

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
BEFORE THE COMMISSION

ORIGINAL

In the Matter of:)
LOUISIANA ENERGY SERVICES, L.P.) Docket No. 70-3103-ML
(National Enrichment Facility)) ASLBP No. 04-826-01-ML
)

Deposition of:
GEORGE R. (RANDY) CAMPBELL
ROD KRICH
ROGER L. PEERY
LEN STOKES
TIM WOOMER

witnesses of lawful age, taken on behalf of the Nuclear Information & Resource Service and Public Citizen, pursuant to notice, in the New Mexico Environment Department, Office of the Secretary, Conference Room, Harold Runnels Building, 1190 St. Francis Drive, Santa Fe, New Mexico, on Friday, September 17, 2004, at 2:00 p.m., before Carol Oppenheimer, Notary Public, when were present:

APPEARANCES:
On behalf of Nuclear Information & Resource Service and Public Citizen:
LINDSAY A. LOVEJOY, JR., ESQ.
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Santa Fe, New Mexico 87501

U.S. NUCLEAR REGULATORY COMMISSION
In the Matter of LOUISIANA ENERGY SERVICES, LP
Docket No. 70-3103-ML Official Board No. 21
OFFERED by: Applicant/Licensee Intervenor NIRS/LPS
NRC Staff Other
IDENTIFIED on 2/3/05 Witness/Panel G. Rice
Action Taken: ADMITTED REJECTED WITHDRAWN
Reporter/Clerk B. Quinn

On behalf of the Louisiana Energy Services,

L.P.:

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On behalf of the Nuclear Regulatory Commission:

LISA CLARK, ESQ.

Nuclear Regulatory Commission

Also Present:

JOHN W. LAWRENCE, ESQ.

National Enrichment Facility

GEORGE RICE

Expert Witness, Groundwater Hydrologist

ALAN TOBLIN

Advanced Technologies and Laboratories

International, Inc.

ABE ZEITOUN, Ph.D.

Advanced Technologies and Laboratories

International, Inc.

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ADJUDICATIONS STAFF

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I N D E XWITNESSEXAMINATION

George R. (Randy) Campbell

Rod Krich

Roger L. Peery

Len Stokes

Tim Woomer

Examination By Mr. Lovejoy

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Nuclear Information & Resource Service
and Public Citizen

EXHIBITSPAGEDESCRIPTION

NIRS-Panel-1	31	Krich resume
NIRS-Panel-2	31	Stokes resume
NIRS-Panel 3	31	Peery resume
NIRS-Panel 4	31	Lockwood Greene/Hobbs Meeting minutes, 10/14/03
NIRS-Panel 5	32	Lockwood Greene/Eunice Meeting minutes, 10/13/03
NIRS-Panel 6	32	MOU, Lockwood Greene/City of Hobbs, 12/30/03
NIRS-Panel 7	33	MOU, Lockwood Greene/City of Eunice, 1/21/04
NIRS-Panel 8	37	Lea County Waters Users Association Municipal Water Audit

P R O C E E D I N G S

Whereupon,

GEORGE R. (RANDY) CAMPBELL

ROD KRICH

ROGER L. PEERY

LEN STOKES

TIM WOOMER

having been first duly sworn, were called as a witnesses
herein, and were examined and testified as follows:

EXAMINATION

BY MR. LOVEJOY:

Q Would the witnesses please identify themselves,
starting with Mr. Peery.

A (Mr. Peery) Roger Peery.

A (Mr. Woomer) Tim Woomer.

A (Mr. Stokes) Len Stokes.

A (Mr. Campbell) Randy Campbell.

A (Mr. Krich) Rod Krich.

Q Thank you. This is kind of an unusual format.
I just feel I should caution everyone and myself at the
same time that there's a whole crowd of us here supposed
to be talking, and if there's more than one talking at
once, nothing good happens at all.

Anyway, with that in mind, let's see. Mr.
Peery, you've identified yourself in the previous

1 deposition. So we'll turn to Mr. Woomer. Can you state
2 what position you hold professionally now?

3 A (Mr. Woomer) Yes, sir. I'm the utilities
4 director for the City of Hobbs, New Mexico.

5 Q And how long have you been that?

6 A (Mr. Woomer) I've been in that capacity, it
7 will be four years in December.

8 Q And what's your educational background? Could
9 you just --

10 A (Mr. Woomer) I have a --

11 Q -- start with college?

12 A (Mr. Woomer) -- bachelor of science in mining
13 engineering from West Virginia University.

14 Q Do you have any graduate degrees?

15 A (Mr. Woomer) No.

16 Q Okay. Do you have any -- have you had any
17 instruction in matters of hydrology or geology?

18 A (Mr. Woomer) Are you asking about formal
19 classwork?

20 Q Yes.

21 A (Mr. Woomer) No, sir.

22 Q Okay. Do you regard yourself as an expert in
23 matters of hydrology?

24 A (Mr. Woomer) No, sir.

25 Q Are the matters you're going to be testifying

1 about in this proceeding, do they involve hydrology?

2 A (Mr. Woomer) I think you'd probably need to
3 get more specific. Am I going to be testifying about
4 hydrology? Is that what you mean or --

5 Q Yes.

6 A (Mr. Woomer) I don't intend to testify about
7 hydrology.

8 Q Okay. Mr. Stokes, where are you employed now?

9 A (Mr. Stokes) I'm the president of Progressive
10 Environmental Systems.

11 Q And where is that based?

12 A (Mr. Stokes) My home office is in Capitan, New
13 Mexico.

14 Q And are you going to be offering expert
15 evidence in this case?

16 A (Mr. Stokes) Yes.

17 Q On what issues?

18 A (Mr. Stokes) Water supply and water rights
19 administration if asked.

20 Q And what training do you have in the area of
21 water supply and water rights?

22 A (Mr. Stokes) I've been engaged in the -- as a
23 water supply consultant since -- for about ten years.
24 City of Las Cruces, I do all of their water supply, water
25 rights work. City of Alamogordo, I'm the project manager

1 on the permitting of their desalination plant. I'm the
2 contract director of the Lea County Water Users
3 Association, and I'm under contract with the New Mexico
4 State Interstream Commission for the Pecos River
5 Compliance Project.

6 Q Okay. Pardon me. I'm going to look through
7 this. I just received your resume. (Perusing document.)

8 You say you've acted as a water supply
9 consultant for the City of Las Cruces for about ten years.
10 What activities has that involved?

11 A (Mr. Stokes) I deal with their permitting
12 issues, water rights. I negotiate purchases of water
13 rights and contracts with the Elephant Butte Irrigation
14 District on their behalf, I do some lobbying strictly on
15 water issues for the City.

16 Q Do you regard yourself as an expert in water
17 supply and water rights?

18 A (Mr. Stokes) Yes, sir. I've been certified
19 such by the Federal Bankruptcy Court and provided
20 testimony in -- expert testimony in several New Mexico
21 State Engineering proceedings.

