

NON-BINDING ARBITRATION BEFORE
JEFFREY C. FEREDAY, ARBITRATOR

Initiated Pursuant to Final Settlement Stipulation
Kansas v. Nebraska & Colorado
No. 126, Orig., U.S. Supreme Court
Decree of May 29, 2003, 538 U.S. 720

N-CORPE Augmentation Plan
(Arbitration Initiated July 10, 2013)

DEPOSITION OF DR. WILLEM SCHREÜDER

Wednesday, January 15, 2014

9:45 a.m.

PURSUANT TO NOTICE and the Federal Rules of Civil Procedure, the above-entitled deposition was taken on behalf of the State of Kansas at 1313 Sherman Street, Suite 821, Denver, Colorado, before Denise A. Freeman, Registered Professional Reporter and Notary Public within Colorado.

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Also Present:
 Dick Wolfe
 Daniel Steuer
 Dale Book

1 PROCEEDINGS
 2 DR. WILLEM SCHREÜDER,
 3 having been first duly sworn, was examined and
 4 testified as follows:
 5 EXAMINATION
 6 BY MR. GRUNEWALD:
 7 Q. Good morning, Dr. Schreüder.
 8 A. Good morning.
 9 Q. You have been deposed before, I believe?
 10 A. That's correct.
 11 Q. And so you are familiar with the process.
 12 And if you would like to take a break or have any
 13 questions about my questions, please speak up. And if
 14 you want to complete an answer, please make sure to
 15 complete it. We can go back on anything. Does that
 16 sound okay?
 17 A. Yes.
 18 Q. Is there any reason why your answers you
 19 think -- like medication or for any other reason, you
 20 think your answers might not be truthful or complete
 21 this morning?
 22 A. Not that I can think of.
 23 Q. Great. And you were present for Mr. Wolfe's
 24 deposition that was just before this one, correct?
 25 A. Yes.

1 INDEX

2	EXAMINATION	PAGE
3	January 15, 2014	
4	By Mr. Grunewald	4
5	EXHIBITS	INITIAL REFERENCE
6	4 Notice of Telephonic Deposition of	7
7	Dr. Willem Schreüder	

8 (Exhibits attached to original and electronic
 9 transcripts to counsel ordering same.)

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1 Q. And did you hear the entire deposition?
 2 A. I think so.
 3 Q. Was there anything in particular that you
 4 heard Mr. Wolfe say that you disagree with?
 5 A. Not that I can think of.
 6 Q. You will have to bear with me. I am going
 7 to march through questions that are essentially the same
 8 questions. In some cases we will be getting into stuff
 9 that it sounds like Mr. Wolfe said you might know more
 10 about.
 11 But if you will bear with me, we will just
 12 go through this, and if you have anything different to
 13 say in particular, you can let us know. Does that sound
 14 okay?
 15 A. Yes.
 16 Q. I heard Mr. Wolfe testify that there wasn't
 17 any text in the report that he could identify separately
 18 drafted by either of you. Is there any text that you
 19 would identify in the joint report you prepared that was
 20 specifically drafted just by you?
 21 A. Well, I am sure there are certain words that
 22 I wrote, but I can't point to any specific area that I
 23 would say that was drafted by me.
 24 Q. Is there any text in the report that you
 25 would identify as being drafted not by you and not by

1 Mr. Wolfe?
2 A. Not that I can think of offhand, no.
3 Q. I heard Mr. Wolfe testify -- and certainly
4 correct me if you think that I am not accurately stating
5 things that we heard earlier -- but I heard him explain
6 that he did not have other folks from the Colorado
7 Division of Water Resources assisting on this report.
8 Do you agree with that?
9 A. Yes. There may be others that have reviewed
10 it, but not as far as I know as far as adding to the
11 draft is concerned.
12 Q. Besides Colorado Division of Water Resources
13 staff, are there any other individuals that assisted
14 with the report?
15 A. Other than counsel, not that I am aware of.
16 Q. Did counsel draft any of the text of the
17 report?
18 A. I think counsel suggested some
19 clarifications to the language, but I don't recall that
20 they drafted any.
21 Q. Thank you. This joint report contains your
22 and Mr. Wolfe's opinions about the N-CORPE project; is
23 that right?
24 A. I think so, yes.
25 Q. Do you have any opinions about the N-CORPE

