1	NEW MEXICO ENERGY MINERALS AND NATURAL RESOURCES
2	DEPARTMENT OIL CONSERVATION COMMISSION
3	
4	Case Nos. 23614-17; 23775;
5	24018-20; 24025; 24123
6	
7	
8	Moderated by Rip Harwood
9	Wednesday, May 21, 2025
10	9:00 a.m.
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12	
13	Remote Proceeding
14	Wendell Chino Building
15	1220 South Saint Francis Drive
16	Santa Fe, NM 87505
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22	Reported by: Trevor Arnold
23	JOB NO: 7225942
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	Page 1

1	APPEARANCES
2	Sheila Apodaca, ENMRD
3	Gerasimos Razatos, Acting Director, OCD; Chair
4	Rip Harwood, Hearing Examiner
5	Dana Hardy, Counsel for Empire
6	Corey Wehmeyer, Counsel for Empire
7	Miguel Suazo, Counsel for Pilot Water Solutions, SWD
8	Adam Rankin, Counsel for Goodnight
9	Nathan Jurgensen, Counsel for Goodnight
10	William Ampomah, Professor, Petroleum Engineering, New
11	Mexico Tech; Designee of the Energy Secretary
12	Zach Shandler, New Mexico Department of Justice
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	Page 2

1	PROCEEDINGS
2	MR. RAZATOS: My name is Gerasimos
3	Razatos. I am the acting director for the Oil
4	Conservation Division. I'm also the acting chair for
5	the Oil Conservation Commission. Today is May the
6	21st, 2025, and we are in our continuing hearing of
7	the consolidated cases of Goodnight Midstream and
8	Empire New Mexico.
9	Before we start, as always, I'll do a
10	roll call. As I stated, my name is Gerasimos Razatos.
11	I am the acting director of the Oil Conservation
12	Division, and the acting chair for the Oil
13	Conservation Commission. Last time, we started with
14	Mr. Lampkin. So this time we'll start with
15	Dr. Ampomah, if you wouldn't mind introducing
16	yourself?
17	MR. AMPOMAH: Good morning. I'm
18	Dr. William Ampomah, professor, petroleum engineering
19	at New Mexico Tech, and also designee of the Energy
20	Secretary. Thank you.
21	MR. RAZATOS: Thank you.
22	Mr. Rankin?
23	THE REPORTER: I'm sorry to interrupt.
24	My name
25	MR. RAZATOS: Oh.
	Page 3

1 THE REPORTER: -- is Trevor Arnold. 2 I'm the reporter assigned by Veritext. I haven't even 3 had a chance to really set up all my speakers in my software, so I don't know if we're on the record, 4 5 right now. 6 I need to start recording this, and 7 having this transcribed. I'm not aware -- and there's 8 33 participants, so I don't even know who's going to 9 be speaking. That's a lot of speakers for my 10 software, so I need to get situated before we get 11 started. 12 MR. RAZATOS: I am so sorry that they 13 did not give you the information. I mean, that's a little disconcerting that Veritext has done this to 14 15 you, so my apologies. You're the second individual 16 that they've done this to, this week. So that's a 17 little disconcerting to me. 18 But my name is Gerasimos Razatos. How 19 much time do you need to get yourself up and running? 20 THE REPORTER: Well, considering the 21 fact that there are 32 other individuals in this meeting, I need to figure out who's going to be 22 23 speaking, because my software only supports up to 20 24 speakers. 25 MR. RAZATOS: Your --Page 4

1 THE REPORTER: So I need to figure out 2 how to differentiate between that. And also, I can't 3 see the other people talking, because there's four 4 pages of --5 MR. RAZATOS: So let me make it --6 THE REPORTER: -- speakers here, so I'm 7 totally --8 MR. RAZATOS: Let me interrupt you --9 THE REPORTER: -- in the dark, right 10 here. 11 MR. RAZATOS: Let me interrupt you, 12 just one second. It's not going to take all 32 13 people, so you don't have to worry about it. The 14 majority are going to be in the big screen that you 15 see, Pecos Hall. I've made it big screen on mine, but 16 the hearing is happening mostly in Pecos Hall. I will be talking, as I said, Gerasimos 17 18 Razatos. I believe my name should show up at the 19 And so you can spell it from there. Our bottom. 20 hearing officer is also going to be talking off of the 21 platform. His name is Rip Harwood. I believe he just 22 waved at you. 23 THE REPORTER: Hold on. Just because 24 there's four pages, I literally did not see anything happen. I don't know how --25

1 MR. RAZATOS: Okay. 2 THE REPORTER: -- to change the setting 3 on --4 MR. RAZATOS: The only --5 THE REPORTER: -- Teams in order to see 6 who's actually speaking at a -- Rip Harwood? Okay. Ι 7 scrolled to the second screen. Awesome. 8 THE HEARING EXAMINER: You know, and 9 when the person speaks, they will show up on your 10 screen. So --11 THE REPORTER: It is not. That's the 12 problem. It was not doing that. When you started 13 talking, I didn't know who was talking. 14 MR. RAZATOS: So Mr. Arnold, let me 15 just finish, so I could just tell you, and I think 16 it'll help us. So it'll be myself and Mr. Harwood. 17 And there's a Mr. Suazo on the Teams platform that will be doing the -- any talking. 18 19 Mr. Suazo, if you wouldn't mind just 20 saying something, so he could potentially see you. 21 Is Miguel on Teams today? 22 MR. SUAZO: Yeah, I'm on. 23 Good morning, Mr. Arnold. Miguel Suazo 24 with Beatty & Wozniak, representing Pilot Water in this proceeding. 25

