

BEFORE THE ENVIRONMENTAL QUALITY COUNCIL
OF THE STATE OF WYOMING

DEPOSITION OF: MICHAEL SERGIO FOREMAN-FOWLER
VOLUME I
EXAMINATION DATE: August 13, 2008

IN THE MATTER OF:)
) Docket No. 07-2801
BASIN ELECTRIC POWER) Presiding Officer,
COOPERATIVE, DRY FORK STATION,) F. David Searle
AIR PERMIT CT-4631)

PURSUANT TO NOTICE, Volume I of the deposition of MICHAEL SERGIO FOREMAN-FOWLER was taken at 3:52 p.m., on August 13, 2008, at 555 Seventeenth Street, Suite 3200, Denver, Colorado 80202, before Patricia S. Newton, Registered Professional Reporter and Notary Public in and for the State of Colorado, said deposition being taken pursuant to the Wyoming Rules of Civil Procedure.

Patricia S. Newton
Registered Professional Reporter

BEFORE THE ENVIRONMENTAL QUALITY COUNCIL
OF THE STATE OF WYOMING

DEPOSITION OF: MICHAEL SERGIO FOREMAN-FOWLER
VOLUME II
EXAMINATION DATE: August 14, 2008

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) Docket No. 07-2801
BASIN ELECTRIC POWER) Presiding Officer,
COOPERATIVE, DRY FORK STATION,) F. David Searle
AIR PERMIT CT-4631)

PURSUANT TO NOTICE, Volume II of the deposition of MICHAEL SERGIO FOREMAN-FOWLER was taken at 7:33 a.m., on August 14, 2008, at 555 Seventeenth Street, Suite 3200, Denver, Colorado 80202, before Patricia S. Newton, Registered Professional Reporter and Notary Public in and for the State of Colorado, said deposition being taken pursuant to the Wyoming Rules of Civil Procedure.

Patricia S. Newton
Registered Professional Reporter

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Also Present: (None)

1 PROCEEDINGS
2 MICHAEL SERGIO FOREMAN-FOWLER

3 The deponent herein, being previously
4 duly sworn to testify to the truth in the above
5 cause, was examined and testified further on his
6 oath as follows:

7 EXAMINATION

8 BY MR. RUPPERT:

9 Q Morning again, Mr. Fowler.

10 A Morning.

11 Q I'm looking at your rebuttal
12 report, page 6. I want to ask you a question
13 about an conclusion that you reached in here.

14 Down toward the lower third of the
15 page, you indicate that "An availability factor
16 of 85 percent...represents a reasonable criteria
17 in the BACT analysis for Dry Fork."

18 A I see it.

19 Q As I understand your report,
20 that's based on the data that you looked at from
21 EPRI: Electric Power Research Institute?

22 A Yes. It's data that was -- was
23 processed by EPRI, put together by EPRI.

24 Q All right. Other than the fact
25 that they are building a power plant at Dry Fork

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6 INDEX OF EXHIBITS

7	DEPOSITION	PAGE FIRST
8	EXHIBIT NO.	DESCRIPTION APPEARS
9	10	Two-page document titled "IGCC 264 and PC Major Equipment List"
10	11	E-mail chains, top one dated 123 7/29/08 to Christina Niednagel from Robin Cooley
11	12	Findings of Fact, Conclusions of 183 Law, and Recommendation from the Minnesota Public Utilities Commission
12	13	10/1990 Draft New Source Review 202 Workshop Manual re Prevention of Significant Deterioration and Nonattainment Area Permitting
13	14	8/24/06 Order Denying Review re 217 Prairie State Generating Company
14	15	E-mail chain, top one dated 222 7/29/08 to Christina Niednagel from Andrea Zaccardi
15	16	2006 through 2008 Sierra Club 257 Website Updates re IGCC Plants (Exhibit 10 was marked during Mr. Fowler's Volume I deposition.) (Original exhibits are attached.)

1 Station and that their permit is being challenged
2 in this case, do you know anything about Basin
3 Electric Power Cooperative?

