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1	IN THE SUPREME COURT OF THE UNITED STATES
2	STATE OF TEXAS,
3	Plaintiff,
4	
	VS. No. 141, Original
5	
6	
	STATE OF NEW MEXICO and
7	STATE OF COLORADO,
8	Defendants.
9	
10	VIDEOTAPED DEPOSITION OF MICHELLE ESTRADA-LOPEZ
	February 12, 2020
11	9:21 a.m.
	Robles, Rael & Anaya, P.C.
12	500 Marquette Avenue NW
	Suite 700
13	Albuquerque, New Mexico 87102
14	PURSUANT TO THE NEW MEXICO RULES OF CIVIL
	PROCEDURE, this deposition was:
15	
	TAKEN BY: MR. MICHAEL KOPP,
16	ATTORNEY FOR PLAINTIFF
	REPORTED BY: ANNE D. WIESE, RPR, NM CCR #301
17	VIDEOGRAPHER: CAINE DEEGAN
	TRATTEL COURT REPORTING
18	609 12TH STREET NW
	ALBUQUERQUE, NEW MEXICO 87102
19	
20	
21	
22	
23	
24	
25	
_ •	
	Attachment C Page 1
	1436 1

1	MICHELLE ESTRADA-LOPEZ,
2	having been first duly sworn, testified as follows:
3	EXAMINATION
4	BY MR. KOPP:
5	Q. All right. Good morning, Ms. Estrada-Lopez.
6	My name is Michael Kopp. I'll be taking your deposition
7	today in the lawsuit Texas v. New Mexico. I represent
8	the State of New Mexico.
9	How are you doing this morning?
10	A. I'm okay. How are you?
11	Q. I'm fine, thank you.
12	Could you please state your full name for
13	the record.
14	A. Michelle Theresa Estrada-Lopez.
15	Q. Thank you.
16	And do you mind if I call you Michelle
17	during this deposition?
18	A. I would prefer that. Thank you.
19	Q. Okay. Thank you.
20	Could you please state your work address.
21	A. I know it
22	Q. It's okay.
23	A 555 Broadway Northeast.
24	Q. Okay. In Albuquerque?
25	A. In Albuquerque.
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1	Q. Great.
2	Have you ever had your deposition taken
3	before?
4	A. I have not.
5	Q. Okay. I'll log over some of the ground rules
6	of a deposition with you, then.
7	First of all, you just took an oath. And
8	you do understand that your answers today are sworn
9	testimony just like you were testifying in court, right?
LO	A. I do understand that.
11	Q. Okay. So some of the ground rules are if I ask
12	a question and you don't hear it, please just ask me to
13	repeat it.
L 4	If I ask a question that you don't
15	understand, which is highly likely because I don't
16	always know what I'm talking about, please just ask me
L7	to rephrase it, and I'll do my best.
18	We can take a break any time you want to,
19	although I will ask, if there's a question pending, that
20	you answer the question before we go on break. I'll try
21	to call a break every hour or so, but if you need it
22	more frequently than that or if I just forget to do it,
23	please say something.
24	A. Okay.
25	COURT REPORTER: Can you slow down, please.
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1	MR. KOPP: Yes.
2	Q. (By Mr. Kopp) The court reporter is
3	transcribing everything that we say. So first of all,
4	all your answers should be verbal so that the court
5	reporter can get that into the transcript. Please try
6	to say "Yes" or "No." Don't nod your head or shake your
7	head to answer, okay?
8	A. Okay.
9	Q. We should also both try not to speak over one
10	another; that just makes the record very confusing. So
11	I will do my best to wait until you finish answering a
12	question before I ask you another one, and if you could
13	do the same, that would be great.
14	A. Okay.
15	(Discussion off the record.)
16	Q. (By Mr. Kopp) Okay. And do you understand
17	that you're here today pursuant to a notice of
18	deposition and subpoena?
19	A. Yes.
20	MR. KOPP: Okay. I'm going to go ahead and
21	mark the first exhibit.
22	Can you please mark this as Exhibit 1.
23	(Deposition Exhibit No. 1 was marked for
24	identification.)
25	(Discussion off the record.)
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1	MR. KOPP: I made eight copies of
2	everything. I don't know if we have enough.
3	Great.
4	Q. (By Mr. Kopp) Michelle, have you seen this
5	document before that I marked as Exhibit 1?
6	A. Yes.
7	Q. If you can tell me what that document is.
8	A. It's my deposition notice.
9	Q. Okay. Great.
10	And let's turn to Page sorry 2 on
11	that notice towards the bottom of the page.
12	A. (Witness complied).
13	Q. Do you see that number listed on there?
14	A. Yes.
15	Q. That requests various documents and other
16	materials that you relied on in forming your opinions in
17	this case.
18	Have you reviewed those requests?
19	A. Yes.
20	Q. Okay. And I know your attorneys made a
21	disclosure of some materials you relied on a few days
22	ago. Are there any other materials that you brought
23	with you today in response to the requests?
24	A. No.
25	Q. Okay. I'm going to ask you a little bit about
	Page 11