1 THE REPORTER: There. It popped up, 2 that time. Thank you. 3 MR. RAZATOS: Okay. So it'll be the 4 three of us, mostly, off of the platform, talking. 5 Everybody else is going to be in Pecos Hall. And what I'm going to do is -- because we had this yesterday, 6 7 at our next break, if you will get with Sheila Apodaca, she will stay on, and she will email you the 8 9 list of participants that are in Pecos Hall, so then 10 you can get those names as well. 11 As far as pressing "record," if you 12 don't mind pressing record now, we would be good. 13 THE REPORTER: I was recording whenever 14 you said the --15 MR. RAZATOS: Beautiful. 16 THE REPORTER: -- time on, and 17 then -- so I've been recording this entire time, so --18 MR. RAZATOS: Excellent. 19 THE REPORTER: Okay. 20 MR. RAZATOS: So --21 THE REPORTER: It's going to be y'all, 22 mainly, and I'll catch up on the other parts. 23 MR. RAZATOS: And you'll catch up on 24 the names on our first break. Sheila will get you that information. 25

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1 Sheila, if you wouldn't mind providing 2 the same information for Mr. Arnold? MS. APODACA: I will. 3 4 MR. RAZATOS: Thank you so much. 5 Mr. Arnold, any other questions? THE REPORTER: No, sir. Thank you so 6 7 much. That clears everything up. 8 MR. RAZATOS: No problem. Glad to 9 help. 10 Okay. So we have a hearing. We're 11 ready to start. As I always do, I start on the left 12 hand side of the room, and move my way over. 13 Empire? 14 MR. WEHMEYER: Corey Wehmeyer for 15 Empire. We're ready. MR. RAZATOS: Okay. Excellent. 16 17 Goodnight? 18 MR. RANKIN: Morning, Mr. Chair. Adam 19 Rankin with Holland & Hart, on behalf of Goodnight. 20 With me today is my colleague, Nathan Jurgensen. 21 MR. RAZATOS: Excellent. Thank you. 22 Rice? 23 MR. BECK: Matt Beck on behalf of Rice 24 Operating Company and Permian Line Service LLC. 25 MR. RAZATOS: Did you notice I did not Page 8

1	call you Mr. Rice today, Mr. Beck; I just said Rice?
2	MR. BECK: I did. Thank you.
3	MR. RAZATOS: You're welcome. Thanks
4	for being patient with me on that.
5	And Pilot, Mr. Suazo, if you wouldn't
6	mind, one more time?
7	MR. SUAZO: Yes. Good morning. Miguel
8	Suazo with Beatty & Wozniak, appearing today on behalf
9	of Pilot Water.
10	MR. RAZATOS: Excellent. Thank you.
11	So as I stated, this is the
12	consolidated cases by Goodnight Midstream and Empire
13	New Mexico. I will just read the case numbers, one
14	more time. So it's Case Numbers 24123, 23614 through
15	17, Case Number 23775, and Case Numbers 24018 through
16	24020, and 24025.
17	Mr. Harwood, we transfer it all over to
18	you, again. Thank you.
19	THE HEARING EXAMINER: Thank you.
20	Good morning, chairman.
21	And good morning, everyone.
22	So let's see. When we broke yesterday,
23	there was a proposed Empire exhibit that Empire was
24	going to run by the rest of the parties. Did that
25	happen, Mr. Wehmeyer?

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1 MR. WEHMEYER: Yes, we provided that to 2 Mr. Rankin. THE HEARING EXAMINER: Mr. Rankin? 3 4 MR. RANKIN: Good morning, Mr. Hearing 5 Officer. Yes, my colleague, Mr. Jurgensen has reviewed that document, and we have no objections to 6 its submission. 7 8 THE HEARING EXAMINER: All right. 9 Rice, have you had a chance to review? 10 What's your position? 11 MR. BECK: I have no objection. 12 THE HEARING EXAMINER: And Mr. Suazo for Pilot? 13 14 MR. SUAZO: No objection. 15 THE HEARING EXAMINER: All right. That 16 document will be admitted. That was the only 17 preliminary matter, but it does raise an issue with 18 respect to the partys' exhibits. There are lots of 19 them, you know, exhibits that were prepared and 20 exchanged before the hearing, and also additional 21 exhibits that were offered during the hearing. 22 So it'll be Ms. Apodaca that will be maintaining one set of everybody's exhibits. 23 24 Basically, it'll -- she'll be like the court reporter 25 is in a courtroom, you know, and it's going to be the Page 10

1 partys' responsibility to, at the end of this 2 proceeding, not necessarily today, but at some point in time, you know, get her an updated list of all of 3 4 your exhibits, and make arrangements with her to go 5 through and make sure that she has copies of 6 everything on your respective list. 7 If you want it in the record, that's 8 going to be your responsibility to make sure that each 9 of -- everybody's exhibits are -- there's a copy of them with Ms. Apodaca. 10 11 All right. And then after closing 12 arguments, remind me, and we'll talk about findings of 13 fact, and conclusions of law. But I know you're all, 14 probably, as Mr. Wehmeyer might put it, "itching" to 15 get on with your closing arguments. 16 So not sure who's going to be 17 presenting for Empire, but whoever it is, are you ready to proceed? 18 19 MR. WEHMEYER: I'm ready, Mr. Harwood. 20 I'm going to try the technology to share. Let's see if we get this. 21 22 THE REPORTER: I'm sorry. I need to interrupt, real quick. I don't know who's speaking at 23 24 the moment? 25 MR. WEHMEYER: Cory Wehmeyer for Page 11

