can you kind of go through  
6 some of that on the map?

7 A. Sure. Okay. This is the entrance into  
8 the plant. Right here is where our storage is for  
9 ammonia, right here (indicating).

10 JUDGE FETCH: And, again, try to be as  
11 descriptive as possible where it's located for the  
12 record.

13 THE WITNESS: Okay. It would be on the  
14 south center of the plant, right at the entrance.  
15 And then the pipeline is across the highway, County  
16 Road 26, over this way.

17 Q. (COMMISSIONER FEDORCHAK CONTINUING) About  
18 how far would you say that is?

19 A. I guess I don't know for sure. I know we  
20 had 500 feet, you know, so it's well over 500 feet.

21 Q. Any other explosive material on the DGC  
22 site close to the pipeline?

23 A. All our -- this is all our storage areas  
24 right in here, so they would all be on the other  
25 side of the ammonia storage tank.



1 way we decided a safer way to do it was to come off  
2 of DGC's facility where we have some aboveground  
3 piping there so it was easy to make a real clean  
4 tie-in there and keep our facility all aboveground  
5 before we went under farther north. Other than  
6 that, being that I've dealt with pipelines for 30  
7 years, you know, and I know -- I feel that we are  
8 looking at every safety aspect for the pipeline, so  
9 there really wasn't too many other concerns.

10 Q. All right. Thank you. Maybe try to learn  
11 for you a little bit, too. I always like those kind  
12 of opportunities.

13 Will you need any additional workers to  
14 pick up this workload based on this three-mile  
15 pipeline?

16 A. I currently have three pipeline  
17 technicians and two supervisors. We take care of  
18 the pipeline we have now. And due to the proximity  
19 of it to the pipe -- to the plant, we really don't  
20 foresee any more added staff.

21 Q. Okay. The current line that's in  
22 operation, how do you report the third-party  
23 damages, if you will? If someone hits your line, do  
24 you notify One-Call, or do you call us, because  
25 we've never, to my knowledge, had any complaints

1 filed by you for violations of One-Call on the line.  
2 Has your line ever been hit over the years?

3 A. Our CO2 line was hit two years ago. And  
4 because it was a CO2 line that was governed by  
5 FIMSA, it was reported to the federal agency, but  
6 our SNG line, because of the proximity of it and  
7 it's all rural, very few homeowners along the way,  
8 very little activity going on in that area of the  
9 plant or that area of the county as opposed to when  
10 you go out west, so we haven't had any third-party  
11 problems at all with our pipeline.

12 Q. Knock on wood; right?

13 A. Yes.

14 Q. Our PSC inspectors, did you meet Al Mack  
15 over the years?

16 A. Yes, sir, I've worked with him.

17 Q. So how often do our PSC people usually  
18 show up to see you?

19 A. They generally make a visit at least once  
20 a year. Now there's a new one, Aaron. He's been by  
21 twice already since he started.

22 Q. Okay. How do you keep track of the  
23 changes that come down from FIMSA on pipeline  
24 operations?

25 A. We have a compliance department and one of

1 its responsibilities is to keep track of federal  
2 regulations. I myself, I also keep track of federal  
3 regulations and I go to different conferences and  
4 keep up on it that way.

5 Q. Because most of the thing we do at the  
6 PSC, we don't typically make any pipeline safety  
7 regulations, we just take the federal ones and  
8 incorporate them.

9 A. Yes.

10 Q. Thank you for your clarification about the  
11 FERC. I also called one of our gurus on it. And  
12 the question I was talking about was that Alliance  
13 Pipeline is adding a line, three-mile addition to  
14 their pipeline, and they're going in front of FERC  
15 for the siting on that. And so I wanted to just  
16 clarify for my own knowledge and others is companies  
17 have the right to request whether to FERC file it or  
18 else the PSC, but inherently it's a state's right,  
19 but in the case of Alliance, they want to go after a  
20 FERC tariff so they were having FERC do the siting  
21 on that. That was something I learned today that I  
22 thought was worthwhile to bring up.

23 COMMISSIONER KALK: I think that was it.  
24 Thank you.

25 JUDGE FETCH: Thank you, Commissioner.

1 Commissioner Christmann.

2 COMMISSIONER CHRISTMANN: Thank you, Your  
3 Honor.

4 EXAMINATION

5 BY COMMISSIONER CHRISTMANN:

6 Q. Mr. O'Berry, as you know, being from  
7 Mercer County here, we don't get too much of a  
8 chance to learn day-to-day about natural gas lines  
9 since we don't have any access to them. So help me  
10 with some basic things.

11 Where do you meter -- like, is there a  
12 meter when it leaves DGC and another meter when it  
13 gets to AVS and so you subtract the difference and  
14 know there's a loss if there were a leak, or what?

15 A. Well, for metering for the sale, our  
16 natural gas line facility, we meter it in Hebron  
17 where we turn it over to the Northern Border  
18 Pipeline. And in this case with AVS we would have  
19 the meter on their property at the end of the line.  
20 We have orifice plates there so we can meter there.  
21 Other than that, we watch the flow rates, so if  
22 they're not in startup, there should be no flow and  
23 our operators will be monitoring that at all times.