1	your backs	ground now.
2		Where did you grow up?
3	A.]	In Las Cruces, New Mexico.
4	Q. (Okay. Is that where you went to college as
5	well?	
6	A.]	It is.
7	Q. (Okay. And did you get your and that was New
8	Mexico Sta	ate University?
9	Α. 3	Yes.
10	Q. (Okay. Did you get a bachelor's degree from
11	NMSU?	
12	A.]	I got a bachelor's degree and a master's
13	degree.	
14	Q. (Okay. What was your bachelor's degree in?
15	A. (Civil engineering.
16	Q. (Okay. What year did you graduate?
17	A.]	In 2007.
18	Q. (Okay. And then you mentioned your master's
19	degree. V	What was that in?
20	A.]	It was in civil engineering as well, and I
21	graduated	in 2009.
22	Q. V	Was that also from NMSU?
23	Α. Σ	Yes.
24	Q. (Okay. Did you write a master's thesis or
25	anything]	like that?
		Daga 12
		Page 12

1	A. I did.
2	Q. What was the topic of your master's thesis?
3	A. It was looking at evapotranspiration rates at
4	Caballo Reservoir.
5	Q. Okay. Was that evaporation from the water
6	surface or were you looking at vegetation?
7	A. It was comparing the water surface evaporation
8	rates with what was happening on the mud flats, along
9	with comparing that to the saltgrass in the area and the
10	Saltcedar in the area.
11	Q. After getting your MS, what did you do?
12	A. I got a job with the Bureau of Reclamation.
13	Q. Okay. What was your position when you were
14	first hired?
15	A. I was an intern in the Water Operations Group
16	in the Albuquerque area office.
17	Q. Okay. How long were you an intern for?
18	A. Two years.
19	Q. Okay. Was that from 2009 to 2011?
20	A. Yes.
21	Q. Okay. And what did you do after you finished
22	your internship?
23	A. I was converted to a full-time employee, or a
24	permanent employee.
25	Q. Okay. Was that also in the Albuquerque Office
	Page 13

1	of Reclamation?
2	A. Yes.
3	Q. Okay. And what was your position at that time?
4	A. It was still in the Water Operations Group.
5	Q. Okay. What were your duties in that position?
6	A. My main duty was the Pecos River water
7	operations and water accounting, and then I was backup
8	for Rio Grande operations and San Juan-Chama water
9	accounting.
10	Q. Okay. How long were you in that position?
11	A. Including the internship, total, three-ish
12	years.
13	Q. Okay. Until around 2014? Oh, you said
14	including the internship?
15	A. Including the internship.
16	Q. I see.
17	Okay. So that would have been until around
18	2012?
19	A. Uh-huh (yes).
20	Q. Okay. And then what position did you move into
21	after that?
22	A. It was still in the Water Operations Division,
23	and it was supposed to be an adaptive management
24	position, working on adaptive management science-type
25	work for the Middle Rio Grande Endangered Species
	Page 14

1	Collaborative Program, but that's not actually what I
2	did.
3	Q. So what did you actually do?
4	A. I continued a lot of my Pecos River duties, and
5	then I started as project manager in our office as a
6	detail, and then eventually, I got that job full-time.
7	Q. Okay. When you say "project manager," you
8	don't mean the Rio Grande project, do you?
9	A. No, I mean project manager as in that like
10	the role you play in overseeing the scope, schedule and
11	budget of different projects.
12	Q. What sorts of projects did you manage in that
13	position?
14	A. My main one was the Carlsbad Project.
15	Q. Okay.
16	A. So my main one was the Carlsbad Project, and
17	the more detailed work I did under the Carlsbad Project
18	was for the Pecos Water Acquisition Program. And then I
19	did smaller projects on the Middle Rio Grande Project,
20	and eventually, I started doing stuff on the Rio Grande
21	Project.
22	Q. And about when did you start doing projects on
23	the Rio Grande Project Rio Grande?
24	A. I briefly helped in the initial stages of the
25	evaluation for the MEPA compliance for the Rio Grande
	Page 15

1	Operating Agreement. That was just for a short time.
2	And then I started helping oversee the full project
3	budget, which is all of the work we do on the Rio Grande
4	Project, which, you know, includes water rights, water
5	operations, environmental work, operation and
6	maintenance of our facilities. And that was really like
7	high-level work, not detailed work.
8	Q. Okay. I'll ask you first about your work on
9	the MEPA compliance. Do you know if that was the EA,
10	the environmental assessment that was originally done,
11	or was that the EIS that was finished in I think 2016?
12	A. It was on the EIS. So I just started helping
13	with the modeling, but then that was taken over by other
14	people in Reclamation.
15	Q. Okay. What sort of work did you do on the
16	modeling?
17	A. I started with basically collecting the
18	historical hydrologic data and compiling it, and that's
19	about as far as I got on that project.
20	Q. Okay. And then approximately when did you
21	start overseeing the project budget?
22	A. Probably in 2015.
23	Q. Okay. And when you say you were overseeing
24	that budget, what did you actually do with respect to
25	that project?