22 Q Okay. What proceeding involving the Bankruptcy
23 Court was that?

24 A (Mr. Stokes) That was the Crowder in Judge
25 McPhiely's -- in front of Judge McPhiely. It was the

1 Crowder, Santa Theresa case.

2 Q Okay. Now, Mr. Campbell, can you state your
3 present position?

4 A (Mr. Campbell) Yes, sir. I'm with Lockwood
5 Greene Engineers, and my current position is that of a
6 senior consultant.

7 Q And what's your area of expertise with Lockwood
8 Greene?

9 A (Mr. Campbell) I'm a mechanical engineer, and
10 my area of expertise is in process engineering and in
11 mechanical engineering.

12 Q And what issues are you going to be testifying
13 about in this proceeding?

14 A (Mr. Campbell) The derivation of water usage
15 for the NEF.

16 Q And we don't have your resume. Can you
17 describe what your educational background is --

18 A (Mr. Campbell) Yes, sir. I --

19 Q -- in the relevant areas?

20 A (Mr. Campbell) I have a bachelor's of
21 mechanical engineering technology from the University of
22 North Carolina at Charlotte. And I do not have any
23 advanced degrees.

24 Q Have you testified as an expert in the past?

25 A (Mr. Campbell) No, sir, I have not.

1 Q Mr. Krich, insofar as this deposition is
2 concerned, what areas of expertise, if any, are you going
3 to be testifying in?

4 A (Mr. Krich) Basically the same as Randy. It's
5 the demand of the water for the facility, what the
6 facility needed in terms of its usage.

7 Q And what training and experience do you have in
8 that area?

9 A (Mr. Krich) I am a mechanical engineer and a
10 nuclear engineer. I have done engineering and licensing
11 for 30 years in the nuclear field, so I've done this type
12 of work before.

13 Q Have you testified as an expert?

14 A (Mr. Krich) I have. Yes.

15 Q When has that happened?

16 A (Mr. Krich) That was in an NRC ASLB hearing
17 for the Big Rock Point spent-fuel pool expansion.

18 Q What company was that for?

19 A (Mr. Krich) That was for Consumers Power.

20 Q And what was the substance -- what was the
21 subject of your testimony there?

22 A (Mr. Krich) It was a long time ago. It had to
23 do with cranes and water, basically the supply of cooling
24 water to the spent-fuel pool.

25 Q Okay. Supply or demand?

1 A (Mr. Krich) Supply. And that's based on, of
2 course, the heat loads, so it's based on a demand.

3 Q Okay. Let's start at the left again. Mr.
4 Peery, what is the substance of the facts and opinions
5 you're going to be testifying about the Board in this
6 proceeding, apart from what we've discussed in the other
7 deposition this morning?

8 A (Mr. Peery) Well, water availability in the
9 Lea County Underground Water Basin, and I also have
10 knowledge of the administrative criteria for the Lea
11 County Underground Water Basin, which I can present as
12 well.

13 Q And what conclusions are you going to testify
14 to about water availability in the basin?

15 A (Mr. Peery) Impacts related to pumping the
16 proposed water from the Lea County basin for the LES
17 facility.

18 Q Can you state what conclusion you're going to
19 give the Board?

20 A (Mr. Peery) My conclusion will be that there
21 is a de minimis impact on water in the Ogallala Aquifer.

22 Q And how do you measure -- how do you calculate
23 the impact?

24 A (Mr. Peery) Impact can be calculated in
25 several ways. As a percentage of water withdrawn in

1 relation to the amount of water available in the Lea
2 County Underground Water Basin and the potential
3 additional declines in water levels at existing wells,
4 specifically the Hobbs and Eunice wells.

5 Q Have you calculated those figures, the declines
6 in the percentage of water withdrawn?

7 A (Mr. Peery) I haven't calculated them in a
8 fashion where I've provided them to anyone else, but I
9 have calculated them.

10 Q Can you share your calculations with us? Are
11 they on paper?

12 A (Mr. Peery) No, they're not.

13 Q All right. Can you tell them into the record?

14 A (Mr. Peery) What I did for my calculations on
15 the impacts of water levels was look at published
16 hydrogeologic information, specifically related to the
17 area of the Hobbs and Eunice well field. I looked at the
18 transmissivity of the aquifer in that area, the specific
19 yield of the sediments, and what the proposed withdraw of
20 the equivalent of 75, 80 feet a year would be actually
21 from an individual well. So I looked at a worst-case
22 scenario, not looking at what that withdrawal would be as
23 spread out over numerous wells or several well fields.

24 Q Did you do this all in your head?

25 A (Mr. Peery) No. I did it on my computer.

1 Q And is the data you generated in your computer
2 now?

3 A (Mr. Peery) No.

4 Q What happened to it?

5 A (Mr. Peery) I didn't save the data. I can
6 tell you what my assumptions were. I ran different
7 scenarios.

8 Q Okay. What were your assumptions?

9 A (Mr. Peery) My assumptions were based on State
10 Engineer's Office groundwater flow model for that area,
11 which you can find reference to in the Lea County
12 Underground Water Basin -- or Lea County Regional Water
13 Plan.

14 Q Uh-huh.

15 A (Mr. Peery) It's a 1999 report by Musarieff &
16 Chudnov. I used the transmissivity values they report for
17 the Hobbs well field area and specific yield of that area.

18 Q Do you remember those figures, the
19 transmissivity?

20 A (Mr. Peery) I looked at two different
21 scenarios, one with transmissivity of approximately 80,000
22 GPD per foot, and another with a transmissivity of
23 approximately 50,000 GPD per foot. Specific yield of 23
24 percent and the pumping rate equivalent, the continuous
25 pumping rate equivalent to 75-acre feet per year.

1 Q Where did you get the figure 80,000?

2 A (Mr. Peery) From the State Engineer's
3 published data on hydraulic conductivity for that area.

4 Q Is that in the regional water plan?

5 A (Mr. Peery) By reference, the range of
6 hydraulic conductivities are.

7 Q When you say, by reference, would you be able
8 to find it if I gave you a copy of the plan?

9 A (Mr. Peery) I could probably find where it
10 says the hydraulic conductivity range is from X to X.

11 Q Okay. I just have one kind of marked-up copy
12 here. Do you think you can find it?

13 A (Mr. Peery) I might.

14 MR. CURTISS: What's the document, Lindsay,
15 you're referring to?

16 MR. LOVEJOY: Well, it's a Lea County Regional
17 Water Plan, as run off from the web, from the State
18 Engineer's web site, and I think we gave you the html in
19 our identifying documents.

20 MR. CURTISS: Okay.

21 BY MR. LOVEJOY:

22 Q I don't know if we -- that's the only copy I
23 have. I've been --

24 A (Mr. Peery) It should be understood this is a
25 preliminary estimate. It has not been reviewed by anyone

1 else here at this table, nor anyone in my office, and it's
2 standard for us to do peer review on everything that we
3 do, and that is why I'm just not providing anything
4 written on this.

5 Q I see.

6 A (Mr. Peery) (Perusing document.) Let me read
7 a specific sentence in this Lea County Regional Water
8 Plan. It's on page 6-9. Maybe a couple of sentences.

9 "Hydraulic conductivity reported for various
10 portions of the Ogallala Aquifer in Lea County Underground
11 Water Basin has been evaluated by a number of different
12 authors, using different techniques. Values reported
13 range from 3 to 262 feet per day."