1 Empire. 2 THE REPORTER: Thank you, sir. MR. WEHMEYER: Excellent. 3 I think we have it working, 4 5 Mr. Harwood. I can proceed at your pleasure. 6 THE HEARING EXAMINER: All right. 7 Please --8 MR. RAZATOS: Mr. Harwood, Mr. Hearing 9 Officer, give me one second. Let me just interrupt. 10 Mr. Arnold, can you see Mr. Wehmeyer's 11 name at the bottom of the screen now, since the screen 12 is being shared? Okay. 13 THE REPORTER: I can now. Thank you. 14 MR. RAZATOS: Okay. 15 Mr. Wehmeyer, my apologies. 16 Mr. Hearing Officer, my apologies for 17 interrupting. THE HEARING EXAMINER: None needed. 18 19 MR. WEHMEYER: Very good. May I 20 proceed, Mr. Harwood? THE HEARING EXAMINER: Yes, please. 21 22 MR. WEHMEYER: Thank you very much, and may it please the Commission. 23 24 I want to start by saying a sincere 25 thank you, on behalf of Empire, to the Commissioners. Page 12

1	This we really recognize that this has been a
2	tremendous burden on your resources, on your time,
3	that y'all have spent a lot of time reading, and
4	looking at exhibits, and formulating questions.
5	This is time you could have spent on
6	other things, could have spent with your classes,
7	could have just spent doing things that are fun. It's
8	incredibly important to the State of New Mexico, and
9	to Empire. That's why we are here.
10	I also, on behalf of the entire trial
11	team, want to say a thank you here for Mr. William
12	West. We've got Mr. Jack Wheeler of Empire, Darryl
13	Davis of Empire, Royce Landing.
14	Dale, also, thank you for your time,
15	and what you've done here.
16	Additionally, the entire trial team of
17	Ms. Hardy, Mr. Shaheen, and Mr. Padilla.
18	Now, this has gone on for months, and
19	the we've heard of from a lot of witnesses now.
20	We've seen a lot of exhibits. I just want to breeze
21	through some of what we've seen to just, kind of,
22	refresh some memories on some of the matters that
23	Empire thinks is really important and dispositive
24	here.
25	What we heard is that the EMSU was
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1 formed in 1984, comprises 14,000 acres, 58 percent of 2 which are owned by the State of New Mexico, 20 percent 3 by the BLM. And since 2021, that's operated by 4 Empire.

5 Goodnight knew, before they came here, 6 that EMSU had been properly formed, and had been 7 unmolested for nearly 40 entire years. With respect 8 to the unitization agreement, this is not complicated. 9 Goodnight just does not care. What was covered in 10 that unitization agreement was the unitized formation 11 and unitized substances.

12 Unitized substances are defined as all 13 the oil and gas that occur within the unitized The unitized formation is all of the San 14 formation. 15 Andres, and all of the Grayburg. All of it. With 16 respect to the rights and obligations that were vested 17 nearly 40 years ago, in 1984, now going over 40 years ago, that was the exclusive -- that is not sharing 18 19 with the Dallas-based trash company.

That is exclusive right of the parties, including all surface rights that are necessary or convenient to prospect for, produce, store, allocate, distribute unitized substances are delegated, and shall be exercised by Unit Operator. That is Empire. The reason we are here is that

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1 Goodnight disrupted 40-plus years of status quo, 2 coming in and putting trash into a properly unitized interval. Empire relied on Exxon. You've heard from 3 the Goodnight witnesses that Exxon is a world class 4 5 operator, largest oil producer in the United States. 6 Exxon identified a ROZ in the San 7 Andres, 350 feet thick, going all the way down to 700 8 feet subsurface, with 912 estimated oils in 9 place -- barrels in place. That ignores the entire Grayburg ROZ, as well. 10 11 Empire came to this EMSU for the 12 significant CO2 and enhanced oil recovery potential in 13 both the San Andres and the Grayburg, as well as the 14 water flood opportunities in the Grayburg. What did 15 Goodnight do? They got little, postage stamp, 16 five-acre surface use agreements from naked surface 17 owners that they say give them the right to come into an established and producing unit and destroy those 18 19 reserves. 20 What did the OCD find? The OCD, after 21 hearing evidence as part of the Piazza proceeding, has 22 already made the determination here that if that Piazza well was not stopped, what is going to happen 23 24 here is a violation of the OCD duties to prevent the drowning by water of stratums, or part thereof, 25

1 capable of producing oil or gas or both in paying 2 quantities, and to prevent the premature and irregular encroachment of water that would tend to reduce 3 4 ultimately -- ultimate recovery of crude petroleum. 5 You heard from Mr. McGuire, yesterday. 6 He said, "I agree. Empire has brought even more evidence to these commissioners than what they brought 7 8 to the OCD, when the OCD has already found that this burden has been met." 9 10 How did Goodnight even get in here? 11 Through deception, and lying to the OCD. And we saw 12 that in the applications. How can this OCC yank these 13 applications and permits? Well, one, if it -- they contain a material mistake. We have seen that, in 14 15 spades. 16 If they made an incorrect statement on 17 which OCD relied. We saw that in the applications, in spades, and we heard from Mr. Alleman about that. Or 18 if the injected fluid is escaping from the approved 19 20 injection interval. Absolutely. That is already occurring. It's going to continue to occur. 21 22 Or if the injection could lead to waste. Any -- these are "or"s. Any one of the four. 23 All four of these are met here. So bases one and two, 24 I'm going to talk about those, very briefly. 25