24 Q. And if there were a small leak, like, that  
25 wasn't caused by a contractor or something that you

1       could visually notice that they had done something,  
2       you're putting out a lot of gas and sending it to  
3       Hebron, how would you notice that? Does gas come  
4       bubbling up out of the ground somehow, or how do you  
5       know if there's a small leak?

6           A.     Yeah, it would be -- bubbling is a good --  
7       the soil would kind of bubble like that, depending  
8       on the size of the leak. If it was larger, then you  
9       would have more of an external leak. We do monthly  
10      routes, check our pipeline and check for signs and  
11      stuff like that, so as the guys are doing the sign  
12      checks and the different things, they're always  
13      looking over the right-of-way checking to see what's  
14      out there.

15          Q.     And it naturally wants to come up to the  
16      ground surface?

17          A.     Yeah, eventually it will make its way to  
18      the top.

19                  COMMISSIONER CHRISTMANN: I have nothing  
20      further. Thank you.

21                  JUDGE FETCH: Thank you. Any further  
22      questions from the Commission? All right. Thank  
23      you.

24                  Mr. Mather, any further questions?

25                  MR. MATHER: No further questions, Your

1 Honor.

2 JUDGE FETCH: Mr. Armstrong?

3 MR. ARMSTRONG: No further questions.

4 JUDGE FETCH: Ms. Cardwell?

5 MS. CARDWELL: No further questions.

6 JUDGE FETCH: Thank you, Mr. O'Berry.

7 THE WITNESS: Thank you.

8 JUDGE FETCH: Did you have another  
9 witness?

10 MR. MATHER: No, Your Honor, that  
11 concludes our presentation.

12 JUDGE FETCH: Okay. Then there's the  
13 matter of the late-filed exhibit. Have we cleared  
14 that up or do we still wish to have -- what was that  
15 Exhibit 13, Mr. Armstrong?

16 MR. ARMSTRONG: Exhibit 13 is going to be  
17 a certificate related to House Bill 1147 issues.

18 JUDGE FETCH: And that we have labeled and  
19 expect. Were there any other possible late-filed  
20 exhibits?

21 COMMISSIONER KALK: We needed more  
22 information about the FERC question, and that was  
23 answered.

24 MR. MATHER: That's our understanding as  
25 well.

1 JUDGE FETCH: Any further testimony at  
2 all?

3 MR. MATHER: Just a point of  
4 clarification. Will Mr. Armstrong prepare the  
5 proposed late-filed Exhibit 13?

6 MR. ARMSTRONG: Yes.

7 MR. MATHER: In that case we are  
8 concluded. We are done with our presentation.  
9 Thank you all.

10 JUDGE FETCH: Anything further?

11 MR. ARMSTRONG: No, Your Honor.

12 JUDGE FETCH: Okay. If there's nothing  
13 further to present in the way of evidence today,  
14 does the Commission want briefs filed or proposed  
15 findings?

16 MR. ARMSTRONG: Your Honor, we'd request  
17 the applicant submit proposed findings for review.

18 MR. MATHER: That's fine with us.

19 JUDGE FETCH: All right. Dakota  
20 Gasification will prepare proposed findings.

21 MR. MATHER: Yes, ma'am.

22 JUDGE FETCH: Anything else?

23 MR. ARMSTRONG: Nothing.

24 MR. MATHER: Nothing further.

25 JUDGE FETCH: All right. If there's

1 nothing else, then I will close this meeting.

2 COMMISSIONER KALK: Your Honor?

3 JUDGE FETCH: Yes, Commissioner Kalk.

4 Sorry.

5 COMMISSIONER KALK: I know no one has  
6 physically entered the room per our visual, but can  
7 we just ask one more time to button the record up?

8 JUDGE FETCH: Thank you. I will ask.  
9 There's nothing further from the company. Is there  
10 a member of the public or anyone out there in the  
11 audience who wishes to come forward and present any  
12 testimony for the Commission or comments? All  
13 right. I'm not hearing anything or seeing anyone  
14 wave their hands. So thank you for reminding me.  
15 It's getting a little late in the day.

16 COMMISSIONER KALK: Commissioner Fedorchak  
17 actually reminded me.

18 JUDGE FETCH: Well, there you go. Came  
19 right down the pipeline. That will conclude the  
20 hearing, and that's my final comment. It is 3:35  
21 p.m., Central Time, on June 13th, 2013. This  
22 hearing is closed. Thank you.

23 (Concluded at 3:35 p.m., the same day.)

24

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25

CERTIFICATE OF COURT REPORTER

I, Linda L. Gingery, a Registered  
Professional Reporter,

DO HEREBY certificate that I recorded in  
shorthand the foregoing proceedings had and made of  
record at the time and place hereinbefore indicated.

I DO HEREBY FURTHER certificate that the  
foregoing typewritten pages contain an accurate  
transcript of my shorthand notes then and there  
taken.

Dated at Bismarck, North Dakota, this 3rd  
day of July, 2013.

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Linda L. Gingery  
Registered Professional Reporter



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