14 "With higher" -- and I'm going to just pick out
15 a select section here. "With higher hydraulic
16 conductivity near the central portion of the basin between
17 Tatum and Lovington, eastward to the Texas border and near
18 Hobbs, specific yields ranging from 10 to 28 percent."

19 Q Was that the source of the data that you used
20 in your calculations?

21 A (Mr. Peery) Yes.

22 Q The figures you gave were 80,000. Is GPD
23 gallons per day?

24 A (Mr. Peery) Gallons per day per foot.

25 Q Per foot. Yes.

1 A (Mr. Peery) But I think I'd like to discuss
2 the more conservative of 50,000 GPD per foot.

3 Q Okay. How did you derive 50,000 from the
4 figures you just dictated?

5 A (Mr. Peery) Just taking a conservative
6 approach.

7 Q Okay.

8 A (Mr. Peery) And that calculates out to -- and
9 a pumping well is an additional decline of approximately a
10 tenth of a foot per year, actually a little bit less than
11 that. So over a 30-year period, I would say that it has a
12 de minimis effect.

13 Q So you'd multiply that figure times 30 to
14 calculate the 30-year effect?

15 A (Mr. Peery) No. I actually calculated a 30-
16 year effect.

17 Q You calculated a 30-year effect.

18 A (Mr. Peery) Uh-huh.

19 Q And was that a tenth of a foot? You said a
20 tenth of a foot per year.

21 A (Mr. Peery) It was a little over two feet for
22 30 years.

23 Q Would there be -- apart from the decline in the
24 water level, which I take you calculated, would there be
25 any other impact on the aquifer from the pumping you

1 hypothesized?

2 A (Mr. Peery) No.

3 Q Do you intend to have your calculations peer-
4 reviewed?

5 A (Mr. Peery) If I'm requested to submit them,
6 certainly they would have to be peer-reviewed.

7 Q Do you intend to write up your calculations?

8 A (Mr. Peery) I hadn't really considered it.

9 Q Okay. Do you intend to do any other
10 calculations in connection with the issues of water
11 supply, broadly speaking, in the LES case?

12 A (Mr. Peery) Not that I can currently think of.

13 Q Do you intend to offer any testimony on any
14 other subjects in connection with the, broadly speaking,
15 water supply issues here?

16 A (Mr. Peery) As I mentioned, I might be able to
17 provide some information on water supply as it relates to
18 administrative -- the State Engineer's administrative
19 criteria for the basin.

20 Q What do you propose to testify concerning at
21 the administrative criteria of the State Engineer?

22 A (Mr. Peery) The fact that -- basically all I
23 was going to do was summarize the fact that the State
24 Engineer's office originally had declared that basin and
25 managed it in such a fashion that it was to be a totally

1 mined groundwater basin. They had intended for that
2 entire basin and let enough water rights out to be mined
3 over a 40-year period.

4 Q Over a what year?

5 A (Mr. Peery) Forty-year period. And we're
6 certainly past the 40-year period at this point, and it
7 hasn't occurred yet.

8 Q What hasn't occurred?

9 A (Mr. Peery) The complete mining of the
10 Ogallala Aquifer. The other thing I would like to say is
11 that the lower portion of the Lea County Underground Water
12 Basin, the Ogallala water, is reserved for municipal and
13 domestic use.

14 Q Reserved by whom?

15 A (Mr. Peery) The State Engineer's office.

16 Q When you say, the lower portion, what do you
17 mean by that?

18 A (Mr. Peery) The lower 40 feet of the aquifer.

19 Q Are you saying that there's a declared policy
20 to set apart the lower 40 feet for only municipal and
21 domestic uses on the part of the State Engineer?

22 A (Mr. Peery) Yes, I am.

23 Q And so you would assume that would not be
24 available for any industrial plant. Is that right?

25 A (Mr. Peery) No. Quite the opposite actually.

1 If an industrial plant were -- any activity where the
2 water's provided from a municipal system, that would be
3 reserved as part of the reservation for the municipal
4 rights.

5 Q Oh, so you're saying that it would be available
6 for a municipality to sell then to an industrial user.

7 A (Mr. Peery) Absolutely.

8 Q Okay. When did the State Engineer declare a
9 basin here to be operated on the basis of mining the
10 aquifer? When did that happen?

11 A (Mr. Peery) Len Stokes might be able to help
12 me with this a little bit on the exact dates.

13 A (Mr. Stokes) It was declared in '51, I
14 believe. Is that correct? Or it was declared in the
15 '40s. Then it was revisited during the '50s.

16 A (Mr. Peery) Reopened in the '50s.

17 A (Mr. Stokes) It was closed and -- when it was
18 first declared, it was closed in reappropriations. Then
19 it was expanded and reopened in '51 for new
20 appropriations. But they -- there's -- all mined basins
21 have criteria for mining. All closed basins do.

22 Q You say they have criteria for mining. What do
23 you mean? Criteria addressing what?

24 A (Mr. Stokes) That we -- every closed basin in
25 the state, which is a basin that has no surface-water

1 discharge from it is called a close basin. All of those
2 basins in the state of New Mexico that are administered by
3 the Engineer -- and I think with the inclusion of the Salt
4 Basin, they all are now -- have criteria that regulates
5 mining. They are all -- withdraws are made in all of them
6 that exceed recharge. The State Engineer administers
7 those withdraws through criteria in each of those basins.

8 Q Okay. And concerning what you've said about
9 the Engineer Office's administrative criteria, what
10 conclusion do you reach that you want to express to the
11 Board hearing this case?

12 A (Mr. Peery) The conclusion is that there will
13 be an ample supply of water for the LES facility, for its
14 proposed 30-year life.

15 Q Do you know what terms LES has reached, if any,
16 with municipal water suppliers?

17 A (Mr. Peery) No, I don't.

18 Q You haven't seen any documentation of that?

19 A (Mr. Peery) I've seen some documentation, but
20 it was not the focus of my studies. I know that they've
21 reached agreements with Eunice and Hobbs, but the
22 specifics of those agreements, I'm probably not the right
23 one to ask.

24 Q Okay. Mr. Woomer, what do you propose to
25 testify about to the Board hearing this case?

1 A (Mr. Woomer) I'm just here to discuss the
2 situation with the water system in Hobbs, the City of
3 Hobbs, and its ability to deliver water and willingness to
4 deliver water to the NEF site.

5 Q Uh-huh. Are you going to testify as an expert
6 on any matters involving the availability of the water to
7 Hobbs to resell?

8 A (Mr. Woomer) I'll be testifying about the
9 knowledge that I have on the Hobbs water system and the
10 ability for Hobbs to deliver the required GPD to the plant
11 site.

12 Q Okay. Well, essentially what are your
13 conclusions going to be?

14 A (Mr. Woomer) My conclusions are that Hobbs has
15 the water rights and the water available and the systems
16 available to deliver the water required by the NEF site.

17 Q And how much water is required by NEF site?

18 A (Mr. Woomer) The requirements for the NEF on
19 what we've been looking at is 65,000 gallons per day,
20 approximately 72 acre-feet per year.