1 Q. And what is that limit?
2 A. I believe that number is also 60,000
3 acre-feet.
4 Q. I would like to ask you a bit about the
5 Medicine Creek reach. The N-CORPE project discharges
6 augmentation water into Medicine Creek; is that right?
7 A. That's my understanding, yes.
8 Q. And are you familiar with the Medicine Creek
9 reach in Nebraska?
10 A. In a general sense, yes.
11 Q. Do you know where it is?
12 A. In a general sense, yes.
13 Q. Have you ever been there?
14 A. I don't recall.
15 Q. The Medicine Creek reach has a reservoir on
16 it; is that right?
17 A. Correct.
18 Q. What reservoir is that?
19 A. Harry Strunk.
20 Q. Is that upstream or downstream of the
21 discharge point from the augmentation water?
22 A. It would be downstream.
23 Q. Are you familiar with the Compact accounting
24 as it deals with the Medicine Creek Subbasin?
25 A. Yes.

1 project that are not in this report?
2 A. No. I think this fairly summarizes my
3 opinions regarding the N-CORPE augmentation plan.
4 (Deposition Exhibit 4 was marked.)
5 Q. (BY MR. GRUNEWALD) Now the deposition notice
6 for your deposition, I believe, has been marked as
7 Exhibit 4, although it's the only exhibit here we are
8 bringing up new for your deposition. Have you seen that
9 deposition notice?
10 A. Yes.
11 Q. And it requests that any electronic or
12 hard-copy backup material not previously provided should
13 be provided. Do you have any of those materials to
14 provide to the states?
15 A. I don't believe there is any additional
16 information to provide.
17 Q. Thank you. The N-CORPE proposal, I would
18 like to ask you a couple of questions about that. Does
19 the proposal have a maximum limit to annual pumping?
20 A. I believe so, yes.
21 Q. What is that limit?
22 A. I think it's 60,000 acre-feet.
23 Q. Does the proposal have a maximum limit on
24 the amount of credit that Nebraska would receive?
25 A. I think so, yes.

1 Q. What's the surface water accounting data
2 that's collected from the Medicine Creek Subbasin?
3 A. It's outlined in the N-CORPE resolution,
4 page 64. It details all of the specifics of what is
5 required.
6 Q. Is page 64 inside the accounting procedures
7 markup that's attached to the N-CORPE proposal?
8 A. That's correct, yes. Did I say 64? It's
9 61.
10 Q. Thank you. I believe you did and I was a
11 bit confused. So that page, for the record, shows
12 formulas related to Medicine Creek in the accounting
13 procedures; is that right?
14 A. That's correct, yes.
15 Q. Thank you. Are there surface water gauges
16 on Medicine Creek?
17 A. Yes.
18 Q. Do you know how many surface water gauges
19 there are?
20 A. I am aware of at least two. There may be
21 more.
22 Q. What are the two you are aware of? Where
23 are they?
24 A. Well, the one is the one that is mentioned
25 in the surface water accounting, which I believe is

Page 10

1 identified as Medicine Creek below Harry Strunk Lake,
2 Gauge Station No. 06842500. I have forgotten the
3 question now. Did you ask me what the names of the two
4 gauges were?
5 Q. I didn't, but I appreciate you naming -- my
6 question was, where are the two gauges? So that was one
7 gauge in the accounting you just referred to, which I
8 appreciate. Do you know where the other gauge that you
9 said you know of on Medicine Creek is?
10 A. Yes. It's above the reservoir.
11 Q. Is that one used in the Compact accounting?
12 A. I don't think that is directly referenced
13 here in Section 11, no.
14 Q. Is Section 11 that you are referring to in
15 the accounting procedures here on this page, is that the
16 only place that surface water gauges are referred to in
17 the Compact accounting or are there other places?
18 A. There's other places where there may be some
19 references to it. I don't recall if it occurs anywhere
20 else.
21 Q. How many stream miles are there between the
22 discharge point of the augmentation pipeline for the
23 project and Harry Strunk Reservoir?
24 A. I don't remember. You asked Dr. Schneider
25 the same question. He probably has a better answer than