1 They stated that the proposed SWD will 2 be injecting water into the San Andres formation, which is a non-productive zone, known to be compatible 3 with formation water for the Wolfcamp and Bone 4 5 Springs. That is utter nonsense. 6 The entire Goodnight case, and their 7 actions, from the first day they laid a foot onto the 8 EMSU, has been utter nonsense. The true statement, 9 that they should have put on those applications, is 10 that that water is not compatible with the San Andres, 11 and that the San Andres is a known and unitized oil 12 and gas producing zone, not just in the EMSU, but very 13 near the EMSU. Within two miles, you can find San 14 15 Andres producing wells in the Wortham wells and the 16 Mittie Weatherly wells. Additionally, in the 658 and 17 660 well, those have swabbed oil out of the San Those evidence -- those exhibits are in the 18 Andres. 19 record. 20 Basis 3, the injected fluid is escaping the approved injection interval. There is no 21 22 impermeable barrier. Apparently, an impermeable barrier is a purple cartoon that shows up on a poster 23 board, when the poster boards don't even align with 24 themselves. The methodology made no sense. It had no 25

1 scientific footing, or grounding. That wastewater is 2 communicating, right now, out of the permitted formation, up into the Grayburg. 3 And you heard -- this is the most -- if 4 5 I was the OCC, the thing I would have been most 6 concerned to hear about was when Mr. McGuire said, "We haven't even tried to map where our water's going." 7 8 The water is going into the Grayburg. And in terms of 9 the aerial displacement, radial displacement of that water, Empire has done the work to establish that. 10 11 But Goodnight, the trash company, has 12 not taken one effort to figure out where is this water 13 going? And we heard something even more concerning from Mr. McGuire, which is that there's maybe five to 14 15 10 percent of pay, according to him. 16 And that this is completely pinched out 17 in the San Andres to the west, and it's completely pinched out to the east. Where do you think we've 18 19 They're setting you up for another Crane County qot? 20 incident. We do not need NASA and SMU on New Mexico 21 here, on the watch of this OCC. 22 Basis 4, Goodnight's wastewater injection is causing waste. It is washing out, right 23 24 now, the secondary efforts in the Grayburg, as part of the water flood. It is washing out future tertiary 25

1 development in the Grayburg.

2 It is washing out and reducing future recovery of oil in the San Andres ROZ. That is not 3 just the upper San Andres. You heard from Mr. West 4 5 that Empire and Mr. Mulacek does everything big. If this salt water disposal is just 6 7 stopped, they are here, ready to spend a billion 8 dollars of capex to make this a great New Mexico 9 success story. But the water has to stop. And you don't have to take Empire's 10 11 word for it. Witness after witness, even out of 12 Goodnight, told you all about the ROZ in the San 13 This comes from Dr. Davidson, Mr. Knights, Andres. Dr. Lake, Mr. Tomastik. I only have an hour here for 14 15 my remarks. I'm not going to get to play all of 16 these, but I'm going to give you some of them, and 17 we'll cite these in the papers to come. \$5.5 billion of cashflow to the State 18 19 of New Mexico's 58 percent royalties, that's \$1.1 20 billion in royalties, a half billion dollars in taxes. And to the BLM, that is -- 19 percent of that is about 21 22 0.37 billion. 23 No witness had a answer about why on 24 Earth should Empire not get a chance to carry this out to the cost-free, risk-free benefit of New Mexico and 25 Page 19

BLM. Now, the Commission's duties; I start with the
 New Mexico Constitution.

It is a constitutional mandate that regulatory agencies, and courts, and the legislature ensure that they are preserving the precious natural resources of this state, consistent with the use and development of these resources for the maximum benefit of the people.

9 Now, that includes protecting oil, even in instances in which the minerals are not owned by 10 11 the State of New Mexico. This is double. Not only 12 are these precious natural resources of the State of 13 New Mexico, they're owned by the State of New Mexico. 14 This commission has a duty to prevent 15 and stop waste. Underground waste is operating any 16 well, including SWD well, in a way or manner that 17 reduces or tends to reduce the total quantity of crude 18 petroleum.

Empire took its burden of proof here very seriously, and it brought the Commission the evidence it needs to make the decision that this is committing waste now; it will commit waste in the future, if not stopped immediately.

24 This commission also must protect 25 correlative rights. Correlative -- a simple way of

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1 saying correlative rights is if you're the owner of 2 the minerals in place, if you're the unit operator, it 3 just gives you the fair-share chance to go in and 4 produce, for everybody's benefit, the minerals that 5 you purchase through your oil and gas lease, and 6 through your unionization agreement.

7 Empire's asking this commission to 8 perform its duty, and protect those correlative 9 rights. That is just the fair share to go in, 10 pursuant to its ownership rights, and produce oil out 11 of its existing oil unit, including under Section 10 12 of the unitization agreement.

13 The Commission also has the duty to 14 prevent the drowning, by water, of any stratum or part 15 thereof that's capable of producing oil and gas in 16 paying quantities, and to prevent water encroachment. 17 This pertains to no production in paying quantities, whatsoever. The Commission 18 19 independently has an obligation to stop and prevent 20 water encroachment that reduces or tends to reduce the

21 ultimate total recovery of crude petroleum, or gas, or 22 both.

That is already happening, right this second. You heard, out of Mr. McBeath's sworn testimony, that no one, no investor, no operator is

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1 going to touch the production of oil and gas through 2 tertiary recovery efforts in the Grayburg or the San 3 Andres until the salt water injection is stopped 4 permanently.

Nobody's going to spend a cent until the destruction stops in the first -- right this second, development opportunities are not being pursued for the reason of only one party, and that is Goodnight.