21 Q And what is the duration of that requirement?

22 A (Mr. Woomer) A 30-year period.

23 Q And what investigation have you undertaken to
24 determine that Hobbs has the rights on the water and the
25 systems to deliver that amount?

1 A (Mr. Woomer) Hobbs holds the right to 20,066.4
2 acre-feet of water. We are currently using between -- a
3 little less than 8,000 acre-feet per year.

4 Q Is that all you've done?

5 A (Mr. Woomer) The 72 acre-feet per year
6 probably equates to less than 1 percent of our total
7 usage.

8 Q Uh-huh.

9 A (Mr. Woomer) Which is minimis.

10 Q Have you done any calculations of what the
11 situation will be, say, 30 years after the plant begins
12 operation?

13 A (Mr. Woomer) I have not done any calculations
14 personally. We do have a 20-year plan that accounts for
15 population growth of about 1.4 percent per year. And it
16 describes the system that would be needed at that time.

17 Q And -- all right. Twenty years out, what will
18 the water usage of the Hobbs system be?

19 A (Mr. Woomer) I can't recall exactly what that
20 number is.

21 Q Do you remember what it -- well, is there any
22 projection for what it will be 30 years out?

23 A (Mr. Woomer) For 30 years out?

24 Q Yes.

25 A (Mr. Woomer) No, sir.

1 Q You don't know. And are there any projections
2 of what water will actually be available to Hobbs, say, 20
3 years out, as distinguished from rights?

4 A (Mr. Woomer) For 30 years out? No, sir.

5 Q Twenty --

6 A (Mr. Woomer) Oh, 20? No, sir.

7 Q The question is to 20. Okay.

8 A (Mr. Woomer) No.

9 Q Mr. Stokes --

10 A (Mr. Stokes) Yes, sir.

11 Q Can you give us the substance of the facts and
12 opinions you propose to testify to the Board about?

13 A (Mr. Stokes) Facts and opinions: The fact
14 that the City of Eunice has 4,003 acre-feet of random
15 water rights as recognized by the State Engineer Office.
16 Current usage or usage in 2000, metered usage, was just a
17 little over 2,000 acre-feet per year, and the provision of
18 an additional 75 acre-feet per year water to the site
19 could be done with no problem to the water rights or the
20 well capacities. And that the provision of water by the
21 municipalities to the facility is authorized under Chapter
22 3 of the statutes.

23 Q Have you done any estimates of the ability of
24 Eunice to deliver water to the NEF out, say, 30 years from
25 today?

1 A (Mr. Stokes) The -- I have done so straight
2 calculations. The 40-year water plan has information in
3 it dealing with the wells and the rights -- when those
4 rights are permitted, the administration of those rights
5 are done on a 40-year period, and there will be water,
6 according to the State Engineer administrative policy, for
7 water to be available for 30 years. The State Engineer
8 does those calculations. I don't.

9 Q So it's his problem then.

10 A (Mr. Stokes) No. It is based -- the supply of
11 water is based upon the administrative criteria and the
12 models developed by the State Engineer Office.

13 Q Okay. So they've done that model.

14 A (Mr. Stokes) That's correct.

15 Q And you're relying on their model in that
16 respect.

17 A (Mr. Stokes) The water rights -- the modeling
18 was done to ensure the viability of the 4,000 acre-feet of
19 withdrawals, and the additional 75 acre-feet fits very
20 well into that 4,000 number.

21 Q Okay. You speak of a 40-year water plan. What
22 is this plan?

23 A (Mr. Stokes) The regional plan that you have
24 in front of you.

25 Q The Lea County plan.

1 A (Mr. Stokes) That's correct.

2 Q Okay. Are you going to offer testimony on any
3 other subjects in this proceeding, other than what you've
4 just described?

5 A (Mr. Stokes) Only if I'm asked.

6 Q Okay. Do you know if the City of Eunice or the
7 utility for the City of Eunice has entered into a
8 commitment to deliver water to the NEF?

9 A (Mr. Stokes) I believe that Mr. Krich is
10 probably the person to answer that question, as he has
11 been in negotiations with the City of Eunice and with
12 Hobbs.

13 Q Okay. Mr. Campbell, can you tell us the
14 substance of the opinions and facts that you're going to
15 testify to the Board about in this case?

16 A (Mr. Campbell) I'll be testifying in regards
17 to what Lockwood Greene did to determine the water usage
18 for the facility. We were also somewhat instrumental in
19 determining the source of water, i.e., Eunice and Hobbs.
20 I will discuss that if necessary and any other things that
21 I may be asked to discuss.

22 Q Okay. Well, what are you going to testify to
23 about the efforts of Lockwood Greene to identify the water
24 demand?

25 A (Mr. Campbell) We will discuss the methodology

1 that we used to determine water quantities, from both the
2 process engineering perspective and the mechanical
3 engineering perspective.

4 Q And where can I find these calculations in
5 writing since I don't want to ask you to try to recall
6 them?

7 A (Mr. Campbell) They're all submitted in our
8 design documents, the basis of design documents, our
9 narratives, et cetera.

10 Q Are they in the materials submitted to the NRC?

11 A (Mr. Campbell) Yes, sir.

12 Q They are? Okay.

13 MR. CURTISS: I believe that's the case.

14 BY MR. LOVEJOY:

15 Q Are they in the application or in response to
16 RAIs?

17 A (Mr. Campbell) They are in the application.

18 Q Okay. Now, what was the bottom line, so to
19 speak, of water demand at the -- you attributed to the
20 facility?

21 A (Mr. Campbell) Total water quantity was 63.5
22 thousand gallons per day for all water usage.

23 Q And was that pure drinking water?

24 A (Mr. Campbell) I'm sorry?

25 Q Was that drinking water that was required,

1 potable water?

2 A (Mr. Campbell) Yes, sir.

3 Q Okay. And I think you said there was some
4 other matter that you were going to testify about, in
5 addition to Lockwood Greene's efforts to calculate the
6 water demand. There's something about the acquisitions of
7 rights.

8 A (Mr. Campbell) We were instrumental -- not the
9 acquisition of rights. We were involved with discussions
10 with the City of Eunice and Hobbs on initial discussions
11 on obtaining water from both of those.

12 Q And did you describe the proposed plant's needs
13 to officials of Eunice or Hobbs?

14 A (Mr. Campbell) When we began our discussions
15 with both, we had preliminary numbers as to usage, and we
16 discussed preliminary numbers. As time progressed, we
17 finalized and got down to the last number of the 63.5
18 thousand a day.

19 Q Were your earlier numbers bigger or smaller?
20 Do you remember?

21 A (Mr. Campbell) Earlier numbers were larger.

22 Q In the discussions with Hobbs and Eunice, did
23 you, on behalf of -- working on behalf of LES, did you
24 characterize the assurance of supply that was necessary
25 for this facility?

1 A (Mr. Campbell) We did discuss the criticality
2 of the reliability of the supply.

3 Q And what did you say?

4 A (Mr. Campbell) We explained to them what the
5 water was for and the necessity of having a reliable water
6 source.

7 Q Did you discuss with them what kind of priority
8 among users the NEF would have?

9 A (Mr. Campbell) Not that I could recollect.

10 Q And have you reached agreement with both cities
11 now concerning water supply?

12 A (Mr. Campbell) Yes, sir. We have a memorandum
13 of understanding from both Hobbs and Eunice.

14 Q And what is your understanding of the assurance
15 of supply contained in the memorandum, let's say, first
16 for Hobbs?

