BEFORE THE OHIO POWER SITING BOARD

- - -

In the Matter of the :
Application of The Ohio :
State University for a :
Certificate of :
Environmental :

Compatibility and Public : Case No. 19-1641-EL-BGN

Need to Construct a :
Combined Heat and Power :
Facility in Franklin :
County, Ohio. :

PROCEEDINGS

before Ms. Sarah Parrot, Administrative Law Judge, Ohio Power Siting Board, called at 10:00 a.m. on Wednesday, July 15, 2020.

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Volume II

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364 1 Wednesday Morning Session, 2 July 15, 2020. 3 ALJ PARROT: Let's go on the record. 4 5 Good morning, everyone. This is the 6 continuation of the hearing in Case No. 7 19-1641-EL-BGN. 8 Let's start with brief appearances of the 9 parties starting with the Applicant. 10 MR. ALEXANDER: Good morning. This is Trevor Alexander and Steve Lesser from the law firm 11 12 of Calfee, Halter & Griswold on behalf of The Ohio 13 State University. 14 ALJ PARROT: Thank you, Mr. Alexander. On behalf of the Sierra Club. 15 16 MS. WACHSPRESS: Today we have Megan 17 Wachspress and Tony Mendoza on behalf of Sierra Club. 18 ALJ PARROT: Thank you. And finally on 19 behalf of the Staff of the Ohio Power Siting Board. 20 MR. LINDGREN: Thomas G. Lindgren and 2.1 Werner Margard, Assistant Attorneys General. 2.2 ALJ PARROT: Thank you very much. 23 Are there any preliminary issues that the 24 parties have at this point? 25 All right. Hearing nothing, I think we

had finished yesterday with Sierra Club's witness, so at this point I believe I will turn things over to Staff.

4 MR. LINDGREN: Thank you, your Honor.

5 And if this is a good time, could we go ahead and

6 mark all of the Staff testimony?

7 ALJ PARROT: That's fine. Yeah, if you 8 wish.

9 MR. LINDGREN: Yeah. I think that would 10 be good.

11 ALJ PARROT: Go ahead.

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MR. LINDGREN: I believe we have already
marked the Staff Report as Exhibit A and that's
already been admitted into the evidence.

ALJ PARROT: That's correct.

MR. LINDGREN: Thank you. And next we would like to have marked as Staff Exhibit B the testimony of Robert Holderbaum.

ALJ PARROT: So marked.

(EXHIBIT MARKED FOR IDENTIFICATION.)

MR. LINDGREN: Staff Exhibit C will be the testimony of Andrew Conway.

ALJ PARROT: So marked.

(EXHIBIT MARKED FOR IDENTIFICATION.)

MR. LINDGREN: Staff Exhibit D will be

366 the testimony of Tyler Conklin. 1 2 ALJ PARROT: Very good. 3 (EXHIBIT MARKED FOR IDENTIFICATION.) MR. LINDGREN: Staff Exhibit E will be 4 5 the testimony of Eric Morrison. ALJ PARROT: So marked. 6 (EXHIBIT MARKED FOR IDENTIFICATION.) 7 MR. LINDGREN: Staff Exhibit F will be 8 9 the testimony of Grant Zeto. 10 ALJ PARROT: Okay. 11 (EXHIBIT MARKED FOR IDENTIFICATION.) 12 MR. LINDGREN: Staff Exhibit G will be 13 the testimony of Matt Butler. 14 ALJ PARROT: All right. (EXHIBIT MARKED FOR IDENTIFICATION.) 15 MR. LINDGREN: Staff Exhibit H will be 16 17 the testimony of Jason Cross. 18 ALJ PARROT: Okay. 19 (EXHIBIT MARKED FOR IDENTIFICATION.) 20 MR. LINDGREN: Staff Exhibit I will be 2.1 the testimony of Paul Nathan Spahr. 2.2 ALJ PARROT: All right. 23 (EXHIBIT MARKED FOR IDENTIFICATION.) 24 MR. LINDGREN: Staff Exhibit J will be 25 the testimony of Jon Pawley.