1	A. Track what the projection for the overall
2	budget was with our budget analyst and determine which
3	contracts we could fund in a year and make that
4	recommendation to the assistant area manager, who would
5	make the decision.
6	Q. Okay. And when you say "project budget," do
7	you mean a financial budget, like money, not water?
8	A. Correct.
9	Q. Okay. I understand.
10	So that was around 2015 you started doing
11	that work. And how long did you do that?
12	A. I am currently doing that.
13	Q. You still do that?
14	A. Uh-huh (yes).
15	Q. Okay. So the position that you that we've
16	been discussing, is that the position you're still in?
17	A. The project manager position, yes.
18	Q. Okay. Since you got your degrees, have you
19	worked for anyone besides Reclamation?
20	A. Not in engineering.
21	Q. Okay. But in another capacity? You've had
22	other positions?
23	A. Yes.
24	Q. Okay. Anything related to your work as an
25	engineer or the expert opinions you're offering in this
	Page 17

1	case?
2	A. No.
3	Q. Okay. When did you first start working on
4	water accounting for the project?
5	A. For the Rio Grande Project, it was probably
6	around 2015. I don't remember the exact date.
7	Q. And what were your duties with respect to water
8	accounting for the Rio Grande Project at that time?
9	A. When I first started, I was just shadowing Bert
L 0	Cortez of our El Paso office and learning the Operating
11	Agreement, allocation and accounting procedures.
12	Q. And you are actually involved in performing
13	those procedures now; is that correct?
L 4	A. Yes, I am.
15	Q. When did you start doing that?
16	A. I know I wrote it in my report before, and I
L 7	can't recall the exact year that I wrote, but it was
18	around 2016 that I took over the full duties.
19	Q. Okay. I'm going to help you out here
20	A. Thank you.
21	Q and go ahead and introduce your report as an
22	exhibit. I'll go ahead and mark this as Exhibit 2.
23	(Deposition Exhibit No. 2 was marked for
24	identification.)
25	MS. O'BRIEN: Just so for the record, Al
	Page 18

1	Blair, the District Engineer for El Paso County Water
2	Improvement District No. 1, has joined by phone.
3	MR. KOPP: Thank you.
4	COURT REPORTER: What's his name again?
5	MS. O'BRIEN: Al Dr. Al Blair,
6	B-L-A-I-R.
7	Q. (By Mr. Kopp) All right. Michelle, I believe
8	I asked you what year you started doing water accounting
9	for the project using the OA, Operating Agreement,
10	procedures that you mentioned earlier. Now that you've
11	got a copy of what I'm going to call your expert report
12	in this case, do you remember now what year that was?
13	A. Yes, 2016.
14	Q. Okay. Great.
15	Let's set aside this Exhibit No. 2 for just
16	a second. I'm going to come back to this.
17	But I want to ask you if you're a member of
18	any professional organizations?
19	A. Not currently related to engineering.
20	Q. Okay.
21	A. I am in nonprofit organizations.
22	Q. Okay. Have you been a member of any
23	professional engineering organizations in the past?
24	A. Yes, American Society of Civil Engineers and
25	the Society of Women Engineers and Chi Epsilon, which is
	Page 19

1	a Civil Engineering Honor Society.
2	Q. And why did you stop being a member of those
3	organizations?
4	A. It was not advantageous for me to continue
5	paying for things that I was not participating in.
6	Q. Understood.
7	Other than your degrees, do you have any
8	licenses or certifications?
9	A. Not related to my work.
10	Q. Okay. I believe you mentioned you've never
11	been deposed before, but have you ever testified in a
12	court proceeding before?
13	A. No.
14	Q. Okay. Have you ever been designated as an
15	expert witness in a court case before?
16	A. No.
17	Q. Okay. Have you ever prepared any expert
18	reports for previous cases where you weren't designated
19	ultimately as an expert?
20	A. I helped work on the United States' report that
21	was recently submitted in Texas v. New Mexico on the
22	Pecos.
23	Q. Okay. But you've not been submitted as an
24	expert in that case?
25	A. No.
	Page 20

1	Q. And what work did you do on that report?
2	A. Just helping review the wording and recalling
3	what occurred in 2014.
4	Q. So you didn't perform any technical analysis
5	for that?
6	A. I did not.
7	Q. Okay. With respect to this case, what
8	materials did you review to prepare for your deposition
9	today?
10	A. To prepare for my deposition today, I reviewed
11	the spreadsheets that were submitted by my attorneys
12	from 2011 and two of the tables from the water
13	accounting report from 2011 that were also submitted by
14	my attorneys. And I briefly looked at the letters and
15	correspondence in the appendix from Esteban Lopez's
16	expert report.
17	Q. Okay. Did you review any deposition
18	transcripts?
19	A. No.
20	Q. Okay. Did you meet with counsel?
21	A. Yes.
22	Q. Okay. Did you meet with anyone other than
23	counsel?
24	A. No.
25	Q. Okay. So you didn't talk to any of the other
	Page 21

1	experts who had been put forward by the United States in
2	this case?
3	A. Not about my deposition.
4	Q. Okay. Have you provided us with a complete
5	list of all of the source materials used in preparation
6	of your report?
7	A. Yes.
8	Q. Okay. So let's go back to Exhibit 2 now, which
9	is your expert report.
LO	Are you familiar with this document?
11	A. Yes.
12	Q. Okay. Did you create this document?
13	A. I created the Parts 3 and 4 but not the or
L 4	not the part about oh, so 1 so Parts 1 , 3 and 4
15	but not the part about which case this is, and the
16	formatting for submission for the court.
L7	Q. Okay. Let's mark that really quick.
18	And on Page 5, towards the bottom, do you
19	include the section that says "Opinion" at the bottom of
20	the page as part of Section 4?
21	A. I do.
22	Q. Okay. I realize this isn't an expert report in
23	the sense of, you know, a disclosed expert report under
24	maybe legal jargon, 26(a)(2)(b), I believe, if I'm not
25	getting nervous messing that up, but I'm going to refer
	Page 22