17 A (Mr. Campbell) Both entities have agreed to
18 supply 100 percent of the water quantity necessary.

19 Q Sometimes utilities assign to certain customers
20 or classes of customers relative priorities as users. Do
21 you understand whether the proposed NEF has any particular
22 priority assigned to it by either Hobbs or Eunice?

23 A (Mr. Campbell) I recollect having read
24 something that the NEF would be a high-priority user, and
25 if I recollect correctly, if water rationing began, it

1 would be one of the last facilities to be rationed on the
2 water plan.

3 Q And where did you read that?

4 A (Mr. Campbell) I'm sorry. I don't remember.

5 Q Did that relate to supply from Hobbs or from
6 Eunice?

7 A (Mr. Campbell) I'm fairly confident it was
8 from Hobbs.

9 Q All right. Mr. Krich, in this proceeding as
10 regards matters of water supply, what subjects are you
11 going to be testifying on?

12 A (Mr. Krich) Same subject pretty much as Randy.
13 That is, the analysis that led to the determination of how
14 much water the plant will need.

15 Q Are you going to testify about the supply
16 obtained?

17 A (Mr. Krich) I was involved in -- as a manager
18 for the overall project. I was the one who agreed or gave
19 the go-ahead for these MOUs to be signed.

20 Q Okay. And what is the substance of your
21 testimony going to be concerning the calculation of water
22 requirements?

23 A (Mr. Krich) That the calculation that was done
24 is a -- has been thoroughly reviewed. It uses standard
25 methods that in our analysis we have included in the

1 design of the plant; water conservation measures to
2 minimize the amount of consumptive use of water at the
3 plant, and that our usage is on the order of about 71, 72
4 acre-feet per year; which is by comparison to other common
5 usage pretty low. And what I mean, common usage, such as
6 farms or golf courses.

7 Q And what is the duration of the water supply
8 commitments that you've obtained for this facility?

9 A (Mr. Krich) Both the memorandum of
10 understanding from City of Hobbs and the City of Eunice
11 state explicitly that the supply will be for 30 years.

12 Q Starting when?

13 A (Mr. Krich) Starting when the plant operates,
14 I believe. Starting when we request, I think is the way
15 it reads.

16 Q And when do you expect that request to be made?

17 A (Mr. Krich) When we're going to start needing
18 the water.

19 Q And in what year?

20 A (Mr. Krich) What year? We have said in the
21 Hobbs -- in the memorandum of understanding with the City
22 of Hobbs, we've estimated that initial use will start
23 about 2007, so we'll obviously need water on the site as
24 we go through construction.

25 Q Have you done anything to determine that water

1 will, in fact, be available for 30 years from that point?

2 A (Mr. Krich) We have looked at the amount of
3 water, the capacity of water, from both the City of Hobbs
4 and the City of Eunice. The numbers that Mr. Woomer and
5 Mr. Stokes gave and that satisfied us that our usage was
6 so small as to be inconsequential to the supply of water
7 for a long period of time, certainly to cover 30 years.

8 Q When you say capacity, what are you referring
9 to?

10 A (Mr. Krich) I'm referring to the numbers that
11 Mr. Woomer gave for the amount of water that the City of
12 Hobbs has at their -- that they have right to. I think --
13 and, Tim, you'll have to help me out. It's 20,000 acre-
14 feet?

15 A (Mr. Woomer) 20,066.4 acre-feet.

16 Q So you judged the capacity based on water
17 rights.

18 A (Mr. Krich) We judged the capacity based on
19 what both the City of Hobbs and the City of Eunice told us
20 that they had in terms of water capacity.

21 Q Expressed in what units?

22 A (Mr. Krich) In acre-feet per year.

23 Q Water rights. Is that what you're saying?

24 A (Mr. Krich) I -- we didn't get into whether
25 they were water rights or what they were. We just were

1 interested in their capacity.

2 MR. LOVEJOY: Okay. I'd like to mark these as
3 Exhibits 1, 2, and 3. These are the resumes that we've
4 been supplied.

5 (The documents referred to were
6 marked for identification as
7 Exhibits NIRS-Panel-1 through
8 NIRS-Panel-3.)

9 BY MR. LOVEJOY:

10 Q I'd like the witnesses just to identify these.
11 Mr. Krich, would you please identify Exhibit 1? Mr.
12 Stokes, would you please identify Exhibit 2, and Mr.
13 Peery, Exhibit 3. We can take it in numerical order.

14 Mr. Krich, would you state for the record what
15 is Exhibit 1?

16 A (Mr. Krich) Exhibit 1 is my resume.

17 Q Okay. Mr. Stokes, is Exhibit 2 your resume?

18 A (Mr. Stokes) It is.

19 Q And, Mr. Peery, is Exhibit 3 yours?

20 A (Mr. Peery) Yes, it is.

21 MR. LOVEJOY: All right. Let's hand these back
22 to the reporter, for the record.

23 Let's mark this as -- this will be Number 4.

24 (The document referred to was
25 marked for identification as

Exhibit NIRS-Panel 4.)

MR. LOVEJOY: Do you have Number 4?

THE REPORTER: Yes.

MR. LOVEJOY: The witness needs it.

BY MR. LOVEJOY:

Q Mr. Campbell, would you look at Number 4 and tell us if you can identify that, please.

A (Mr. Campbell) Yes, sir. These are meeting minutes from the meeting that we had with the officials at Hobbs.

MR. LOVEJOY: Okay. Let's mark this one also. So it would be Number 5.

(The document referred to was marked for identification as Exhibit NIRS-Panel 5.)

BY MR. LOVEJOY:

Q Mr. Campbell, would you also please look at Number 5 and identify that if you can.

A (Mr. Campbell) Yes, sir. These are meeting minutes from our meeting with the officials at Eunice.

Q Did you prepare Number 4 and Number 5?

A (Mr. Campbell) Yes, sir.

MR. LOVEJOY: Okay. Let's move right ahead and mark this one. This will be Number 6.

(The document referred to was

1 marked for identification as
2 Exhibit NIRS-Panel 6.)

3 BY MR. LOVEJOY:

4 Q And this one seems to be signed by Mr. Woomer,
5 so let's ask him to identify it if he can. Mr. Woomer,
6 can you identify that as a copy of a document that you
7 signed?

8 A (Mr. Woomer) Yes, it is.

9 Q Is this the memorandum of understanding with
10 Lockwood Greene on behalf of NEF concerning water
11 supply --

12 A (Mr. Woomer) Yes, it is.

13 Q -- by the City of Hobbs? Okay.

14 MR. LOVEJOY: Let's mark this one, too.

15 (The document referred to was
16 marked for identification as
17 Exhibit NIRS-Panel 7.)