Page 11

1 I do, but it's of the order of 10 miles or so, I think.
2 Q. Will there be any transit losses of the
3 augmentation water between the discharge point and Harry
4 Strunk Reservoir?
5 A. Potentially some, yes.
6 Q. And you say, "potentially." So under what
7 circumstances or what would lead to those losses?
8 A. Well, whenever water flows down a surface
9 conveyance, there may be some gains or losses to that
10 water. So there may be some changes in the amount of
11 flow at the bottom end as opposed to the upper end.
12 Q. Do you know when it's likely to occur?
13 A. If we talk about infinitesimal amounts, it
14 probably happens all the time.
15 Q. Are there conditions under which it's more
16 likely to occur?
17 A. Probably, yes.
18 Q. Do you know what those conditions are?
19 A. How much time do you have for me to go
20 through all of them? There are a large number of
21 factors that would influence that.
22 Q. Are there major factors and minor factors?
23 A. Probably, yes.
24 Q. Do you have several items that you would
25 consider major factors that would lead transit losses to

Page 12

1 be more likely?
2 A. Well, it would be a function of the
3 specifics of the conveyance that we are talking about.
4 Q. When you say, "the specifics of the
5 conveyance," could you explain? I am not following
6 whether you are referring to something physical or
7 conceptual.
8 A. It would be a function of what exactly
9 happens on Medicine Creek between the outfall and
10 wherever the water eventually ends up.
11 Q. And when you say, "what exactly happens,"
12 are we talking about the time of day, the temperature?
13 What sort of conditions are you talking about?
14 A. All of the things that you enumerated and
15 probably many more.
16 Q. Would you consider the ones I enumerated to
17 be major factors?
18 A. I have not made a specific determination of
19 what are major and minor factors on Medicine Creek.
20 Q. So it's possible that the time of day could
21 be a major factor influencing the transit losses as to
22 whether they are more likely to occur?
23 A. Based on my experience, there are systems
24 where the time of day is a major factor. I don't know
25 if it's a major factor in this particular instance.

Page 13

1 Q. Thank you. Have you or anyone from Colorado
2 conducted any analysis or evaluation of the potential
3 for transit losses to occur along Medicine Creek between
4 the point of discharge from the N-CORPE project and
5 Harry Strunk Reservoir?
6 A. In a generic sense, yes.
7 Q. What are those generic analyses or
8 evaluations that you are referring to?
9 A. I reviewed what we have found as far as the
10 general behavior of the stream reach and determined that
11 it was generally a gaining stream, and for that reason I
12 did not consider that there would be a significant
13 transit loss along the stream.
14 Q. Could you -- I apologize. This may have
15 been my poor note-taking just now. Could you explain
16 what it was that led you to conclude that it was a
17 gaining stream and what analysis you are talking about?
18 A. Well, this is not the first time we have
19 looked at Medicine Creek, and my general impression of
20 Medicine Creek is that it's been a gaining stream.
21 Q. When you say not the first time you have
22 looked at Medicine Creek, what were the other times that
23 you are referring to?
24 A. Well, you'll remember we were before Special
25 Master Kayatta not that long ago where imported water

Page 14

1 supply was a big issue and Medicine Creek featured as
2 one of the primary streams where imported water supply
3 shows up.
4 Q. And what are the specific things that you
5 were looking at in terms of an analysis, either during
6 that time or some other time, that leads you to conclude
7 that it's a gaining stream? Are you looking at some
8 study conducted by someone else, some results that you
9 generated? I am just looking for the source of any
10 data, if there was any data, that you looked at.
11 A. Well, I am sure I couldn't enumerate all of
12 the things that I have looked at, sitting here, but, in
13 general, our review of the data on Medicine Creek
14 indicated that it was a gaining stream.
15 Q. And the data is from where?
16 A. Both the gauge data that's available and the
17 model results.
18 Q. What time period were you looking at?
19 A. The period of record.
20 Q. Could you, just for the record, tell us what
21 that is?
22 A. I don't remember.
23 Q. Did it include recent years?
24 A. I don't recall to what extent we have data
25 for recent years or not.