367 ALJ PARROT: So marked. 1 2 (EXHIBIT MARKED FOR IDENTIFICATION.) 3 MR. LINDGREN: Staff Exhibit K will be the testimony of Mark Bellamy. 4 5 ALJ PARROT: Okay. 6 MR. LINDGREN: And Staff Exhibit L will 7 be the testimony of Allison DeLong. 8 ALJ PARROT: Okay. So marked. 9 (EXHIBIT MARKED FOR IDENTIFICATION.) 10 MR. LINDGREN: And the parties have 11 agreed to waive cross-examination and stipulate to 12 the admission of Staff Exhibits D through L. 13 ALJ PARROT: Let's go off the record for 14 a moment. (Discussion off the record.) 15 16 ALJ PARROT: So let's go back on the 17 record. 18 Mr. Lindgren, we had a technical blip 19 there for a moment. You were representing that 20 the -- it was your understanding the parties had 2.1 agreed to admit some of this testimony and waive the 22 right to cross-examination of some of these witnesses 23 so let's pick that up again, please. 24 MR. LINDGREN: Yes. The parties have 25 agreed to stipulate to the admission of Staff

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     Exhibits D, E, F, G, H, I, J, K, and L.
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                 ALJ PARROT: Okay. And any issues?
 3
     Objections? Is that consistent with the other
    parties' understanding of the agreement reached?
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 5
                 Mr. Alexander?
                 MR. ALEXANDER: Mr. Lindgren is correct,
 6
 7
     your Honor.
 8
                 ALJ PARROT: Okay. And Ms. Wachspress?
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                 MS. WACHSPRESS: Mr. Lindgren is correct.
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                 ALJ PARROT: All right. Very good. With
     that Staff Exhibits D as in dog through L are
11
12
     admitted into the record at this time.
13
                 (EXHIBITS ADMITTED INTO EVIDENCE.)
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                 MR. LINDGREN: Thank you.
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                 ALJ PARROT: All right. If there's
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     nothing else, Mr. Lindgren, you may call your
17
    witness.
                 MR. LINDGREN: Thank you. The Staff
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19
     calls Robert Holderbaum to the stand.
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                 ALJ PARROT: All right. Give me just a
2.1
    minute.
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                 MR. LINDGREN: I hope he's connected.
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                 ALJ PARROT: All right. I think I have
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     done what I need to on my end to get him situated.
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                 Mr. Holderbaum, can you hear me?
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369 1 MR. HOLDERBAUM: I can. Can you see or 2 hear me? 3 ALJ PARROT: I can hear you. Let's see. Get your video feed started. There you are. Very 4 5 good. 6 Can everyone see the witness, hear the 7 witness? All right. Very good. Go ahead, Mr. Lindgren. 8 9 MR. LINDGREN: Thank you. ALJ PARROT: Actually hang on. Sorry. 10 11 Spoke too soon. 12 Mr. Holderbaum, let's get you officially 13 sworn in. (Witness sworn.) 14 15 ALJ PARROT: Very good. Thank you, 16 Mr. Lindgren. 17 MR. LINDGREN: Thank you. 18 19 ROBERT HOLDERBAUM 20 being first duly sworn, as prescribed by law, was 2.1 examined and testified as follows: 22 DIRECT EXAMINATION 23 By Mr. Lindgren: 24 Q. Good morning, Mr. Holderbaum. 25 A. Good morning.

- Q. Where are you employed, sir?
- A. I am employed at the Public Utilities
 Commission of Ohio.
 - Q. And what's your business address?
- 5 A. 180 East Broad Street, Columbus, Ohio 6 43215.
- 7 Q. Thank you. And what was your role with 8 respect to the application in this proceeding?
- 9 A. I was the overall staff lead for the project.
- 11 Q. Thank you. Did you prepare testimony in this proceeding?
- 13 A. I did.

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- Q. Thank you. Do you have any changes or corrections to that testimony?
- 16 A. I do not.
- 17 Q. Thank you.
- MR. LINDGREN: For the record -- for the record that testimony has been marked as Staff

 Exhibit B.
- Q. So if I were to ask you all the same questions this morning, would your answers be the same?
- 24 A. Yes.
- MR. LINDGREN: Thank you.

I have no further questions, and the witness is available for cross-examination.

ALJ PARROT: Thank you, Mr. Lindgren.

Ms. Wachspress, are you ready?

MS. WACHSPRESS: Yes. Yes, your Honor.

ALJ PARROT: All right. Very good.