_	to the consense of the Marie 171 laws of the Time
1	to it as your expert report. You'll know what I'm
2	talking about.
3	Is that okay?
4	A. Yes.
5	Q. Okay. So turning to Page 1 I'm sorry,
6	Page 2 of this document, under Section 1 let's
7	see about one, two, three lines down, it says that
8	your duties include representing Reclamation on the 2008
9	Operating Agreement, or OA, Committee for the Rio Grande
LO	Project, which you've done since 2016.
11	Do you see that?
12	A. Yes, I do.
13	Q. Okay. What is the 2008 Operating Agreement
14	Committee for the Rio Grande Project?
15	A. It is a group of people who represent the three
16	parties to the Operating Agreement that meet and confer
L7	on the calculations and documentation of the subjects in
18	the agreement.
19	Q. Okay. Is this committee also sometimes called
20	the Allocation Committee?
21	A. It is referred to.
22	Q. Okay. And it says here that you're a member of
23	that committee, correct?
24	A. I am.
25	Q. And you've been a member since 2016?
	Page 23

1	A. Yes.
2	Q. Okay. When was this committee formed?
3	A. I don't know.
4	Q. Okay. Do you know why it was formed?
5	A. I can make presumptions, but I don't know
6	specifically why.
7	Q. I don't want you to speculate. And if you
8	know, then great or but do you know if the
9	Operating Agreement explicitly requires the formation of
10	this committee?
11	A. I do not recall seeing that in the Operating
12	Agreement language.
13	Q. And you don't know how it was decided that this
14	committee would be formed?
15	A. I do not.
16	Q. Okay. What are the well, you mentioned
17	earlier that it's a committee of representatives from
18	the two districts in Reclamation, correct?
19	A. Yes.
20	Q. You confer on Operating Agreement subjects?
21	A. Yes.
22	Q. Could you elaborate a little bit more on what
23	the committee's responsibilities are.
24	A. Reclamation puts together a proposed
25	allocation, then the committee reviews that and
	Page 24

1	discusses the specific inputs and if there's any
2	concerns or recommended changes, and then the districts
3	put together their draft allocation charges, and then
4	the committee reviews the other party's charges, looks
5	for errors, asks questions, confers on things that are
6	unusual that occurred during the year, and makes
7	determinations on how the water should be accounted for.
8	Additionally, each of the parties can make
9	recommended updates to the Operating Agreement Manual,
LO	and the committee members review those, sometimes write
11	technical memos associated with them, and then updates
12	the manual if it's agreed upon by all the parties.
13	Q. Okay. So when you're going through any of
L 4	these procedures, whether it's the allocations or the
15	charges or the Operating Agreement Manual, does the
16	committee always operate by unanimous consent?
L7	A. Yes.
18	Q. So in other words, if there's some disagreement
19	about anything, does any party have the power to
20	overrule the other parties or can two of the three
21	members overrule a third member?
22	A. I don't know if that's how it's been operated
23	as I have been the member. I don't know if there would
24	be the possibility of overruling another two parties or
25	one party.

1	(Discussion off the record.)
2	VIDEOGRAPHER: The time is 4:17 p.m. We're
3	back on the record.
4	EXAMINATION
5	BY MR. WALLACE:
6	Q. Good afternoon. For the record, I'm Chad
7	Wallace for the State of Colorado.
8	May I call you Michelle during the
9	deposition?
10	A. You may.
11	Q. Thank you.
12	I have some questions for you from
13	Colorado's perspective to help clarify some issues in
14	your report. If you could turn to what's been marked as
15	Exhibit 2. That's your report in this case.
16	And are all of the opinions regarding
17	accounting for the Rio Grande Project that you expect to
18	give testimony on contained in this report?
19	A. Yes.
20	Q. And are you aware of any other people from the
21	Bureau of Reclamation that may give testimony on Rio
22	Grande Project accounting?
23	A. Ian Ferguson.
24	Q. Anyone else?
25	A. I suppose somebody might call Bert Cortez to
	Page 188

1	testify, but I don't know.
2	Q. Those are the two names you can think of right
3	now?
4	A. Yes.
5	Q. Okay. And if you were to give testimony
6	regarding Rio Grande Project accounting, issues that are
7	not contained in this report, would you expect to file
8	an amended report?
9	A. If I was planning to give testimony, if that's
10	the I've never done this before, so I don't know the
11	procedures. But if I was told that was the procedure,
12	that's what I would do.
13	Q. On Page 2 of your report this is about the
14	middle of the page on Section 1. And this is a section
15	that you wrote?
16	A. Yes.
17	Q. Okay. And you have a phrase in here I'll
18	just show you where I have it highlighted in my copies
19	to make it easier for you to find.
20	Do you see that highlighting?
21	A. Uh-huh (yes).
22	Q. It's "Using the Upper Rio Grande Water
23	Accounting Model is required for Rio Grande Compact
24	accounting."
25	What do you mean by that phrase?
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1	A. My understanding for the San Juan-Chama Project
2	was that the Rio Grande Compact requires the San
3	Juan-Chama Project accounting for that, and that was
4	delegated to Reclamation, to conduct the San Juan-Chama
5	Project accounting and report that to the Rio Grande
6	Compact.
7	Q. So in using this phrase, are you limiting
8	it the use of the model to San Juan-Chama accounting?
9	A. Yeah. It does not do the Compact accounting
10	for the Compact, just the San Juan-Chama accounting, and
11	it's provided to the Compact.
12	Q. To the Compact Commission?
13	A. Commission, uh-huh (yes).
14	Q. And would it make any difference if you
15	referred to the accounting model or the operations model
16	in this phrase?
17	A. Yeah.
18	Q. What difference would that make?
19	A. The operations model is used for projections
20	and studies, and the accounting model is backward
21	looking and looks at the accounts of the San Juan-Chama
22	and the native water, or Rio Grande water.
23	Q. Okay. And are you aware of any documentation
24	of the requirements to use the accounting model for the
25	Rio Grande Compact accounting or San Juan-Chama water?
	Page 190