Page 15

1 Q. I apologize. This could be a failing on my
2 part with not understanding the basic technical points.
3 When you say, "period of record," do you mean the period
4 that there's gauge data for a particular gauge?
5 A. For the gauge. That would be the proper
6 definition, yes.
7 Q. And if it wasn't gauge data you were looking
8 at, what was the other data you were looking at?
9 A. It would have been the period of simulation
10 that we looked at for the model.
11 Q. Is "period of record" here jargon or term of
12 art? Does it always mean a certain period of years or
13 does it change based on the assignment?
14 A. No. Generally "period of record" refers to
15 the period for which you have data or for which you have
16 conducted a simulation.
17 Q. And what is that for the model?
18 A. Today it would be basically from 1918
19 forward.
20 Q. Thank you. Besides those -- what you term
21 generic evaluations -- were there any specific
22 evaluations of gains and losses in the Medicine Creek
23 reach?
24 A. There may have been, but I don't recall.
25 Q. Did you look at them while you were

Page 16

1 preparing this joint report?
2 A. Not that I recall.
3 Q. Now these generic evaluations, would it be
4 fair to call those ones done by or for Colorado as
5 opposed to done by someone else?
6 A. I didn't follow that question. Could you
7 repeat it?
8 Q. Well, perhaps a better question, just to
9 make sure I understand the source of everything that you
10 may have looked at or that may exist, are there any
11 other studies or evaluations of the stream conditions in
12 Medicine Creek that you are aware of besides the ones
13 you have described to me?
14 A. Well, I remember -- we had mentioned that
15 there may have been some various synoptic gain and loss
16 studies that have been done in various places. So if
17 you include that, I can't think of any other studies
18 that I am aware of.
19 Q. I think you are about to expand my
20 vocabulary. Did you say, "synoptic"?
21 A. Yes.
22 Q. Could you define that for me, please?
23 A. A synoptic survey generally refers to a
24 survey that is done at a particular instance in time
25 where somebody goes down the stream, records stream

Page 17

1 flows at various locations, and looks at the diversions
2 and return flows that occur and tries to make a
3 determination of gains and losses along the stream. You
4 can think of it as an instantaneous set of data.
5 Q. And did you look at any of those that may
6 exist when you were preparing your joint expert report?
7 A. I didn't do so in preparation of the report,
8 no, or that I recall.
9 Q. Do the results of any of those studies
10 inform any of your opinions in this joint expert report?
11 A. Well, to the extent that my opinions are
12 influenced by everything I have done in the Republican
13 River over the last dozen years or so, perhaps there may
14 be some influence, but I don't recall specifically
15 looking at those in formulating these opinions.
16 Q. Thank you. What happens to water as it
17 moves through the basin downstream of Harry Strunk
18 Reservoir?
19 A. Some of it is diverted for surface water.
20 Some of it gets evapotranspired. Some of it evaporates
21 directly from the surface water. Some of it might get
22 stored. There's a whole bunch of things that happen to
23 that water.
24 Q. And Medicine Creek is a tributary to the
25 main stem?