18 BY MR. LOVEJOY:

19 Q Mr. Stokes, would you take a look at Number 7
20 and tell us if you can identify that.

21 A (Mr. Stokes) No. I'm not the one to identify
22 it. I did not negotiate this or sign this.

23 Q Okay. Let's hand it to Mr. Krich. Maybe he
24 knows.

25 A (Mr. Stokes) (Handing document.)

1 Q Can you identify that document?

2 A (Mr. Krich) Yes, I can.

3 Q What is that?

4 A (Mr. Krich) This is the memorandum of
5 understanding that we have signed between us, with John
6 Shaw acting as our agent, and the City of Eunice.

7 Q Okay. Mr. Woomer, do you have Number 6?

8 A (Mr. Woomer) Yes, sir.

9 Q Under this agreement, what priority of water
10 usage would the proposed NEF as a utility customer?

11 A (Mr. Woomer) As part of our agreement, the NEF
12 site would have first priority of the water going down to
13 the Eunice site.

14 Q Eunice site being the NEF site. Is that what
15 you mean?

16 A (Mr. Woomer) Yes, sir.

17 Q Do you have any other utility customers that
18 have first priority?

19 A (Mr. Woomer) We have a ordinance in place, a
20 rationing ordinance in place for the City of Hobbs that
21 prioritizes from non-essential use such as irrigation is
22 the first to be curtailed.

23 Q Uh-huh.

24 A (Mr. Woomer) Then the next tier of
25 nonessentials would be car washes, operations of that

1 nature. Of course, in the meantime, there is rationing on
2 lawn irrigation for residents.

3 Q Uh-huh.

4 A (Mr. Woomer) And that's pretty much the
5 priority scale.

6 Q You said irrigation is ranked among the
7 nonessential uses. Is that --

8 A (Mr. Woomer) It is the first to be --

9 Q -- agricultural irrigation or --

10 A (Mr. Woomer) This is municipal use. There is
11 no agricultural use on our system.

12 Q Okay. So how many categories of priority are
13 there under your system?

14 A (Mr. Woomer) I don't recall exactly. I would
15 have to review the ordinance to give you that exact
16 answer.

17 Q Well, how many users exist in the same category
18 that NEF has under this agreement?

19 A (Mr. Woomer) I don't recall that exact number.
20 They would be grouped as an industrial user, which is a
21 new category that we just instituted to handle our
22 pretreatment program.

23 Q All right.

24 A (Mr. Woomer) That will be a combination which
25 will be garnered out of our commercial classification of

1 customers that we currently have.

2 Q So this is a new category, and is NEF the first
3 one in --

4 A (Mr. Woomer) Yes.

5 Q -- this category?

6 A (Mr. Woomer) And the rationing is based on
7 usage, not exactly classification for billing.

8 Q Did you say the rationing is based on usage?

9 A (Mr. Woomer) That's what I --

10 Q What do you mean?

11 A (Mr. Woomer) Irrigation usage is the first to
12 be rationed.

13 Q Yes. Okay. Mr. Krich, looking at Exhibit 7,
14 can you tell us what priority you believe the NEF would
15 have under this commitment by the City of Eunice?

16 A (Mr. Krich) I can't. There is no -- there's
17 no priority specified in the MOU.

18 Q Have you been advised of any particular
19 priority that you would have?

20 A (Mr. Krich) Not that I'm aware of. No. Nor
21 have we requested a priority.

22 Q Did you request a particular priority in the
23 City of Hobbs?

24 A (Mr. Krich) No.

25 Q But it was expressed to Hobbs and to Eunice on

1 behalf of NEF that assurance of supply was important, was
2 it not?

3 A (Mr. Krich) Assurance of supply or reliability
4 of supply is important for asset protection.

5 Q The asset being the NEF.

6 A (Mr. Krich) Well, being the machines in the
7 NEF. It's not required for safety. It's required for
8 asset protection.

9 MR. LOVEJOY: This is Exhibit 8, I believe.

10 (The document referred to was
11 marked for identification as
12 Exhibit NIRS-Panel 8.)

13 BY MR. LOVEJOY:

14 Q Okay. Mr. Campbell, would you look at Exhibit
15 8 and tell us if you can identify that as something you've
16 seen.

17 A (Mr. Campbell) (Perusing document.) Yes, sir.
18 I have seen it.

19 Q And is this document the audit, the Lea County
20 Municipal Water Audit document?

21 A (Mr. Campbell) As far as I'm aware, yes, sir.

22 Q Okay. I've got a number of questions for
23 different people about this. Could you hand it over to
24 Mr. Stokes, please?

25 A (Mr. Campbell) (Handing document.)

1 Q Would you look at the page captioned, 'LES-1184
2 in the lower right corner.

3 A (Mr. Stokes) Yes.

4 Q Under, Water Production -- you may want to read
5 that paragraph -- there's a reference to wells in an area
6 called Nadine.

7 A (Mr. Stokes) That's correct.

8 Q Are you familiar with that area?

9 A (Mr. Stokes) Yes, sir.

10 Q Where's it located?

11 A (Mr. Stokes) It's about halfway between Hobbs
12 and Eunice.

13 Q And --

14 A (Mr. Stokes) It's on the very southern end of
15 the Ogallala Aquifer.

16 Q There's a statement that, "When the Nadine
17 wells became contaminated, water production was shifted
18 north." Are you aware of contamination of the wells at
19 Nadine?

20 A (Mr. Stokes) Yes, I am.

21 Q What's the cause of the contamination?

22 A (Mr. Stokes) There was some hydrocarbon
23 contamination in the wells.

24 Q How did that happen?

25 A (Mr. Stokes) Well, they're in the middle of an

1 oil patch.

2 Q Was there an accident, or was this --

3 A (Mr. Stokes) Just over time --

4 Q -- a natural phenomenon?

5 A (Mr. Stokes) Just over time -- Roger may know
6 more about the Nadine contamination out of the water deal,
7 but it's a hydrocarbon contamination. It's a low-level
8 contamination, but they did move their production source
9 further northwest of Hobbs.

10 Q These wells are now out of use -- is that
11 right? -- at Nadine.

12 A (Mr. Stokes) Those wells are not being used at
13 the current time. However, the rights from those wells
14 are valid, and those -- water was used there for water-
15 plug purposes in a lease that just expired last year.

16 Q It was used for what purpose?

17 A (Mr. Stokes) Water-plug purposes for oil
18 extraction purposes. It was leased by the City of Eunice,
19 I believe, to Conoco. That lease expired in 2003. That
20 water is available.

21 Q But it's not potable water, is it?

22 A (Mr. Stokes) It is available and could be made
23 potable with treatment.

24 Q Mr. Peery, are you better informed about the
25 origins of contamination at the Nadine wells?

1 A (Mr. Peery) No, I'm not. I don't have
2 anything to add to what Len said.

3 Q Okay. Mr. Woomer, Hobbs has a so-called
4 increasing block or rate structure in system for water
5 consumption, doesn't it?

6 A (Mr. Woomer) Inclining block --

7 Q Inclining block?

8 A (Mr. Woomer) -- rate structure. Yes, sir.

9 Q And what's the purpose of that?

10 A (Mr. Woomer) It is -- its main purpose is to
11 make sure that the utilities is solvent fiscally through a
12 rate structure and rate analysis for cost of service. And
13 there are several different rate structures that you can
14 put into place: flats, volumetric, inclining or declining
15 block. And Hobbs chose to institute an inclining block to
16 encourage conservation of water resources.