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CROSS-EXAMINATION

By Ms. Wachspress:

- O. Hello, Mr. Holderbaum.
- A. Good morning.
- Q. Good morning. So you -- you state in
 your testimony that you were the project lead for the
 Staff evaluation of this project, correct?
 - A. Correct.
 - Q. So you would be familiar with the research conducted not only yourself but by other members of Staff, correct?
- A. Generally in what they did, yes.

 Specifics about everything they researched, probably
 not.
 - Q. So in -- in review of this case, did you or anyone on the Staff review the ecological impacts of carbon emissions?
- 25 A. I did not. I know that our Staff member

who is set to testify after me worked with the Ohio EPA and with the air emissions. That's about as far as my knowledge of that goes.

- Q. Did you or anyone on the Staff review the ecological impacts of the extraction of natural gas for the proposed facility?
 - A. No.

2.1

- Q. Did you or anyone on your Staff review the ecological impacts associated with particulate matter at issue?
- A. I'm not sure if you can hear me.

 Everything is kind of froze on my end.
- Q. It's froze on my end as well. I guess it is a relief it is not the computer.
 - A. I didn't hear that full question, I'm sorry.
 - Q. Oh. I'll ask it again. Did you review the -- did you or anyone on your -- on the Staff review the ecological impacts associated with the particulate matter at issue?
 - A. My knowledge of that would be the Applicant is, you know, required to get the appropriate permit from the Ohio EPA for that, and our review saw that they did that. That's about as far as I know.

- Q. So your review of air pollutant emissions was limited to confirming that the Applicant applied for and received the relevant permit, correct?
- A. That and what the Applicant provided in their application, yes.
- Q. In -- in your review of the case, did you or anyone else on Staff consider the costs and benefits of -- of heated hot water systems as a means of supplying OSU's heating needs?
 - A. Can you be more specific?

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- Q. Is there something in the question that -- that's --
- 13 A. The cost and benefits to OSU, I'm sorry.

 14 It's still a little breaking up on my end. I'm

 15 sorry.
 - Q. Okay. In your review of the -- of this case, did you or anyone else on Staff consider the costs and benefits of heated hot water systems as a means of supplying OSU's heating needs?
 - MS. WACHSPRESS: Your Honor, I don't know -- this is -- I keep going in and out. I'm not sure if there is any way to address this --
- THE WITNESS: It's happening to me too.
- MS. WACHSPRESS: -- prior to continuing.
- 25 ALJ PARROT: I am going to guess -- I

think this may still -- I think it looks like Ms. Fischer had tried to sort of take back the host role, and then she just gave that back to me so maybe that will hopefully address the issue. So let's go ahead and do our best I think to proceed. And then 6 if it keeps happening though, then we will kind of take a break and see if we can figure out what's really going on, but I think it looks like everyone is with me.

MS. WACHSPRESS: Okay.

11 ALJ PARROT: Mr. Holderbaum, can you hear 12 okay right now?

THE WITNESS: I can.

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14 ALJ PARROT: Okay. Let's hope this 15 works.

All right. Let's go ahead. And I think, Ms. Wachspress, maybe if you can just start again with your question.

- (By Ms. Wachspress) In your review of this case, did you or your Staff consider the costs and benefits of OSU converting to a heated hot water system to serve its heating needs?
- 23 We, you know, considered what they Α. 24 provided in the application as the cost and benefits, 25 yes.

- Q. And did they provide information in the application relating to the use of heated hot water as a means of providing their heating?
- A. Did they provide general information or?

 I'm not exactly sure what you are asking.
- Q. Did they provide any information in their application regarding the cost and benefits of converting to heated hot water as an alternative to steam for their heeding needs?
 - A. I don't -- I'm not sure.
- Q. In your review of the case, did you or anyone on your Staff consider the cost and benefits associated with the use of solar or wind for electrical generation?
 - A. No.

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- MS. WACHSPRESS: If you will give me one moment.
- A. Can you hear me?
- MS. WACHSPRESS: Yeah, I can hear you.
- Okay. Thank you very much for your time.
- 21 That's all I have.
- 22 THE WITNESS: All right. I couldn't
- 23 tell. Everybody was cutting out on my stream there.
- 24 I wasn't sure what was going on.
- 25 ALJ PARROT: All right. Mr. Alexander?