1	A. I am not aware of any documentation that says
2	that that model has to be used.
3	Q. So what is the basis for your statement?
4	A. That Reclamation is required to provide the
5	San Juan-Chama water accounting to the Compact
6	Commissioners, and that we use that we currently use
7	this accounting model in order to do that.
8	Q. And why do you say that it's required? What's
9	your understanding of why it's required for you to use
L O	this?
L1	A. That's the methodology that is
L2	Q. So
L3	A agreed upon.
L 4	Q. Okay. So what I'm trying to get at is, if
L 5	you're not aware of any documentation setting out the
L6	requirement, how is it that you've come to understand
L 7	that it is a requirement?
L8	A. Using the model or doing the accounting?
L 9	Q. Using the model to give San Juan-Chama
20	accounting to the Compact Commission.
21	A. It's the agreed-upon methodology to provide
22	that required accounting.
23	Q. Okay. And do you know where that if that
24	agreement was documented?
25	A. I do not know.
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1	Q. Okay. On Page 3 of your report this is the
2	same exhibit. It's the bottom of the first paragraph in
3	Section 3.
4	And you wrote Section 3?
5	A. Yes.
6	Q. And this last sentence says, "Each month or as
7	needed, Reclamation updates the allocations to the
8	districts to account for changes in the project,
9	including the reservoirs, due to releases, evaporation
	and deliveries from New Mexico."
10	
11	Did I read that correctly?
12	A. Yes.
13	Q. Okay. And this is something I want to get at.
14	This may be a quick way to kind of get through a lot of
15	the questions about how you put together the accounting
16	spreadsheets, the accounting model.
17	You do these on a they're done on a
18	monthly basis?
19	A. The allocation spreadsheets are typically done
20	on a monthly basis.
21	Q. And what's so if you do them on a monthly
22	basis, what period rate of data are inputted into those
23	monthly calculations, if you understand? Is it daily
24	data collated for a monthly output, or how does that
25	work?

1	A. The data put into the monthly allocation
2	spreadsheet is chosen from one day, and it is noted on
3	that. So if it says, "Data from end of month - July,"
4	it's from the day of the end of the month to the July.
5	Q. Okay. And is that compared, then, to the prior
6	month?
7	A. Compared?
8	Q. Like, say, you're getting a change and there's
9	more elevation releases.
10	A. It's noticed by me, the difference, but there's
11	no requirement for comparison in order to make any of
12	the determinations.
13	Q. So if you're if the project is making
14	releases from project storage of usable water to the
15	various districts, how is that determined, what those
16	releases are?
17	A. From the Caballo gauge data that the El Paso
18	office of the Bureau of Reclamation collects.
19	And then that data is provided to our
20	hydrologic database, which is put into the Upper Rio
21	Grande Water Accounting Model, and I sum all the days up
22	to the date that I'm looking at, and that's the total
23	volume released up until that day.
24	Q. Okay. So these gauges, they're
25	continuous-recording gauges?
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1	A. Yes, I believe they record every 15 minutes.
2	Q. Okay. And is it important to get these
3	frequent inputs, or could you just look at the an
4	estimate of what the releases at the end of the month
5	are?
6	A. I don't know how you would estimate the
7	releases from a reservoir without a gauge.
8	Q. But how I guess my question is, how often
9	does that gauge need to be read in order for it to be
10	useful to you?
11	A. In order for it to be within the standards of
12	accuracy for hydrologic data, we're following the
13	U.S. Geological Survey methodology. And that's required
14	in order for it to be as accurate as needed for this
15	type of gauge.
16	Q. And with those methodologies that you follow,
17	how often are gauges supposed to be read?
18	A. I don't know what you mean by "read." We
19	collect the data continuously.
20	Q. Oh, so they're continuously. So they are
21	continuously summing the release volumes?
22	A. There's a daily flow, and those daily flows are
23	summed up for the monthly flow. The gauge does not do
24	any summations. It reads instantaneously.
25	Q. So you take a flow rate reading for any given
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day and you create a volume release for that day with
that data?
A. Yes.
Q. In your report, in that same section, though,
it says each month, or as needed, you update the
allocations. What would cause you to update the
allocations other than on a monthly basis?
A. I have never done an allocation in November
because nobody cares in November
Q. Uh-huh (yes).
A so we skip that month. Sometimes we skip
December as well.
But I have, on occasion, done an allocation
using the beginning-of-the-month data, but it was during
a high inflow into the reservoirs, and so the districts
have asked for the allocation to be run again so that
they can make a higher allotment to their farmers at the
next board meeting.
Q. Okay. On the next page, Page 4, the last
sentence of that paragraph in the middle. And it says,
"Consequently, actual accounting for water physically in
the reservoir is necessary for New Mexico deliveries,
under Article 4 of the Compact, to be made available
upon delivery to the project beneficiaries."
Do you see that?