The evidence. We heard Goodnight knew 10 11 of, but failed to disclose the hydrocarbon-bearing 12 zones in the San Andres, and failed to disclose the 13 EMSU unit. Now, when it's the Ted Williams, that comes later in time, outside of the unit, we showed 14 15 the Commission where Mr. McGuire says, "Can you show 16 me where we did it?" They showed the EMSU on that. 17 But in permitting the wells in the If the OCD staff, who is overburdened 18 unit, no. 19 and -- when they look at that, it was perfectly 20 intentional that Goodnight left off that EMSU on those 21 papers. 22 Goodnight repeatedly testified that XTO

23 received notice. Now, when they were going to the 24 Devonian, they sent it to XTO's correct address, 25 return receipt requested. When they decided to come

Page 22

1 up into the San Andres, we saw that they send it to what might be a field office in Midland, Texas, that 2 nobody has ever understood to be associated with XTO 3 in any shape, form, or fashion. They didn't do it 4 5 return receipt requested. 6 And then when they were asked about it 7 here, they said, well, we're not required to notify 8 anybody unless they're an affected party and have 9 already protested. They've played games with the permits, and they've gotten caught with it here, red 10 11 handed. 12 (Video played.) 13 MR. WEHMEYER: Just like its science 14 and engineering work, the theme that we see over and 15 over with this company, Goodnight, even at the very 16 jump, in the application stage, is this is a company 17 that just does not care. Let's talk about waste. There is waste 18 19 occurring, right this second, in the San Andres ROZ, 20 and the Grayburg ROZ. Every experienced and educated 21 science and engineering expert that testified in this case agrees, there's a ROZ in the San Andres; we are 22 23 done. 24 That includes Dr. Trentham, Dr. Lindsay, Mr. Melzner, Mr. Birkhead, Mr. Bailey, 25 Page 23

1	Mr. McShane, Mr. West, Mr. Knights, Dr. Davidson,
2	Mr. McBeath, Dr. Lake, Mr. Tomastik. History will
3	watch what we are doing as part of this proceeding,
4	right now, and the decision that comes out of it.
5	How many qualified engineers and
6	scientists do we need to come in here and swear that
7	there's a ROZ in the San Andres for this salt water
8	injection to stop?
9	(Video played.)
10	MR. WEHMEYER: I could play these
11	videos for hours, in here.
12	(Video played.)
13	MR. WEHMEYER: It is Empire took its
14	obligation seriously before coming to this commission
15	and taking this commission's time. Empire has not
16	merely proved the presence of ROZ throughout the San
17	Andres as a matter of a preponderance of the evidence;
18	Empire has proved it here conclusively, and they've
19	done it through a cross-disciplinary and
20	multidisciplinary approach.
21	You heard the petrophysics from Scott
22	Birkhead and Ryan Bailey; Dr. Lindsay and Dr. Trentham
23	on the geology out here, along with Ryan Bailey; the
24	engineering of Steve Meltzer and William West.
25	These are people who worked
	Page 24

1 independently, who are qualified, who relied on 2 reasonable data and information that would be 3 consistent with their particular expertises and disciplines, who applied sound methodologies that are 4 5 recognized in actual literature and education 6 associated with their expertises, who came to reasonable and rational conclusions where there is a 7 8 clean nexus between their qualifications, the data 9 they looked at, the scientific and engineering methods 10 they used, and the conclusions they arrived at. 11 What on earth did Goodnight bring you, 12 They have yet to bring a geologist into this here? 13 room to take the oath to testify to where in the heck the tops are of the different formations we're even 14 15 talking about. 16 They had engineers that performed the 17 geology, in Dr. Knights. You had Mr. Knights, who is 18 the geologist, but didn't do any geology. It's crazy. 19 And with respect to the cartooning, the purple 20 cartooning, I would ask the Commissioners to go back. 21 We've heard that there -- out of the Goodnight witnesses, that there's a ROZ in the upper 22

San Andres. Where in the purple cartoons is there a
barrier between the upper San Andres and the lower San
Andres? None, whatsoever.

1 Now, over here, this is what 2 Mr. Knights swore to. Mr. Knights swore -- this is at Page 2 of his report, "The subsequent unitization and 3 operation of the EMSU involved the combined geologic, 4 5 engineering, and operational expertise of world-class major oil companies such as Conoco, Exxon, and Gulf 6 7 Oil. 8 Yet none of them concluded that there 9 was any reasonable economic potential below minus 350 subsea." That's just false. And the Exxon sales 10 11 brochure, over here on the left, they've got ROZ going down to a minimum of 700 foot subsea. 12 13 But the point here is that Mr. Knights 14 swore to what is common sense. If there was anybody 15 that had the human resources, the financial resources, 16 the resources to proprietary data, science 17 information, engineering information, it would be these companies of Chevron, and Exxon, and Gulf, and 18 19 Empire, who have had decades of experience precisely 20 in this EMSU. 21 Before knowing we were ever going to 22 have these seats here today for you all to have to make your decision, Exxon independently came to the 23 conclusion that there were 912 million barrels of oil 24 recoverable out of that San Andres ROZ. 25

1 Now, rock facies. I want to talk a 2 little bit about the importance of rock facies. Now, Dr. Davidson chose a facies model, but didn't describe 3 the core, and didn't look at the core to even 4 5 understand what in the heck are the rocks that are subsurface. 6 7 And I asked Mr. Knights, "What rocks is Dr. Davidson even using? And he said, "I looked. We 8 9 work at Netherland Sewell. I've gone down the hole. I've tried to ask him what rocks he's using. 10 Ι 11 can't -- even after visiting with Dr. Davidson, I 12 don't know what rocks he's using." 13 What we know, and can take confidence 14 in, is that they're the wrong rocks. We've heard 15 consistently, from all of the witnesses except 16 Dr. Davidson, that this is a shallow water deposition 17 environment, not a deep water. 18 By him choosing deep water, it placed all of his rock facies into territory where you could 19 20 never put enough oil into it to get past that 20 21 percent threshold for him to give it credit in any of 22 the models. 23 Now, on the other side of that, we 24 brought you Mr. Birkhead as an example, and Mr. Bailey, who did actually examine the core, examine 25 Page 27