17 Q Does the inclining block -- does the same rate
18 structure apply to all customers of the water system at
19 Hobbs?

20 A (Mr. Woomer) Yes, it does.

21 Q Is there any witness here who is knowledgeable
22 in the rate structure for Eunice?

23 A (Mr. Stokes) No.

24 Q So there's nobody who knows whether Eunice has
25 an inclining block system. Okay. Let me just check

1 something here.

2 (Pause.)

3 BY MR. LOVEJOY:

4 Q Does any one of the witnesses here know what
5 changes in water usage in Lea County are projected to
6 occur over, say, the next 40 years?

7 A (Mr. Peery) I think it's in the regional water
8 plan there.

9 Q And you worked on the plan, didn't you?

10 A (Mr. Peery) Yes, I did.

11 Q And what projection of water usages is there
12 contained for the next 40 years, 40 years from the report?

13 A (Mr. Peery) It projects an increase in water
14 use.

15 Q To what extent?

16 A (Mr. Peery) I don't have the specific figures
17 in front of me.

18 Q Let me be fair to you and show you the report.
19 On the second page of the executive summary, you can see
20 the highlighted provision. See if that refreshes your
21 recollection.

22 A (Mr. Peery) (Perusing document.) I'm just
23 going to read this out loud --

24 Q Please, please.

25 A (Mr. Peery) It says, "Over the next 40 years,

1 if unrestrained, water use in Lea County is estimated to
2 increase to approximately 360,000 acre-feet, 105 percent
3 greater than the 1995 totals."

4 Q Okay.

5 A (Mr. Peery) And I think the key point there is
6 "if unrestrained."

7 Q And why do you say that's the key point?

8 A (Mr. Peery) As I mentioned earlier, the State
9 Engineer does have provisions in to save the lower part of
10 the aquifer, if it should become necessary, for municipal
11 and domestic use. So obviously the State Engineer's
12 administration would require them to stop other uses to
13 save that water for the municipal and domestic uses.

14 Q And what other uses do you have in mind when
15 you say that?

16 A (Mr. Peery) Agriculture. That would be the
17 primary one, since it accounts for something on the order
18 of -- I don't remember the exact number -- maybe 80
19 percent of the basin use.

20 Q And do you foresee that within the 40 years
21 from this report, it's going to be necessary to stop some
22 agricultural use, to restrain it?

23 A (Mr. Peery) It's hard to predict the future.
24 We don't know who is going to put their water rights into
25 play and who is not going to use their water rights. The

1 report basically assumed that the vast majority of
2 existing water rights and declarations for water -- which
3 aren't true water rights; they're just a declaration of
4 the water right -- would be used for agricultural
5 purposes.

6 MR. CURTISS: Lindsay, can we take a break at
7 this point, if we could?

8 MR. LOVEJOY: Sure. Let's take a break.

9 (Whereupon, a short recess was taken.)

10 THE WITNESS: (Mr. Peery) Mr. Lovejoy, if I
11 could try to --

12 BY MR. LOVEJOY:

13 Q Please, go right ahead.

14 A (Mr. Peery) -- try to clarify where I was
15 headed when we took a break. What the report did was look
16 at a worst-case scenario for water use in a Lea County
17 Underground Water Basin. As I was mentioning, it was
18 assuming that all the declared and permitted water rights
19 would be used for agricultural lands.

20 In addition to all the lands that are currently
21 in the CRP, which is the Crop Reserve Program, which
22 allows agricultural lands to be taken out of production,
23 but the water rights to be -- not lost, but to remain with
24 the land going back into production. So it was really
25 looking at worst-case scenario for the basin.

1 Q Can you --

2 A (Mr. Peery) And the fact of the matter is that
3 as water levels declined, it's more and more difficult for
4 the agricultural industry to continue on, because it
5 becomes uneconomical for them. So what happens eventually
6 is when the saturated thickness drops, starts to drop too
7 much for them to make money, because it's more expensive
8 to pump water to the surface where they need more wells to
9 make the same amount of water, then agricultural uses
10 naturally slow down also.

11 Q Can you point to the place in this plan where
12 it says that it's describing a worst-case scenario?

13 A (Mr. Peery) No. I can't -- I don't think that
14 it says in the plan that it is a worst-case scenario. But
15 it certainly is the worst-case scenario.

16 A (Mr. Stokes) May I interject one thing?

17 Q Please.

18 A (Mr. Stokes) You probably, being with the AG
19 Office, understand why the 40-year regional water plans
20 were developed. Statutory reasons to develop those water
21 plans was it was a way that the regions in the state of
22 New Mexico could put on paper that they needed every drop
23 of water in a certain basin of New Mexico for use in New
24 Mexico, so that it would not have to be exported to Texas.
25 It is definitely a worst-case scenario. I managed the

1 project.

2 Q Okay. Mr. Peery, you gave your calculations of
3 the impact, assuming one single well were used as a
4 source.

5 A (Mr. Peery) Uh-huh. That's really unlikely.

6 Q How many wells does Eunice have?

7 A (Mr. Peery) They currently have four they're
8 operating, and I don't recall the number that Hobbs has.

9 Q Uh-huh. Let me draw your attention to the
10 highlighted language on page 6-9 of the regional water
11 plan. You can read it into the record for clarity.

12 A (Mr. Peery) "Because pumping is in excess of
13 the Ogallala's recharge rate, elevation at the top of the
14 aquifer has declined or experienced drawdown. The recent
15 groundwater flow model indicated that, in response to
16 heavy pumping in Texas, the most severe drawdowns occur
17 along Lea County's east border, the Texas line.

18 "In this area, draw-downs in excess of 60 feet
19 have occurred since 1940. The model predicts that the
20 saturated thickness will decrease by another 50 to 100
21 feet in the area between the state line and the
22 communities of Hobbs, Lovington and Tatum in the next 40
23 years. Actual drawdowns could be much greater than this
24 amount."

25 Q If drawdowns occur at the rate projected there,

1 say -- rather, a decrease in saturated thickness by 50 to
2 100 feet in the area of the well that you hypothesized,
3 would your calculations still reach the same result?

4 A (Mr. Peery) Oh, yes. My calculation would
5 have reached the same result, but the fact of the matter
6 is, the area --

7 (Interruption at door.)

8 THE WITNESS: (Mr. Peery) Let me clarify my
9 last comment. Naturally the hydraulic properties of the
10 aquifer are related to the saturated thickness, so it
11 could have had an impact if it was 100 or 150 foot of
12 drawdown over a period of time.

13 There is ample saturated thickness in the
14 Ogallala in the areas west of Hobbs, and primarily, in all
15 actuality, throughout the westernmost portion of the
16 basin, there's very little agriculture in the western
17 portion of the basin, because there's very little soil, so
18 it's very difficult to grow anything there.

19 And if you want to look at the perspective of
20 the amount of water that's going to be needed at the LES
21 facility in terms of the current water in storage in the
22 Lea County Basin, Underground Water Basin, there's
23 approximately 31 million acre-feet of water in storage in
24 the Lea County Underground Water Basin. If you look at
25 LES's --

1 BY MR. LOVEJOY:

2 Q What was that number? Sorry.

3 A (Mr. Peery) 31 million acre-feet. If you
4 compare LES's needs to that quantity, you're looking at
5 well less than .01 percent of available water from the Lea
6 County Underground Water Basin.