376 1 MR. ALEXANDER: Your Honor, can you hear 2 Your Honor, can you hear me? ALJ PARROT: Kind of. 3 MR. ALEXANDER: Okay. I am trying again. 4 5 ALJ PARROT: Okay. Go ahead. MR. ALEXANDER: I have no questions. 6 7 ALJ PARROT: Okay. Thank you. 8 Mr. Lindgren, any redirect? 9 MR. LINDGREN: Briefly. 10 11 REDIRECT EXAMINATION 12 By Mr. Lindgren: 13 Q. Mr. Holderbaum, did you consider --14 consider the -- outside the application, the 15 possibility of wind or solar generation? 16 ALJ PARROT: Mr. Lindgren, I think we are 17 still having issues here. All right. I am going --18 just give me 5 minutes, everyone. Hold tight. Take 19 a quick break if you need one already. I am going to 20 see if this is on our end of things or what's going 2.1 on so hold tight. 22 (Discussion off the record.) 23 ALJ PARROT: Let's go ahead, 24 Mr. Lindgren, and pick up with your redirect again.

MR. LINDGREN: Thank you. Your Honor, I

377 am going to withdraw that last question, and I have 1 2. no redirect. ALJ PARROT: No redirect, all right. 3 Very good. 4 5 Well, with that --MR. LINDGREN: Your Honor, I would move 6 7 for the admission of Mr. Holderbaum's testimony. ALJ PARROT: Okay. Very good. Are there 8 any objections to the admission of Staff Exhibit B as 9 10 in boy? 11 MS. WACHSPRESS: No, your Honor. 12 MR. ALEXANDER: Not from Ohio State. 13 ALJ PARROT: Staff Exhibit B is admitted. 14 (EXHIBIT ADMITTED INTO EVIDENCE.) 15 ALJ PARROT: Thank you, Mr. Holderbaum. 16 THE WITNESS: Thank you. ALJ PARROT: Give me just a minute. All 17 18 right. Very good. I think we're good. 19 Mr. Lindgren. 20 MR. LINDGREN: Your Honor, Mr. Margard 2.1 will be calling our next witness. 2.2 ALJ PARROT: Okay. Very good. 23 Mr. Margard. 24 MR. MARGARD: Thank you, your Honor.

Staff would call Mr. Andrew Conway.

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                 ALJ PARROT: All right. Give me just a
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     minute.
                 All right. Mr. Conway, can you hear me?
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                 MR. CONWAY: Yes.
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                 ALJ PARROT: All right. Very good. If
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     could you raise your right hand.
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                 (Witness sworn.)
                 ALJ PARROT: Very good. Mr. Margard.
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                 MR. MARGARD: Thank you, your Honor.
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11
                         ANDREW CONWAY
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    being first duly sworn, as prescribed by law, was
     examined and testified as follows:
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14
                       DIRECT EXAMINATION
15
     By Mr. Margard:
16
               State your name, please.
            Q.
17
            Α.
                Andrew Conway.
18
                And by whom are you employed and in what
            Q.
19
     capacity?
20
            Α.
                 I am employed by the Public Utilities
2.1
     Commission as an engineering specialist.
22
                 Mr. Conway, do you have before you what's
            Q.
    been marked as Staff Exhibit C?
23
24
                 Yes, I do.
            Α.
25
            Q. Can you identify that for us, please.
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- A. That's my prefiled testimony -- written testimony.
 - Q. And was this prepared by you or at your direction?
 - A. Yes, it was.

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- Q. Do you have any corrections or changes of any kind to that testimony as filed?
- A. Yes. I have two corrections. On page 3, question and answer 8, line 18. It reads "Yes.

 Initially, I consulted by sending an e-mail on
- 11 12/13/27/201." I would like to change that 12/13, the phrase of numbers, to "12/13/2019."
- Q. Thank you. And you had a second correction?
- A. Yes. On -- on page 5, question and answer 10, line 22, after the word "surroundings," there should be a paragraph break. And where it begins "This condition is," that should be a new paragraph.
- Q. No change to the substance of the answer, just to form?
- 22 A. Correct.
- Q. Thank you very much. Any other changes or corrections of any kind?
- 25 A. No.

Q. And if I were to ask you the same questions contained in your testimony as written there, would your responses today be the same?

A. Yes.

Q. And in your opinion are those responses true, accurate, and reasonable?

A. Yes, they are.

MD MADCARD: Who

MR. MARGARD: Thank you, sir. Your
Honor, I respectfully move for the admission of
Mr. Conway's testimony, subject to cross, and tender
the witness for that purpose.