Page 18

1 A. That's my understanding, yes.
2 Q. And what's the next federal reservoir
3 downstream of Harry Strunk Reservoir?
4 A. I am not aware of any federal reservoirs on
5 Medicine Creek, per se. On the main stem, the next
6 reservoir would be Harry Strunk Reservoir.
7 Q. You said, "Harry Strunk Reservoir." Did you
8 mean a different reservoir?
9 A. Sorry. Harlan County. I'm sorry. I had a
10 momentary lapse.
11 Q. Not a problem. Thank you. Will there be
12 any transit losses of augmentation water as it moves
13 downstream of Harry Strunk Reservoir to Harlan County
14 Lake?
15 A. Potentially, yes.
16 Q. And when you say, "potentially," is it
17 likely to occur?
18 A. Well, just as a matter of pure physics, it's
19 rare that you have the exact same amount of water at the
20 top end and at the bottom end of the reach. Sometimes
21 it increases. Sometimes it decreases. Both of those
22 could be transit losses.
23 Q. Are the transit losses that could
24 potentially occur likely to be significant?
25 A. It depends on your definition of

Page 19

1 "significant," but it could probably occur, in reality.
2 Q. If they potentially occur, are they likely
3 to be greater than what you consider de minimis?
4 A. I don't think "de minimis" has a good
5 engineering definition, but I don't know that it would
6 be a very large fraction of that augmentation water.
7 Q. And on what do you base that conclusion?
8 A. Again, my observations, based on some of the
9 results that we have looked at before, is that there's a
10 gaining reach along the main stem in that area. And so
11 I don't expect a significant fraction of that water to
12 be lost.
13 Q. Have you or anyone for Colorado conducted
14 any analysis or evaluation of the potential for transit
15 losses to occur between Harry Strunk Reservoir and
16 Harlan County Lake?
17 A. In a generic sense we have looked at the
18 behavior of the system. I haven't done a specific
19 evaluation of it.
20 Q. Are you aware of any studies that were
21 conducted of that reach from Harry Strunk Reservoir down
22 to Harlan County Lake related to transit losses?
23 A. Again, we have talked about this before in
24 the context of the upper reach, but there have been some
25 historical studies of that, both in terms of the

Page 20

1 modeling context as well as those synoptic surveys are
2 concerned. I don't recall the specific details of
3 those.
4 Q. Did you review those while you were
5 preparing or to assist you in preparing your joint
6 expert report?
7 A. Well, I relied on my general knowledge of
8 the system. I didn't specifically go back and review
9 any of that information.
10 Q. Thank you. If you could turn to the N-CORPE
11 proposal, which has been marked as Exhibit 2 for
12 Mr. Wolfe's deposition. Do you have that handy?
13 A. Yes.
14 Q. If you could turn to page 6 -- again, I
15 apologize for retreading some ground here. This is
16 material we covered in Mr. Wolfe's deposition. Do you
17 see the equations in the center of the page there?
18 A. Yes.
19 Q. And they refer to the RRCA accounting
20 procedures for Medicine Creek Subbasin, and do you see
21 that first equation which is listed under both headings?
22 A. Yes.
23 Q. And what does that first term, "VWS,"
24 represent?
25 A. It's generally used to depict virgin water

Page 21

1 supply.
2 Q. Is that your understanding of what it
3 depicts there?
4 A. Yes.
5 Q. And after the equals sign on the right side,
6 there's the term "gauge." Could you explain what your
7 understanding of that term means?
8 A. Yes. On page 6 it's sort of represented in
9 a generic sense. The more detailed explanation of
10 exactly what the accounting procedures were for Medicine
11 Creek Subbasin is shown on page 61, which I referred to
12 earlier.
13 Q. So if we turn to page 61 of the proposal, if
14 I am following what you are saying, it's the first term
15 listed on the right side of the equation -- I'm sorry --
16 the equals sign there. Is that what you are referring
17 to?
18 A. Yes.
19 Q. And it refers to a specific gauge station
20 number, and so the entry that should go there would be
21 what in terms of the numerical result?
22 A. I believe that the shorthand gauge on page 6
23 specifically refers to Medicine Creek below Harry Strunk
24 Lake, Gauge Station No. 06842500.
25 Q. And it's intended to be the total flow