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1	A. I do.
2	Q. What does that mean?
3	A. I'm going to read the rest of the paragraph for
4	the context of it.
5	Okay. This is in context of why
6	Reclamation estimates the physical Compact credit water
7	in Elephant Butte so that we can determine the inflow
8	into Elephant Butte, which, in my understanding, a
9	delivery by New Mexico under Article 4 of the Compact.
10	And a calculation of this type is the only way to
11	determine inflow accurately. And that water is can
12	then be made available to our project beneficiaries.
13	Q. And you say in the same paragraph that you do
14	this accounting on a daily basis?
15	A. We do.
16	Q. And do you make any distinction on water
17	flowing into Elephant Butte between water delivered to
18	meet Compact obligations by New Mexico under Article 4
19	or water that might be eventually accounted, under the
20	Compact, as credit water for New Mexico?
21	A. I do not.
22	Q. I want to just follow up on a few things that
23	you covered in part earlier today
24	A. Okay.
25	Q so I'm going to kind of be jumping around.
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1	And please bear with me. Let me know if
2	you need more context to understand the question.
3	A. Okay.
4	Q. You said earlier that the Bureau of Reclamation
5	does not do Compact accounting; is that right?
6	A. Correct.
7	Q. So is there any expectation on behalf of the
8	United States that the calculations done by the Bureau
9	of Reclamation on Compact credit water would be used by
L O	the Rio Grande Compact Commission in determining annual
11	or accrued credits or debits?
12	A. I don't know what the expectations are of the
13	other parties.
L 4	Q. But for the United States?
15	A. I don't have that expectation. I don't know if
16	anybody else in the United States has that expectation.
L7	Q. Does anybody at the Bureau of Reclamation have
18	that expectation?
19	A. I don't think so, but I don't know what
20	everybody's thoughts on the matter are.
21	Q. You've mentioned earlier, Michelle, how you do
22	evaporation estimates.
23	A. Yes.
24	Q. And there's some questions about the deviation
25	error in those evaporations, and you said that there
	Page 197

1	were then well, do you recall what you said those
2	error ranges might be?
3	A. For evaporation?
4	Q. Yes.
5	A. I did not say what they are because I do not
6	know what they are, but I know that we are using the
7	standard method.
8	Q. Do you know what percentage range that might
9	fall into?
L O	A. I don't feel comfortable speculating.
11	Q. So if you were to say what that error rate was,
12	it would be speculation?
13	A. Yeah. I have not read a technical report on
L 4	that.
15	Q. So I'm going to walk through a hypothetical
16	reservoir accounting situation for you.
L 7	If the Bureau is making an allocation of
18	usable water in project storage, that allocation can
19	exceed the actual water in physical storage; is that
20	right?
21	A. Yes.
22	Q. And if those full allocations are taken for
23	delivery, is it possible that the full amount delivered
24	could end up exceeding what was allocated?
25	MR. DuBOIS: Objection, lack of foundation,
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1	calls for speculation.
2	You can answer if you can.
3	A. I don't know.
4	Q. (By Mr. Wallace) So in some of your earlier
5	spreadsheets, you had the negative carryover allocation
6	balance?
7	A. Yes.
8	Q. That seemed to indicate that a district ended
9	up taking delivery in excess of their allocation for
L O	that year; is that right?
11	A. In excess of their final allocation
12	Q. So
13	A yes.
L 4	Q over the year? Okay.
15	If that is done, is it possible to have
16	released from the project more than the available usable
L 7	storage supply?
18	MR. DuBOIS: Again, objection, lack of
19	foundation and speculation.
20	You can answer if you can.
21	A. No, because you can't release more than what is
22	physically there.
23	Q. (By Mr. Wallace) Okay. So let me run through
24	this scenario for you. You're estimating Compact credit
25	water in accounts for purposes of making allocations.

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1	A. Yes.
2	Q. And based on that, allocations are made
3	periodically through the year until you come to a final
4	end-of-the-year allocation.
5	A. Yes.
6	Q. And if the Compact Commission then informs you
7	the following year of a carryover Compact credit amount
8	that's different than your estimated Compact credit
9	amount, those two numbers would be different, right?
10	A. Yes, different numbers would be different.
11	Q. And if you you've mentioned before how
12	sometimes, after a Compact Commission meeting, you will
13	adjust those Compact credit amounts in your in the
14	accounting model, which are then reflected in the
15	spreadsheets?
16	A. Yes.
17	Q. And we had an exhibit wherein the Compact
18	credit numbers were adjusted I believe in the April time
19	frame, and you said that reflected adjustments because
20	the Commission gave the Bureau of Reclamation different
21	Compact numbers Compact credit account numbers?
22	A. That sounds correct.
23	Q. So again, this is a hypothetical. It's not an
24	allegation that this was done.
25	Is it possible that given numbers from the
	Page 200