ALJ PARROT: Thank you, Mr. Margard.

Any questions for this witness,

Ms. Wachspress?

2.1

MS. WACHSPRESS: Yes, your Honor.

CROSS-EXAMINATION

18 By Ms. Wachspress:

- Q. Mr. Conway, you were responsible for the environmental impact analysis for the proposed facility as part of the Staff Report, correct?
- A. I was -- I wrote the portions of the Staff Report pertaining to the project description, wind velocity, public safety, fire protection system, air, water, solid waste, and aviation section, the

water conservation section, and I also sponsored the three conditions.

2.1

- Q. All right. Were you responsible for reviewing the proposed facility's compliance with Section 4906 10(A)(2) and (A)(3)?
- A. Yeah, portions of that, not the complete (A)(2) and not the complete (A)(3). I wrote portions of the -- I was the primary analyst -- analyst for the sections of that -- of that (A)(2) and (A)(3) that you mentioned.
- Q. And if I could direct your attention to page -- the question 9 of your testimony at page 5; page 5, line 8.
 - A. Yes. I see that.
- Q. Okay. And you state "I was able to glean the nature of the probable environmental impacts, determine if the Applicant minimized those adverse environmental impacts from the CHP facility, and whether the Applicant would likely comply with Ohio's air pollution, water pollution, solid waste, and aviation regulations," correct?
 - A. Yes. For my section, yeah, I wrote that.
- Q. Okay. And when you say that you were able to determine if the Applicant minimized those adverse environmental impacts, to what are you

comparing the CHP facility?

2.1

- A. Environmental is -- is -- is a broad definition, and we look at not just the ecological impacts but a wide range of impacts, roads and bridges, archeological impacts, threatening endangered species. The sections that I wrote which were the wind velocity; the public safety; the air, water, solid waste, and aviation impacts; the water conservation, just to name a few, that's what we -- we define environmental as a broad impact so I was able to determine that the sections that were -- I analyzed those were minimized.
- Q. Minimized as to what? Excuse me.

 Minimized relative to what?
 - A. Minimization is -- can be categorized in totality of the project. We look at the size; the acreage of the project, it's only 2 acres; looked at the air pollution, what technologies they have in place, just to name a few. Minimization is typically we see an applicant can minimize its impact in at least three ways. It could avoid the impact, they could minimize or lessen the impact, or they could mitigate the impact which would be to put some sort of control technology or have a plan in place.

So I looked at this particular

application, the proposal in front of me, and made sure that they had those state-of-the-art technology, plans in place, at least for my sections, and then Staff as a team looked at all -- all of the impacts, all the environmental impacts from the facility and -- and produced the Staff Report.

2.1

- Q. Did you compare the project's environmental impacts to a plan if the University made the conversion to a heated hot water system?
- A. Partially on Table -- I believe on page 39 of the application, Table 9, the Applicant proposed a -- a no CHP option and that didn't have some of the flexibility, didn't -- had significant costs so that was an option that we analyzed.

I'm sorry. You were muted.

- Q. But so do you understand the no CHP option in Table 9 to represent the conversion to a heated hot water system by OSU?
- A. That was one of the options that the Applicant provided and we analyzed it.
- Q. Could you direct me to where on -- in the application the Applicant makes reference to conversion to a heated hot water system with respect to the application?
 - A. On Table 9, it looks like eighth column

- down, "steam to hot water -- HH water conversion," that line has heated hot water as an option.
- Q. Yes. And if I am correct, could you tell me what it says under the no CHP option for that line, heated hot water conversion?
 - A. It says "No."

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- Q. No. And then if you go over to the next column, it says "Major asset to enable heated hot water switch," correct?
 - A. That's correct.
- Q. So is it accurate to say that this table describes -- compares a scenario in which there is no steam to heated hot water conversion to a scenario in which the CHP is built and there is the option of conversion in the future?
- A. Yeah. The CHP is -- gives them that flexibility.
 - Q. Okay. So you did not compare the construction of the CHP facility as an alternative -- as an alternative to doing the conversion now and utilizing alternative forms of generation?
- A. No. That's not the proposal in front of us. The proposal is a CHP facility.
 - Q. So in assessing whether it minimized the environmental impacts of the proposed facility, you

did not compare those environmental impacts to the alternative of heated hot water?