Page 22

1 reading from that gauge on an annual basis? Is that
2 what goes there?
3 A. That's my understanding, yes.
4 Q. What is your understanding of whether
5 Nebraska proposes to make any changes to that gauge term
6 in the accounting procedures?
7 A. It wasn't my understanding that Nebraska
8 would actually propose that we use something different
9 than the gauge flow that is recorded at that particular
10 gauge.
11 Q. Thank you. Now I'm going to ask you just a
12 question about your joint report, if you want to put
13 that in front of you. It was marked as Exhibit 3 in
14 Mr. Wolfe's deposition. Do you have that?
15 A. Hang on just a second. Yes, I've got it.
16 Q. Thank you. I wanted to ask the same
17 questions I asked Mr. Wolfe. At the bottom of the
18 report, first page, there's a reference to Nebraska
19 addressing all of Colorado's questions. Do you see
20 that?
21 A. Yes.
22 Q. And do you remember what any of those
23 questions were?
24 A. Well, one question that comes to mind is
25 that I was curious about improvements that Nebraska

Page 23

1 would be making to the channel of Medicine Creek,
2 whether they were going to be increasing the size of
3 culverts and so forth.
4 Q. And why did that matter to you?
5 A. Well, 60,000 acre-feet is quite a
6 significant volume of flow, and I was just curious to
7 what extent it actually required some work to the stream
8 channel to be made to be able to handle that volume of
9 water.
10 Q. Is it possible that there would be problems
11 in the channel without those improvements?
12 A. Yeah, potentially. I mean, if the culverts
13 aren't sized appropriately, there may be some backups
14 that form. You would want to make sure that the water
15 can make its way down the channel.
16 Q. What happens if there are backups behind the
17 culverts?
18 A. Well, if there's, for example, a road there,
19 if the backup -- if the water can't make it through the
20 culvert, it may actually start riding over the road and
21 wash it out.
22 Q. Aside from washing out roads, are there any
23 other concerns if water backs up behind culverts?
24 A. No, not really.
25 Q. And do you remember what Nebraska's answer

Page 24

1 to you raising this concern was?
2 A. They said that the people who are actually
3 constructing the pipeline would be looking into those
4 issues and making sure that there are no -- none of
5 these, but the individual of whom I asked the question
6 didn't know of those details.
7 Q. Who was the individual you asked?
8 A. I think it was Tom Riley.
9 Q. And if you could just explain for the record
10 who Tom Riley is?
11 A. He's one of Nebraska's consultants that
12 helped design the project.
13 Q. Thank you. Were there any other questions
14 that Colorado raised that you remember?
15 A. Specifically at the workshop, I don't recall
16 that there were any outstanding issues.
17 Q. Were there any other questions that Colorado
18 raised not at the workshop?
19 A. Yes.
20 Q. What were those questions?
21 A. Well, prior to Nebraska actually formally
22 putting forward the proposal and at these workshops, I
23 asked numerous questions of Nebraska to understand what
24 their project was and what they were going to propose.
25 Q. What were the issues that you were asking

Page 25

1 questions about?
2 A. Just generally how Nebraska was going to
3 approach this and how things would be different at this
4 particular project as opposed to some of the other
5 proposals that we have seen.
6 Q. When you say, "different," do you mean
7 different from the Rock Creek augmentation plan?
8 A. Among others, yes.
9 Q. Which others?
10 A. Colorado's CCP proposal.
11 Q. Any others?
12 A. I don't recall that they mentioned any
13 others.
14 Q. And what was their answer as to whether it
15 would be different?
16 A. Well, there are numerous things that are
17 different in this area. The primary part being that
18 it's in the moratorium area and what we have also
19 generally referred to as the mound area.
20 Q. I think you said in the moratorium area or I
21 may have misheard. Is that what you meant?
22 A. No. I'm sorry. It's not in the moratorium
23 area. I apologize.
24 Q. And you also said in the mound area. Is
25 that referring to the area where imported water supply

Page 26

1 is relevant for the Compact accounting?
2 A. In a generic sense, yes.
3 Q. Any other ways that it was different from
4 either the Colorado proposal or the Nebraska Rock Creek
5 proposal?
6 A. There probably are, but not that come to
7 mind right now.
8 Q. Were you satisfied with the answers you got
9 from Nebraska?
10 A. Eventually, yes.
11 Q. I didn't quite catch that. Did you say,
12 "eventually"?
13 A. Yes.
14 Q. Were changes made to address your questions?
15 A. I believe so, yes.
16 Q. What were those changes?
17 A. Well, for example, early on Nebraska had
18 floated the concept that some of the water that would be
19 produced by Medicine Creek could be considered imported
20 water and therefore special conditions would be applied
21 to it, which eventually -- or doesn't appear in the
22 final proposal.
23 Q. Was that something that you agreed with?
24 A. I had some concerns about how that would be
25 quantified.