1	Compact Commission that are higher than the estimated
2	numbers used by Reclamation, the sum of what's left in
3	storage in the Compact credit amounts from the
4	Commission could exceed what is actually in the storage
5	in the project?
6	MR. DuBOIS: Form of the question
7	objection, form of the question, speculation.
8	Again, go ahead if you can.
9	A. Based solely on calculations and theoretical
L O	situations that I don't think would be possible in real
11	life, because we talk to everybody all the time in the
12	State of New Mexico and the State of Colorado and how
13	much they think they are going to be under or over their
L 4	deliveries. Very remote theoretical probability that
15	could happen.
16	Q. (By Mr. Wallace) If it did and I understand
L 7	the qualifications you gave in your answer how would
18	Reclamation deal with it?
19	A. I do not know.
20	Q. So Michelle, did anything in the report that
21	you submitted cover Colorado's Compact credit account?
22	A. Yes.
23	Q. What?
24	A. Specifically, if you look on Page 4, in the
25	last paragraph, in the parentheses, it says, "About
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1	33,000 acre-feet attributable to Compact credit
2	accounts." That is including both Colorado and New
3	Mexico.
4	Q. Is that the only thing?
5	A. The last sentence of that paragraph, which is
6	on the beginning of Page 5, it refers to the credit
7	water. That would be referring to both accounts.
8	Q. You spoke earlier how you have read the Rio
9	Grande Compact; is that right?
10	A. Yes.
11	Q. Do you know where, under the Compact,
12	Colorado's delivery obligation is located?
13	A. I don't recall specifically off the top of my
14	head.
15	Q. If I told you it was at the Lovatos gauge, does
16	that seem familiar?
17	COURT REPORTER: I'm sorry, if it was at
18	what?
19	MR. WALLACE: Lovatos.
20	COURT REPORTER: Okay.
21	A. I know of the gauge Lovatos, and if you told me
22	that that was it, I would believe you until I read the
23	Compact.
24	Q. (By Mr. Wallace) All right. If I further told
25	you that that gauge was near the Colorado-New Mexico
	Page 202

1	border, does that seem familiar to you?
2	A. Yes, and that would make sense.
3	Q. Okay. If Colorado makes its deliveries, under
4	the Compact, at the border between Colorado and New
5	Mexico, does Reclamation do anything to account for
6	that? Do you account for any of that in your project
7	accounting?
8	MR. DuBOIS: Objection, lack of foundation
9	and form of the question.
10	A. I have never personally thought about the water
11	passing the Lovatos gauge in developing my allocation.
12	Q. (By Mr. Wallace) Okay. Does Reclamation do
13	anything to account for whether the deliveries made by
14	Colorado appear in Elephant Butte Reservoir?
15	A. Reclamation, to my knowledge, does not track
16	the Colorado deliveries through the Rio Grande down to
17	Elephant Butte Reservoir in any significant or separate
18	manner than just looking at gauges for native water.
19	Q. So I'm not sure if I understand that answer.
20	Is there any distinction that Reclamation
21	makes for any flows into the Elephant Butte Reservoir,
22	whether that is a delivery by Colorado or by New Mexico?
23	A. Not that I know of.
24	Q. And Mr. Kopp was talking to you earlier about
25	one of the spreadsheets and I believe it was the June
	Page 203

1	data and there was a notation for underdeliveries by
2	New Mexico.
3	A. Uh-huh (yes).
4	Q. What does that mean?
5	A. I would imagine the term "underdelivery" means
6	that somebody thinks that there's less delivery than
7	anticipated.
8	Q. And what was that based on? Do you know?
9	A. I do not know.
10	Q. Do you have any opinion now on whether a
11	spreadsheet should track, on a monthly basis,
12	underdeliveries under the Compact?
13	A. By whom, anybody?
14	Q. By New well, let's start with New Mexico.
15	That was the example that was given, underdeliveries by
16	New Mexico.
17	A. As a citizen of New Mexico, I would hope that
18	the State of New Mexico would be tracking its water and
19	knowing prior to the end of the year if it was going to
20	be under- or overdelivering. But as a Bureau of
21	Reclamation employee
22	Q. Well, let me
23	A I don't
24	Q. Let me put it to you this way, because my
25	question caused some confusion. Do you have an opinion