- A. Could you repeat the -- rephrase the question? I didn't understand.
- Q. So in concluding that the Applicant had minimized the environmental impacts, you did not compare the environmental impacts of the proposed facility to a heated hot water facility?

MR. ALEXANDER: Your Honor, could I have that question read, please.

11 (Record read.)

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MR. ALEXANDER: I am going to object as to vagueness. I don't know what a heated hot water facility is in this context.

MS. WACHSPRESS: I can try again, your Honor.

ALJ PARROT: All right.

Q. (By Ms. Wachspress) So in concluding that the proposed facility minimized environmental impacts, you did not compare the proposed facility to a heating system that utilizes heated hot water.

MR. ALEXANDER: Objection, incomplete hypothetical. There is no such alternative that's been introduced and, therefore, we can't ask the witness whether he did a comparison to something

that's purely hypothetical.

2.1

MS. WACHSPRESS: Your Honor, I think the record is replete with examples of heated hot water conversions performed by other universities to facilitate the use of geothermal and heat exchangers. In fact, it was Applicant's own materials.

ALJ PARROT: Overruled.

A. No. The steam production -- and I direct you to page 7 of the Staff Report on the steam production. "The steam produced in the CHP facility would be used in any of the following combinations: To produce electrical power in the steam turbine generator, supplement the existing main campus steam network, or produce hot water heating through the heat exchanger to feed a new district heating and cooling system." So they are going to use heated hot water.

The Applicant did propose alternatives.

One such example was listed on Table 9, page 39. But the proposal in front of us is a CHP system, so we -- when we look at minimizing the adverse environmental impact, Staff looks at not just one particular option or one category, but environmental impacts as far as it's used by OPSB Staff is a whole host of environmental impacts such as the size of the

facility, the impact to the grid, the sections that I analyzed, water, conservation practice, wind velocity, so we looked at all of those impacts, not just -- not just one.

2.1

Your question is a little difficult to answer in its -- in that they did consider a hot -- HHW system they are going to use at -- and then Table 9 indicates that they have the ability to use that in the future so that is -- that is an option.

- Q. So to refer to page 7 of the Staff
 Report, you state -- the Staff Report reads that "or
 produce hot water heating through a heat exchanger to
 feed a new district heating and cooling network." Is
 it correct to say that that heated hot water system
 will actually be heated by steam generated through
 the CHP facility and not through heated hot water
 that's generated directly through other heating
 mechanisms?
- A. Yes. The steam production will go towards heating that hot water.
- Q. Okay. So just -- so the record is clear, you did not compare the environmental impact of this facility as to -- as opposed to an alternative that as of the present moment, or subject to construction, utilizes heated hot water in combination with

geothermal or heat exchangers as a way of providing the University's heating needs?

2.1

MR. ALEXANDER: Objection, your Honor.

Once again, there is no such geothermal or other
generation source at issue in this case, therefore,
there would be nothing to compare it to.

MS. WACHSPRESS: Your Honor, I feel like we are going in circles. I just asked this question. I got an answer that was marginally responsive, and I asked it again. We are having the same objection on the same issue.

ALJ PARROT: Overruled. If the witness has not done that investigation, the witness can say that.

A. Could you repeat the question, please?

MS. WACHSPRESS: I'm sorry, Ms. Gibson.

Could you -- could you read it back.

(Record read.)

A. I did research geothermal to an extent.

I found that the University did install geothermal a few years ago and it seemed to be overbudget. And then also on page 17 of the application from -- page 16, "These cavernous zones" -- at the bottom line "These cavernous zones created many problems during well development for this geothermal project

including guisers spouting out previously drilled 1 2 holes while drilling new wells." So there were some issues with the geothermal project that was -- that 3 was begun or initiated a few years ago at the 4 5 University. The proposal in front of us is a 6 combined heat and power project, so we looked at that 7 project and we looked at the technology that they would install and we -- we did not look at -- we 8 9 didn't propose another alternative for the Applicant. 10 We -- they proposed a CHP project. We looked at it. 11 We looked at what was proposed in front of us. 12 So your conclusion that the proposed Ο. 13 facility minimize -- represents the minimum adverse 14 environmental impacts is not based on a comparison 15 you did to a facility as an alternative? 16 MR. ALEXANDER: Object, asked and 17 answered. 18 MS. WACHSPRESS: I am trying to clear up 19 the record, your Honor. 20 ALJ PARROT: Overruled. I think it's a 2.1 better question. 2.2 Go ahead, Mr. Conway.