Page 27

1 Q. What were those concerns?
2 A. It would be -- I had some difficulty with
3 knowing that, if one of the augmentation wells, for
4 example, were to pump 100 acre-feet, what fraction of
5 that water we would be able to definitively say was
6 imported water and what was native water.
7 Q. And is that important for the Compact
8 accounting?
9 A. Since imported water is treated special,
10 yes, I think that would be important.
11 Q. Do you still have that concern based on how
12 Nebraska is proposing the project now?
13 A. No. The N-CORPE resolution, as was
14 presented to the RRCA, did not try to take that
15 approach, so that concern was alleviated.
16 Q. Were there any other changes that were made
17 that allowed you to be satisfied with Nebraska's
18 proposal?
19 A. There probably were.
20 Q. And what were they?
21 A. I don't recall. All I can tell you is that
22 the proposal, as was finally submitted to the RRCA, I
23 thought was appropriate and that Colorado could -- I
24 could recommend to Colorado that we support that
25 particular proposal.

Page 28

1 Q. Thank you. I wanted to ask you some
2 questions like I did with Mr. Wolfe about the
3 augmentation proposal that Nebraska had for augmentation
4 on Rock Creek. Are you familiar with the arbitration
5 that the states undertook regarding the Rock Creek
6 proposal by Nebraska?
7 A. In a generic sense, yes.
8 Q. Any specific memory?
9 A. I probably have specific memories, yes.
10 Q. It concerns me that it was only a general
11 sense. The arbitrator issued a decision in that Rock
12 Creek dispute in late December. Did you read that
13 decision?
14 A. Are you sure it was in late December?
15 Q. I thought I said late December. I apologize
16 if I didn't say that.
17 A. I thought it was earlier, but I did review
18 that decision, yes.
19 Q. I'm sorry. Late November. My apologies. I
20 believe that was the date of the decision.
21 A. That sounds better, yes.
22 Q. Did you read that decision?
23 A. I did.
24 Q. In your opinion, does anything in Nebraska's
25 N-CORPE proposal need to be changed based on that

Page 29

1 decision?
2 A. Are you asking me that as a matter of law or
3 as a matter of science?
4 Q. I am asking whether or not you have an
5 opinion that anything should be changed.
6 A. As far as the legal requirements are
7 concerned, I would defer to others as to what is legally
8 required. In order to be changed, I thought that the
9 N-CORPE proposal, as originally submitted, satisfied the
10 requirements of the FSS.
11 Q. Picking up on your distinction, as a matter
12 of science, to use your term as you understand it, is
13 there anything that should be changed in Nebraska's
14 N-CORPE proposal as a result of the Rock Creek decision?
15 A. I don't think so. I think the specifics
16 that were discussed in that Rock Creek decision
17 essentially support the bulk of how things are done in
18 the N-CORPE proposal.
19 MR. GRUNEWALD: Thank you. I don't have any
20 other questions.
21 MR. STEINBRECHER: Any questions from
22 Nebraska?
23 MR. WILMOTH: No questions from Nebraska.
24 MR. STEINBRECHER: None from Colorado.
25 MR. GRUNEWALD: I think we are done. We can