4 A Not very much.

5 Q Do you know that it's an energy
6 co-op and not a public utility?

7 A I do know that, yes.

8 Q Do you know anything about Basin
9 Electric's members' need and projected need for
10 electricity either now or in the near future?

11 A No, I don't.

12 Q Do you know anything about the
13 operating history of its other pulverized-coal
14 plants?

15 A Operating history, no.

16 Q What I'm getting at specifically
17 is operating -- operational availability: You
18 don't know anything about that?

19 A There was a comment on it in
20 Mr. Jenkins' report, I believe.

21 Q And specifically in terms of how
22 well those plants have fared in terms of
23 operational availability; specifically, the
24 Laramie River Station, the Antelope Valley
25 Station, you're not aware of those availability

1 your combustion turbine? Yes?
 2 A Within that part, that internal
 3 part of the --
 4 Q That's all I'm asking you about.
 5 A Within that internal part of the
 6 plant, what you are doing is burning this coal-
 7 derived syngas.
 8 Q And that's -- at least in terms
 9 of the production of electricity, percentagewise,
 10 that accounts for the largest percentage of your
 11 electricity production, doesn't it: that
 12 combustion turbine? Or do you know? Maybe you
 13 don't know the answer to that; I don't know.
 14 A The output of the combustion
 15 turbine in the case of GE's reference plants --
 16 it's in my report -- 60 percent of the gross
 17 output -- I'm looking on page 6 at the first
 18 footnote -- is produced by the combustion
 19 turbines.
 20 Q Okay. I noticed in your report
 21 and your rebuttal report you have some
 22 discussions of the BACT analysis generally. And
 23 at page 5 of your original report and page 2 of
 24 your rebuttal report, you quote the Clean Air Act
 25 and some legislative history on the Clean Air

1 Q That really wasn't my question.
 2 A I understand.
 3 Q Go ahead. If I interrupted you,
 4 I'm sorry.
 5 A It is -- it is a question of
 6 what -- you know, what does the law mean, yes?
 7 Q Right. The same with the
 8 question of what is the meaning of "production
 9 process," that's a question of what does the law
 10 mean?
 11 A In this -- in this context, I
 12 would agree that it is ultimately the law --
 13 words of the law.
 14 Q As I understand your report and
 15 from the diagram in your report -- and I don't
 16 have a page committed to memory here, but it's
 17 the diagram where you show coal in, electricity
 18 out --
 19 Do you know what I'm talking about?
 20 A I do.
 21 Q Take a look at that. Page 4.
 22 A Uh-huh.
 23 Q I think what you're saying here
 24 is that conceptually, if you have a production
 25 process where coal goes in and electricity goes

1 Act, right?
 2 A Yes.
 3 Q Did you get this discussion from
 4 Ann Weeks in your office?
 5 A No. The -- the legislative
 6 history, I said before a number of times, in the
 7 state of New Mexico, we looked at that.
 8 And then this -- this section of the
 9 Clean Air Act, that's -- that's something that
 10 I've been looking at for quite some time.
 11 Q Well, are you giving an opinion
 12 on the meaning of these phrases that you talk
 13 about in the Clean Air Act?
 14 A Well, I -- I believe this is --
 15 or I should say that I'm not an attorney, but I
 16 did implement these requirements in the context
 17 of a regulatory agency where we -- we went over
 18 these things in some detail. And so I am
 19 discussing some of that -- some of the meaning in
 20 these reports.
 21 Q So the meaning of the term
 22 "innovative fuel combustion techniques" in the
 23 Clean Air Act, that's a legal question, right?
 24 A I do not believe that it's
 25 defined in the Clean Air Act.