1	whether Reclamation is tracking under- or overdeliveries
2	on a monthly basis under the Compact by New Mexico?
3	A. I don't know of anyone in Reclamation that is
4	tracking under- or overdeliveries on a monthly basis
5	under the Compact by New Mexico.
6	Q. Okay. So I'm going to follow up on that.
7	You mentioned that when that was noted in
8	the parentheses in the spreadsheet, it was corrected
9	next month?
L O	A. I said for lack of a better word.
11	Q. Is there a better word that you can think of
12	now why that change was made?
13	A. If I could change time, I would have said
L 4	"adjusted."
15	And as I explained earlier, my
16	understanding is that there were conversations between
L 7	Reclamation and New Mexico during that time frame. And
18	then the next month's allocation came out, and it was a
19	different number.
20	Q. Okay. And now just I want to clarify a few,
21	for lack of a better word myself, big picture items.
22	So you've got these accounting spreadsheets
23	where you are figuring out the available allocation
24	amounts. In any terms that you're using in those
25	spreadsheets or in the model descriptions for
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1	example, project water Compact credit accounts are
2	similar to those used in the Rio Grande Compact is it
3	your intention that they mean the same thing all the
4	time?
5	A. My intention on the spreadsheets is to use the
6	definitions in the Operating Agreement and the Operating
7	Agreement manual and technical memorandums associated
8	with those two. I understand that they are similar and
9	possibly related to Compact accounting definitions, but
10	I do not know that they mean the same thing all the
11	time.
12	Q. Do you intend them to mean different things or
13	do you intend them to mean the same thing all the time?
14	What I'm getting at is, if you're using the same term
15	for what you're doing in operating the Rio Grande
16	Project and there's an identical term for the Rio Grande
17	Compact, is it your intention to make them the same
18	thing or are they just, by happenstance, using the same
19	phrase and you're using it for a different purpose
20	altogether?
21	MR. DuBOIS: Object to the form of the
22	question.
23	A. I don't have intention and I have not
24	contemplated this prior to your question. Therefore, I
25	don't have intention while I'm doing the work.
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1	Q. (By Mr. Wallace) Okay. So to follow up on
2	that, when Reclamation is doing accounting of Compact
3	credit accounts, do you intend for those account
4	numbers, that accounting balance to be bonding on any of
5	the states under the Rio Grande Compact?
6	A. Reclamation does not do any accounting of the
7	Compact credit accounts in relation to the development
8	of the allocation. And if I was not fully clear
9	earlier, the Operating Agreement states that it's not
L O	intended to have an impact on the Compact.
11	And that is the end of my statement.
12	Q. So when you calculate evaporation of Compact
13	credit accounts, there's no intention for the Compact
L 4	states to be bound by those calculations?
15	MR. DuBOIS: Asked and answered.
16	A. I refer to my previous answer.
L 7	Q. (By Mr. Wallace) So I'm confused because you
18	said you didn't do any accounting of Compact credit
19	accounts.
20	MR. DuBOIS: That's not what she said.
21	Objection.
22	A. Reclamation does not do the Compact credit
23	accounting.
24	Q. (By Mr. Wallace) And by that, do you mean for
25	the Compact?
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1	A. Yes.
2	Q. But you do calculate evaporative losses for the
3	project?
4	A. Yes. And calculating and accounting are not
5	the same to me.
6	Q. What's the difference?
7	A. An accounting is for the Compact. A
8	calculation is used in determining a value.
9	Q. And for what purpose do you determine the
LO	value?
11	A. To determine the Rio Grande Project usable
12	water for allocation to the customers.
13	Q. And when you do the accounting, you start off
L 4	each year with a Compact credit account. Is that the
15	number that you use, is that given to you by the Compact
16	Commission?
L7	You said earlier that you may make
18	adjustments depending on that number, so I'm assuming
19	you're is the reason you're waiting because you may
20	start with a number that's later adjusted, depending on
21	what the Commission gives you?
22	A. Yes.
23	And like this year, I'm using zero for New
24	Mexico, because New Mexico has informed us that they are
25	going to be in a debit status. So I'm using that
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1	because I know, from their estimations and informing
2	Reclamation, I'm estimating it at zero.
3	Q. And that's an estimate.
4	And will that estimate be then firmed up by
5	whatever the Compact Commission gives you as final
6	end-of-year numbers for the prior year?
7	A. Yes.
8	Q. Have you ever encountered a situation, in
9	accounting for the Rio Grande Project, where the Compact
10	credit account volume given to you by the Commission
11	exceeds what you may have in physical storage accounted
12	for as Compact credit water?
13	A. I have never seen a situation in which the
14	Compact credit account volume is greater than the
15	physical storage in Elephant Butte. And I don't recall
16	if it was adjusted upward or downward in all the
17	situations that I've encountered.
18	Q. If that situation occurred, that you were given
19	by the Commission a number for Compact credit account
20	that exceeded what you had up to that point in physical
21	storage attributed to the Compact account credit
22	account, what do you know what you would do?
23	A. I do not.
24	Q. Okay. Would it be possible to adjust the
25	accounting to designate some of the water that's
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1	physically there as Compact credit account water so as
2	to make the physical amount then attributed as Compact
3	credit water match what the Commission had identified as
4	the volume of Compact credit water?
5	MR. DuBOIS: Objection, form of the
6	question, calls for speculation, foundation.
7	A. I'm unsure what "designate" means in relation
8	to an allocation spreadsheet.
9	Q. (By Mr. Wallace) Well, would the number in the
10	allocation spreadsheet representing the physical supply
11	in the reservoir change in order to make the Compact
12	credit amount as given to you by the Commission the same
13	as what is physically in the reservoir identified as
14	Compact credit account water?
15	MR. DuBOIS: I was going to say objection,
16	calls for speculation.
17	Q. (By Mr. Wallace) But you can answer if you
18	know. You know, you're responding to material in your
19	expert report.
20	A. It depends on the time of the year.
21	And when the Compact provides the final
22	credit accounting is, as stated earlier, late March or
23	early April, and that is the January 1 number.
24	And I would not go back to the January
25	allocation and change that because I'm already working
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1	on an April allocation. And I would only estimate the
2	credit water in storage on the date that I'm looking at
3	for that April allocation based on physical evaporation
4	that had happened from January 1st on that new Compact
5	credit number to that date.
6	Q. So you're saying you would make that adjustment
7	going forward incorporating monthly prorated evaporative
8	losses to that volume?
9	A. I did not say monthly prorated evaporative
10	losses.
11	Q. How would you calculate those evaporative
12	losses?
13	A. They're calculated daily in the accounting
14	model and monthly-ish. Like I said earlier, not every
15	month. I look at the day that I choose from the day
16	before or the week before up until that date and I sum
17	them up.
18	Q. Okay. And just to be clear, those evaporative
19	changes that you calculate at the Compact credit account
20	are for allocation purposes only, not for making
21	determinations of what the actual Compact credit water
22	to the states may be under the Compact?
23	A. Yes, it's only for allocation purposes.
24	MR. WALLACE: Thank you. That's all I
25	have.