1 go off the record.
 2 (WHEREUPON, the deposition concluded at 10:27 a.m.)
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1 REPORTER'S CERTIFICATE
 2 STATE OF COLORADO)
) SS.
 3 COUNTY OF DENVER)
 4 I, Denise A. Freeman, do hereby certify
 5 that I am a Registered Professional Reporter and
 6 Notary Public within the state of Colorado; that
 7 previous to the commencement of the examination,
 8 the deponent was duly sworn by me to testify to the
 9 truth.
 10 I further certify that this deposition was
 11 taken in shorthand by me at the time and place herein
 12 set forth and was thereafter reduced to typewritten
 13 form, and that the foregoing constitutes a true and
 14 correct transcript.
 15 I further certify that I am not related
 16 to, employed by, nor of counsel for any of the parties
 17 or attorneys herein, nor otherwise interested in the
 18 result of the within action.
 19 In witness whereof, I have affixed my
 20 signature this 17th day of January, 2014.
 21
 22 PATTERSON REPORTING & VIDEO
 Denise A. Freeman
 Registered Professional Reporter
 and Notary Public
 23
 24
 25

1 I, DR. WILLEM SCHREÜDER, do hereby certify
 2 that I have read the foregoing transcript and that the
 3 same and accompanying correction sheets, if any,
 4 constitute a true and complete record of my testimony.
 5
 6
 7 _____
 Deponent
 8
 9
 10 () No changes () Amendments attached
 11
 12 Subscribed and sworn to before me this
 13 _____ day of _____, 2014.
 14
 15 My commission expires _____.
 16
 17 _____
 Notary Public
 18
 19
 20 Address _____
 21 _____
 22
 23 df
 24 N-CORPE Augmentation Plan
 25

1 PATTERSON REPORTING & VIDEO
 2170 South Parker Road, Suite 263
 2 Denver, Colorado 80231
 January 17, 2014
 3
 4 SCOTT STEINBRECHER, ESQ.
 Colorado Department of Law
 Natural Resources and Environment
 Federal and Interstate Water Unit
 Ralph L. Carr Colorado Judicial Center
 5 1300 Broadway, 7th Floor
 6 Denver, Colorado 80203
 7
 8 Case Name: N-CORPE Augmentation Plan
 Deposition of DR. WILLEM SCHREÜDER
 9 The deposition in the above-entitled matter is ready
 for reading and signing. Please attend to this
 10 matter by complying with ALL blanks checked below:
 11 arrange with us at (303)696-7680 to read and
 sign the deposition in our office
 12
 13 OR (if applicable),
 14 have deponent read your copy; signing
 attached original signature page and any
 amendment sheets.
 15
 16 _____ read enclosed deposition, sign attached
 signature page and any amendment sheets.
 17 within 30 days of the date of this letter.
 18 _____ by _____ due to a trial date of _____.
 19 Please be sure that the signature page and
 accompanying amendment sheets, if any, are signed
 20 before a notary public and returned to our office at
 the above address.
 21
 22 If this matter has not been taken care of within said
 period of time, the deposition will be filed unsigned
 pursuant to the Rules of Civil Procedure.
 23
 24 Thank you.
 Enclosures: (As above noted)
 cc: Christopher M. Grunewald, Esq.; Justin D.
 Lavene, Esq.
 25

1 PATTERSON REPORTING & VIDEO
2 2170 South Parker Road, Suite 263
3 Denver, Colorado 80231
4 January 17, 2014
5 CHRISTOPHER M. GRÜNEWALD, ESQ.
6 Assistant Attorney General
7 Civil Litigation Division
8 Office of Attorney General Derek Schmidt
9 120 SW 10th Avenue, 2nd Floor
10 Topeka, Kansas 66612-1597

11 Dear Mr. Grunewald:

12 Re: Deposition of DR. WILLEM SCHREÜDER

13 Signed, no changes.

14 Signed, with changes, copy attached.

15 No signature required.

16 Reading and signing not requested pursuant to
17 CRCP Rule 30(e).

18 Signature waived.

19 Forwarding original transcript unsigned;
20 signature pages and/or amendments will be
21 forwarded, if received.

22 Original exhibits included in ongoing notebook
23 and will be filed with counsel at conclusion of
24 discovery.

25 Via Email.

Enclosures: (As above noted)

cc: Scott Steinbrecher, Esq.; Justin D. Lavene, Esq.