1 out, that whatever is in that black box in the
 2 middle, regardless of process, that's not a
 3 redefinition of the design of the source if you
 4 change something in the middle in that black box.
 5 Am I getting that right?
 6 A What I'm getting at here is the
 7 concept of production process.
 8 Q I understand that.
 9 A Okay.
 10 Q And what I'm asking you is, if
 11 I'm understanding your point, that the production
 12 process you have illustrated in this schematic is
 13 coal in and electricity out; and anything in the
 14 middle in that black box, regardless of what you
 15 do in that black box, is a production process and
 16 would not be a redefinition of the design of the
 17 source by just changing something inside that
 18 black box, correct?
 19 A That's the concept that's
 20 schematically illustrated there, yes.
 21 Q Okay. I just want to make sure I
 22 understand that. I took that as the point of the
 23 schematic, right?
 24 A Right.
 25 Q So, in other words, when we're

1 looking at this issue of redefinition of the
2 design of the source, what we should be looking
3 at is -- you should look at the -- look at an
4 electric-generating facility's purpose and view
5 that as the production of electricity from coal?
6 Does that make sense?

7 A Generally, that's what we're
8 talking about.

9 Q That's what you're saying, right?

10 A That the -- that the purpose of
11 the facility is -- I'm trying to paraphrase.

12 Q That's fine. Go ahead.

13 A That the -- the purpose of the
14 facility is to generate electricity from coal?

15 Q Yes.

16 A That's what -- you're asking
17 whether I believe that that's the production
18 process or . . .

19 Q What I'm asking is -- we just
20 talked about the schematics. So what I'm asking
21 is, the view that you take -- and I'm trying to
22 understand the view that you take, is really what
23 I'm doing here -- the view that you take is that
24 you view an electric-generating facility's
25 purpose as the production of electricity from

1 coal, and unless you change that basic purpose,
2 then you're not redefining the design of the
3 source. As I understand it, that's what you're
4 saying?

5 A Broadly speaking, that's what I'm
6 saying.

7 Q Okay. All right.

8 Given your experience as a regulator, I
9 know you know what the Environmental Appeals
10 Board is, right?

11 A I do.

12 Q The EAB for short?

13 A I do.

14 Q Have you ever read any of their
15 decisions?

16 A I have. It's been -- it's been
17 some time.

18 Q Since you were a regulator,
19 probably?

20 A Yes. I -- yeah, if I'm correct,
21 I've skimmed some things since then; but by and
22 large, I did it when I was a regulator.

23 Q Okay. I'm handing you what I've
24 marked as Deposition Exhibit 14. It's an EAB
25 decision in the Prairie States -- Prairie State,

1 excuse me -- Generating Company case.

2 Have you heard of this decision before?

3 A I have.

4 Q Have you read it before?

5 A I have not read all of it, and I
6 understand that there were a number of -- a
7 number of legal -- I don't know the term -- but
8 appeals. There was back and forth. And I
9 believe what I have read is actually some of the
10 subsequent -- one of the subsequent decisions
11 after the EAB's decision.

12 But I have -- I have skimmed this in
13 the past. It's been some time.

14 Q Okay. Well, let me draw your
15 attention to page 32 to that middle paragraph:
16 "We also specifically reject Petitioners'
17 contention that an electric generating facility's
18 purpose must be viewed as broadly as," quote, the
19 production of electricity, from coal, unquote.

20 See that?

21 A I see that. Yeah.

22 Q So apparently the EAB doesn't
23 agree with your analysis of as long as it's coal
24 in and electricity out, that's not a redefinition
25 of the design of the source, do they?

1 A There's quite a bit of language
2 that follows this, quite a bit of language that
3 precedes it. What they're talking here, you
4 know, about some -- some distinctions, which is
5 baseload versus peaking; they talk about some
6 issues with fuel; they talk about fuel. And so
7 -- and there's -- as we've discussed subsequent
8 -- in subsequent decisions.

9 So I don't think I'm going to be able
10 to compare this statement directly with what I
11 was saying.

12 Q So you can't tell me whether or
13 not this is contradictory to your opinion?

14 A What they're talking about is as
15 broadly as the production of electricity from
16 coal. And I believe I've indicated earlier that
17 there are -- that the definition, if you will, of
18 a project can be specified with -- with more
19 granularity than that simple phrase. So . . .

20 Q Could you suggest any sort of
21 granularity in your schematic that we have
22 already looked at with the coal in, electricity
23 out, and a black box in between?

24 A No, I didn't suggest granularity
25 there. I'm talking about our discussion today.