1 the core reports, and include that into their
2 analysis. The corrected oil saturations for Grayburg
3 that Mr. Birkhead calculated, the corrected -- and
4 Grayburg is 23.94 percent, about 24 percent
5 saturation, and in the San Andres, about 21 percent
6 saturation, corrected.
7 Now, you heard Mr. Birkhead explain

8 that it -- in his opinion, using n values between 11 9 and 100, which is where Dr. Davidson ends up at, is 10 completely crazy. You cannot use that. You know that 11 that data is wrong, that those n values are way too 12 high.

13 If you exclude the suspicious data, 14 which Mr. Birkhead did, on the basis of sound 15 scientific principles, you end up with 25.7 percent 16 corrected core oil saturation in the Grayburg, and 29 17 percent corrected oil saturation in the San Andres, 18 off of core.

Now, Mr. Knights agrees that if you make the wrong rock pick, you're already into the territory where you can -- just by picking the deep water rock, you can never get enough oil in there for this to get credit in the model.

24 (Video played.)

25

MR. WEHMEYER: They set up a

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1	methodology that could only lead to one result, that
2	being the result that Goodnight wanted, and needed,
3	because it had already put the pipe in the ground.
4	None of the Goodnight work has been about following
5	the data and the science to the logical conclusion.
6	All of the work has been about reverse
7	engineering to a predetermined result where you get to
8	keep the pipe in the ground. Dr. Davidson agrees his
9	rock facies pick can be off.
10	(Video played.)
11	MR. WEHMEYER: And again, he
12	understood the non-geologist thought this was a
13	deep water environment, which contradicts every other
14	piece of evidence that's come out. This is the
15	combined work of both Nutech and Ops Geologic.
16	And you can see there, where and I'm
17	looking at the 628 well, specifically, Ops Geologic
18	has their what they've calculated, through
19	Mr. Birkhead's petrophysical work, is 28 to 47 percent
20	oil saturations in the 628 well.
21	In the 660 well, it's 14 percent to 28
22	percent oil saturations that have been calculated.
23	And in the 746, 41 percent to 69 percent oil
24	calculations that have been calculated. Why on earth
25	would Empire, who spent tens of millions of dollars to

buy these oil and gas leases, not get the opportunity
 to prove Mr. Birkhead right?

For the part of Goodnight, this is the 3 science work they brought us. Even after examining 4 5 Mr. McGuire for our -- I have no idea what this is, 6 or -- I've -- and we asked him, "Have you ever seen 7 the OCD permit wells and approve applications based on 8 water management barriers in a water management zone? 9 Just help me. Where in the OCD file do I find this, 10 that we can have an intelligent conversation with the 11 Commissioners about how this fits into anything?" He 12 had nothing.

The question is whether, in the San Andres, there is an ROZ, and in the Grayburg is there an ROZ, and is there communication? If Empire has met a preponderance burden on any of -- on any one of those three things, we are done here. It gets to proceed with its development, and the salt water trash injection gets stopped.

But again, off of Mr. McGuire's work, the -- all the green that's down in his water management zone, that is oil. And to be more precise, 58 percent of that is the State of New Mexico's oil. And you don't have to take Empire's word for it. Let's take Dr. Davidson's word for these oil

,	
1	saturations. Now, all the way to the bottom
2	(Video played.)
3	MR. WEHMEYER: When people are reading
4	about we're reading about transcripts that happened
5	40 years ago as part of the EMSU. When folks are
6	reading these transcripts, 40 years from now, you
7	didn't have to take Empire's word for it.
8	Dr. Davidson told you that 58 percent of the State of
9	New Mexico's oil is down in the zones that Goodnight
10	is flooding, right this second.
11	Barriers. The idea of that a
12	barrier somehow protects this, it complete
13	nonsense. It relies entirely on mud losses. There's
14	no authority. We've asked, "Give me the literature.
15	What professor, what scientist has written that you
16	would say mud losses equates to an impermeable
17	barrier?" Nothing. Zilch.
18	The mud losses are inconsistent. The
19	way you explain the mud losses is by high-permeability
20	zones. Just like Mr. McGuire screwed up and said,
21	"Oh. Well, the reason the going here is because
22	it's a high permeability streak."
23	To the extent they've had these
24	inconsistent mud losses at inconsistent depths, and
25	inconsistent volumes, that's explained by the high
	Page 31

1 permeability rock that's in the formation. They 2 wouldn't know about that though, because not one 3 single Goodnight witness has ever looked at the core. Goodnight concedes there's no evidence 4 5 or literature showing a barrier goes all the way 6 across the EMSU. To Mr. Lampkin's questions, you're showing us this little part. If we are to believe 7 8 that this is a beautiful and perfect barrier blanket 9 across 14,000 acres, where's that mapping? If you get outside of his little area 10 11 of review, he's told you nothing about what happens 12 north, and he's told you nothing about what happened 13 south in the EMSU, let alone anywhere adjoining the EMSU, knowing that we have San Andres production 14 15 within two miles of EMSU, right now. 16 They failed to understand. This 17 is -- if I took one thing that it -- like, Mr. West just cannot sleep at night, at the idea that Goodnight 18 is still in here, with Mr. McGuire swearing that the 19 20 pressure is higher in the Grayburg than the San Andres 21 is just mind-boggling. 22 They rely on that faulty assumption. And in his rebuttal sworn testimony, you can see on 23 24 the data that they want -- even though they know it's completely false, but that they cling to, if you read 25

Page 32

Mr. West's rebuttal sworn -- he explains exactly the problem with the algorithm, and the measurement, and why those readings are there. It's also not supported by core.