(Record read.)

THE WITNESS: Could I have the question

23

24

25

read back, please?

A. I think I already answered that. The reason that we didn't propose -- or we didn't analyze another completely different technology for electric generation and steam needs other than the -- excuse me, the -- we looked at the no CHP option as one example. And we researched at least the geothermal project, found some difficulties. But we looked at the proposal in front of us, the CHP and whether it minimized adverse environmental impacts considering -- wait a minute, considering the state of the available technology and the nature and economics of the various alternatives and other pertinent considerations. So we looked at that.

- Q. Okay. Thank you. If you give me just one moment. Do you -- you state as part of your testimony you contacted Columbia Gas as part of your investigation, correct?
 - A. That's correct.

2.1

2.2

- Q. And as -- did you inquire into the source, the likely source for the fuel to be used at the proposed facility?
 - A. Yes. I researched the source.
- Q. And is that source likely to be fracked gas from shale deposits?
 - A. It can be. It could also be there is

- a -- there is a connection from Lebanon, Ohio, which
 is in southwest Ohio to the Columbus area which
 has -- is a hub where multiple pipelines intersect,
 and it can be -- can be from Colorado or the Gulf as
- Q. Did you inquire into the environmental impacts associated with the extraction and
- 8 transportation of that gas?
- 9 A. No.

well.

- MS. WACHSPRESS: Thank you, your Honor.
- 11 I think that's it for me.
- 12 ALJ PARROT: Any questions for this
- 13 | witness, Mr. Alexander?
- MR. ALEXANDER: No questions, your Honor.
- 15 | Thank you.
- 16 ALJ PARROT: All right. Any redirect,
- 17 Mr. Margard?
- MR. MARGARD: No, no redirect. Thank
- 19 you, your Honor.
- 20 ALJ PARROT: Okay. Very good.
- 21 MR. MARGARD: I respectfully renew my
- 22 motion to admit the exhibit.
- 23 | ALJ PARROT: Are there any objections to
- 24 | the admission of Staff Exhibit C?
- MS. WACHSPRESS: None from Sierra Club,

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 1
     your Honor.
 2
                 MR. ALEXANDER: And none from Ohio State.
                 ALJ PARROT: Okay. Very good. Staff
 3
     Exhibit C is admitted into the record.
 4
 5
                 (EXHIBIT ADMITTED INTO EVIDENCE.)
                              Thank you, Mr. Conway.
 6
                 ALJ PARROT:
 7
                 All right. Let's go off the record
                 (Discussion off the record.)
 8
 9
                 ALJ PARROT: Let's go back on the record.
10
                 The parties have discussed while we were
11
     off the record a briefing schedule, but before we get
12
     to that, is there anything else from the Applicant or
13
     any of the other parties before I set out the
14
     briefing schedule?
15
                 MR. ALEXANDER: No, your Honor.
16
                 MS. WACHSPRESS: No, your Honor.
17
                 ALJ PARROT: Okay. Very good. With that
18
     the parties have agreed to file initial briefs on
19
     Friday, August 7, and reply briefs on Wednesday,
20
     August 19.
2.1
                 Is there anything else we need to
22
     discuss? Just also note that we expect transcripts
23
     in this matter will be filed around July 22
24
     approximately.
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Anything else?

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                 MR. ALEXANDER: On behalf of Ohio
 1
 2
     State -- are we off?
 3
                 ALJ PARROT: Okay. Hearing nothing, we
 4
     are adjourned.
 5
                  (Thereupon, at 10:58 a.m., the hearing
 6
     was adjourned.)
 7
 8
                           CERTIFICATE
 9
                 I do hereby certify that the foregoing is
10
     a true and correct transcript of the proceedings
     taken by me in this matter on Wednesday, July 15,
11
12
     2020, and carefully compared with my original
13
     stenographic notes.
14
15
16
                           Karen Sue Gibson, Registered
                           Merit Reporter.
17
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     (KSG-6932)
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Summary: Transcript in the matter of The Ohio State University hearing held on 07/15/20 - Volume II electronically filed by Mr. Ken Spencer on behalf of Armstrong & Okey, Inc. and Gibson, Karen Sue Mrs.