7 Q And what amount would be in storage in, say,
8 20/40?

9 A (Mr. Peery) I would have to look at that.
10 (Perusing document.)

11 Referring to your highlighted section, it says,
12 "It follows that approximately only 8 million acre-feet of
13 recoverable water will exist in 2040 if continuation of
14 1998 pumping rates occur. The bulk of this figure will
15 also probably be located away from existing well fields
16 due to drawdown in the aquifer." So it still is a
17 substantial amount of water.

18 Q And would --

19 A (Mr. Peery) And that 8 million acre-feet of
20 recoverable water was taken as 45 percent of the water in
21 storage. So it says here, "Approximately 14 million acre-
22 feet of water would still be in storage, 8 million
23 recoverable." So still a significant quantity.

24 Q And would your calculation as to the extent of
25 drawdown attributable to the facility be the same under

1 those circumstances, the ones you just referred to?

2 A (Mr. Peery) It would be specific to the
3 drawdown at the particular site, so I would have to look
4 at the projected drawdown at the end of the 40-year period
5 and calculate that.

6 Q You'd have to do a new calculation. Is that
7 right?

8 A (Mr. Peery) I'd have to review my
9 calculation --

10 Q Would your --

11 A (Mr. Peery) -- because those drawdowns don't
12 occur evenly throughout the basin, so that's the important
13 thing to know.

14 Q Would the figure you used for transmissivity be
15 the same if there were significant drawdowns as described
16 in the document?

17 A (Mr. Peery) Since I already started with a
18 conservative transmissivity, I'm not sure.

19 Q Okay. Were there -- in the calculations you
20 did, were there any boundary conditions with respect to
21 the single well that you've assumed?

22 A (Mr. Peery) No.

23 Q Nothing. Okay.

24 A (Mr. Peery) Again, looking at one well -- I
25 mean, you're talking about all the water coming out of one

1 well, when the fact of the matter is it's going to come
2 out of two well fields -- does provide a conservative
3 estimate.

4 MR. LOVEJOY: Okay.. That's all I have. Thank
5 you all.

6 MR. CURTISS: That's it.

7 THE WITNESS: (Mr. Krich) One point of
8 clarification, which I'm not sure is there, and that is
9 simply that the supply from Hobbs and the supply from
10 Eunice are redundant supply for the plant, and I don't
11 know whether you're aware of that, but either supply will
12 provide enough for the plant to operate, both are not
13 needed at the same time.

14 MR. CURTISS: We're done?

15 MR. LOVEJOY: We're done.

16 (Whereupon, at 3:15 p.m., the taking of the
17 instant deposition was concluded.)
18
19
20
21
22
23
24
25

CERTIFICATE

This is to certify that the foregoing proceedings
in the matter of: The Deposition of
 George R. Campbell
 Rod Krich
 Roger L. Peery
 Len Stokes
 Tim Woomer

held on: September 17, 2004

at the location of: Santa Fe, NM

were duly recorded and accurately transcribed under my
direction; further, that said proceedings are a true
and accurate record of the testimony given by said
witness; and that I am neither counsel for, related
to, nor employed by any of the parties to this action
in which this deposition was taken; and further that
I am not a relative nor an employee of any of the
parties nor counsel employed by the parties, and I am
not financially or otherwise interested in the outcome
of the action.



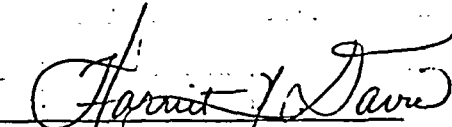
Carol Oppenheimer

AUTHENTICATION BY SIGNATURE

I, the undersigned, do hereby certify by my signature hereunder that I have read the foregoing deposition of testimony given by me on September 17, 2004, and find said transcription to be a true and accurate record, as corrected.


George R. Campbell

Sworn to and subscribed before me this 13 day
of OCTOBER, 2004.


Notary Public

My commission expires January 23, 2014

1323 RHODE ISLAND AVENUE, NW
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ERRATA

ERRATA

RE THE DEPOSITION OF GEORGE R. CAMPBELL
(deponent's name)

TAKEN ON SEPT. 17, 2004
(date)

IN THE MATTER OF

V.

(party) _____ (party)

DOCKET NO. _____

IN _____
(name of court)

[illegible]

AUTHENTICATION BY SIGNATURE

I, the undersigned, do hereby certify by my signature hereunder that I have read the foregoing deposition of testimony given by me on September 17, 2004, and find said transcription to be a true and accurate record, as corrected.

Rod Krich

Sworn to and subscribed before me this _____ day
of _____, 20__.

Notary Public

My commission expires _____.

AUTHENTICATION BY SIGNATURE

I, the undersigned, do hereby certify by my signature hereunder that I have read the foregoing deposition of testimony given by me on September 17, 2004, and find said transcription to be a true and accurate record, as corrected.

Roger L. Peery

Sworn to and subscribed before me this _____ day
of _____, 20__ __.

Notary Public

My commission expires _____.

AUTHENTICATION BY SIGNATURE

I, the undersigned, do hereby certify by my signature hereunder that I have read the foregoing deposition of testimony given by me on September 17, 2004, and find said transcription to be a true and accurate record, as corrected.


Len Stokes

Sworn to and subscribed before me this 3rd day
of November, 2004.


Notary Public

My commission expires March 31, 2006.

0917 LOVE

NEAL R. GROSS & CO., INC.

1323 RHODE ISLAND AVENUE, NW
WASHINGTON, D.C. 20005
TELEPHONE (202) 234-4433

ERRATA

ERRATA

RE THE DEPOSITION OF

LEN STOKES

(deponent's name)

TAKEN ON

(date)

IN THE MATTER OF

(party)

V.

(party)

DOCKET NO.


IN

(name of court)

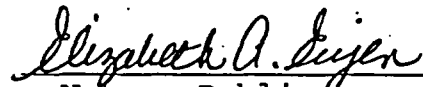
PAGE NO.	LINE NO.	CORRECTION
18	18	closed to new APPROPRIATIONS
20 18	20	Delete But they -- there's -- Capillary All
	24	Delete - That we (Cap) Every
19	3	Engineer ②
19	5	They are all <u>mined</u> - Withdrawals
		or pumping
	7	WITHDRAWALS
23	1	Delete: The -- STRAIGHT
		I have done no calculations
	3	Delete -- add and
	4	permitted - The
	5	Delete - add is
	6	Delete - For
	7	Delete water to be available
	10	Delete It is based --
	17	Delete - The water rights
39	39 17	WATER FLOOD

AUTHENTICATION BY SIGNATURE

I, the undersigned, do hereby certify by my signature hereunder that I have read the foregoing deposition of testimony given by me on September 17, 2004, and find said transcription to be a true and accurate record, as corrected.


Tim Woomer

Sworn to and subscribed before me this 20th day
of October, 2004.


Notary Public

My commission expires Oct. 2, 2007.