5 This -- OCC is to take the word of 6 Goodnight about barriers which they've not mapped 7 across the EMSU. This is what you would have to be 8 biting off with, by way of credibility. No one from 9 Goodnight knows where the bottom of the Grayburg is. No one knows where the top of the San Andres is. 10 No 11 one knows where the upper San Andres is. No one knows 12 where the Lovington Sand is. No one knows where the 13 lower San Andres is.

15 that -- Mr. Rankin told you, on the very first day of 16 opening arguments, "I cannot wait to get my experts in 17 here for you to be impressed by these guys." Every 18 single one of them told you they relied on Preston 19 McGuire for their tops.

Every expert in here,

14

20 What did Preston McGuire tell you, 21 yesterday? He said he didn't pick any tops. How on 22 earth do you cause millions of dollars of harm, and 23 cause millions of dollars of attorney's fees, and all 24 of y'all's wasted time in this proceeding, and you 25 haven't brought a single geologist in here to swear to

1 the tops and the methodology associated with picking 2 them. 3 Nobody, from the part of Goodnight, looked at or described the 679 or R R Bell cores. No 4 5 one had -- before Goodnight, has ever called 7 percent porosity an impermeable barrier. Where, in 6 literature -- if it's something other than "the 7 8 Commissioner should take your word for it," where do 9 we find it? Goose eqq. Nothing. 10 No one mapped the entire EMSU. No one 11 prepared a material balance simulation or model. It's 12 easy to rip at, and tear out, and claw at, and 13 criticize, and poke, and slander the work of Dr. Buchwalter. 14 15 If Goodnight had any earnest belief in 16 the science of their position, they should have built 17 their own material balance simulation and brought it 18 in here to the Commissioners and explained 19 Dr. Buchwalter's role. They didn't do it, because 20 they can't do it. 21 This is the geology work of 22 Mr. McGuire. He literally came in here and swore to this commission that there's a confining layer, and 23 tens of feet in which he didn't even have core because 24 it was so cracked up they couldn't get it up in the 25

hole.

1

I was the one who showed him, for the very first time, photos of the actual core that he's calling "confining layer." And we went through those, and we zoomed in on them. And you could just see, with the naked eye, how cracked up this rock is, that he calls "confining layer."

8 He didn't -- before he chose "confining 9 layer," he didn't know that, because he didn't look 10 at -- he didn't examine the core, even though it was 11 available to check out from the BEG. And he didn't 12 look at the photos, even though those were also 13 available.

We went through the actual core laboratories report, and again, the one he chose to show y'all, at 4335, had a vertical -- we're not talking porosity; it's a vertical permeability of 10 is what Preston McGuire brought you in here, as his great example case of impermeable barrier confining layer.

I can tell you Empire's terrified of the work that this SWD Disposal trash company is doing in its unit. I think the Commission, hearing about Goodnight operating in other places in New Mexico, should be equally terrified.

1 Dr. Lindsay, he prepared an actual 2 fracture study, the work that a geologist would do in an important case such as this one. Goodnight did not 3 bring you one single fracture study. We -- the 4 5 cartoons; I mean, we showed these things were wrong, every which way, but, I mean, the idea that this would 6 7 be prepared off a seven porosity, just eyeballing 8 paper raster logs, and that you would come in here and 9 swear to this commission that this is a barrier. 10 He agreed that some of the purple is 11 going to have higher than 7 percent porosity. He 12 agreed that somebody in their group actually liked the 13 purple rock so much, they chose to put perfs into it. We showed you instances in which the 14 15 exact same well -- they had literally cartooned the 16 exact same well, and the alleged barriers; the purple 17 cartooning doesn't match up in the exact same well. None of it correlates across. 18 19 And the importance of these open-hole 20 completions, and putting all these perfs -- if you indulge, if you just believe that every single one of 21 22 the purples was a barrier, as soon as you poke that top hole, or as soon as that water gets to the 23 24 open-hole completions on the older wells, where does it -- it's going to go straight up to the Grayburg. 25
1	It and this is what we I didn't
2	spend any time with Mr. McGuire on this, but as I talk
3	about the OCC should be terrified that Goodnight has
4	been turned loose on the state of New Mexico, here's
5	my cleanest example of that one.
6	If you look at this Snyder well, right
7	here in the middle, the blue is what they permitted
8	with the OCD. Right today, if they want to put
9	perfs, right there, they told the OCD, in getting that
10	permit, that that was perfectly fine, and would be
11	appropriate.
12	It they literally told the OCD that
13	put that that all the way up to that would be a
14	fine place for saltwater injection. There's no
15	barrier above that. This is the cleanest example of
16	them straight lying to the OCD.
17	If their work really showed that that
18	is barrier, then why on earth would you have told the
19	OCD that you could inject at the very top of that.
20	Makes no sense whatsoever.
21	And on the green, one of the
22	Commissioners asked the question. We've talked about
23	the different zones; if we're to believe your barrier
24	work is cartooning, where are the different zones
25	reflected within the Grayburg? Why do we have places
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1 where there's no log, whatsoever, but you've cartooned down here. How can you cartoon miles between wells, 2 3 when the log that you're using, that tool, goes three to five feet into the rock? 4 5 It makes no sense, whatsoever. It's all because this has always been a case about trying 6 to reverse engineer a result that lets them keep their 7 pipe in the ground, not what science and engineering 8 9 would actually lead one to. Empire presented conclusive evidence of 10 11 communication. This is the 1989 Chevron paper, the 12 1996 Chevron paper. Over in Mr. Love's paper from 13 Chevron, talks about the bottom water coming up. I 14 asked Mr. McGuire, "Where do -- where would bottom 15 water come from?" 16 Before he knew this is where I was going with it, he said, "Well, it's going to come from 17 the formation below." But then when I show him the 18 19 actual paper that he cited and relied on, then he 20 said, "Well, the bottom water might come from the edge," which I'm a lawyer, not a geologist or an 21 22 engineer; I would call that edge water, not bottom 23 water. 24 He wanted to point you -- and Dr. Lindsay, a man who has spent decades of his life 25 Page 38

1 employed by operators in the EMSU, who prepared an 2 over thousand page PhD dissertation on this area, he wants to tell you what Dr. Lindsay thinks, and what 3 he's come to a conclusion of. 4 5 And he highlighted you the orange. We 6 showed, over in the yellow, where Dr. Lindsay, before 7 knowing he was ever going to be an expert in this 8 case, specifically identified vertically-oriented 9 plumes of upper San Andres formation water within the Grayburg formation. 10 11 Dr. Lindsay did not know that he was 12 going to come testify to this OCC, in February. He 13 did this independently, years before knowing any of this would happen. I think this slide probably tells 14 15 the story the best. 16 So many witnesses were asked, "How do 17 you explain this pressure depletion, but for communication with that lower-pressured Grayburg 18 reservoir above?" 19 20 (Video played.) 21 MR. WEHMEYER: We also -- we've spent some time with this bubble map. The -- we -- the 22 Goats Seep aquifer drive to the southwest. 23 The 24 testimony has been universal that that would be a very weak water contribution here, if any. 25

1	And, in fact, you heard that from
2	Mr. White. This was the one where he's got it
3	flipped, where you've got T1, and T1 Prime, and
4	you the west is actually over on the right.
5	What Mr. White testified to here, very
б	credibly, is that as you move these are flipped
7	around in my head now as you move from the west,
8	that that rock gets tighter and tighter, and that that
9	Goats Seep is pinched out before you even get to EMSU,
10	with very little contribution there.
11	Dr. Buchwalter's model, again, only 99
12	grid blocks out of 34,500 had to have vertical
13	permeabilities adjusted. All of those vertical
14	permeabilities were adjusted within ranges that were
15	identified in core, and reasonable off of core.
16	Dr. Buchwalter's work is sound. They
17	can always fuss at it. You as Dr. Buchwalter said,
18	you can always say you could have done more, you could
19	have done a better model, you could have done this,
20	you could have done that.
21	But the model is sound. And if
22	Goodnight thought it was not, they should have brought
23	their own, and they did not. Dr. Davidson agrees it's
24	reasonable to assume that there's fractures causing
25	the communication.

1	(Video played.)
2	MR. WEHMEYER: Dr. Lake also agrees.
3	(Video played.)
4	MR. WEHMEYER: Water chemistry. I'm
5	not going to dwell on water. I thought we were going
6	to have a chemistry discussion, because there's
7	so we saw so much of it in the sworn statement from
8	Mr. McGuire, but it turns out he's not an expert.
9	We actually heard that it's 250,000 TDS
10	is the water coming from the Delaware, and
11	through he doesn't know how, but they get it down
12	to 120 to 150,000 TDS before sticking it into the
13	State of New Mexico's minerals, the state of New
14	Mexico's porous base, and to Empire's unit.
15	And we've heard that there's high
16	sulfates in the water in the upper San Andres, and you
17	heard from Mr. West and others about all of the bad
18	things that happen when you're mixing the strontium,
19	the high TDS, the chlorides, with the sulfates.
20	And because this is an existing water
21	flood that was approved in 1986, 84 to 86, if you put
22	one drop you take one drop out of the San Andres to
23	use for makeup water, as part of the water flood in
24	the Grayburg, which is happening today, it touches
25	every single well, every single well bore.

1 What happens? Well, we saw it here, in 2 the Rhino well. Within six years, they had to conduct a \$650,000 workover. The entire Christmas tree had to 3 be junked because of corrosion. They replaced two 4 5 different strings of coated tubing. 6 The casing itself, in the top hundred feet, was scaled up and corroded. This is an example 7 8 of what is going to happen to hundreds of Empire's 9 Grayburg wells, that it is lawfully producing, right 10 now, as part of the unit agreement. 11 And again, this is all going to 12 be -- this is going to be oil lost. This is going to 13 be millions of extra dollars spent when what starts 14 happening to -- and continues happening to Empire's 15 wells, we saw right here within six years of a brand 16 new well out of Goodnight. 17 We don't have to prove economics, but we've done it anyway. With respect to application 18 19 production, paying quantities, Mr. McBeath confirmed 20 on the record, you do not consider capital 21 expenditures. PPQ, production paying quantities, is 22 merely an exercise of recurrent revenue over recurrent expense; is it profitable or not? You exclude all the 23 24 capex, such as drill and complete costs. 25 If you take that out, here, take out Page 42

1 capex, every single human in this entire room agrees this is a profitable undertaking down in the San 2 3 Andres. Mr. McGuire swore about PPO, over here on the left, but when he was asked in his deposition about 4 5 PPQ, he says, "Yeah, actually, I have no clue how to do it. Mr. Rankin put that in my witness statement." 6 7 Mr. McBeath, here, I always like to make things as easy as I can for whoever's the fact 8 finder. 9 If this commission just accepts, you can use all of the Davidson and Knights volumes, use 10 11 Goodnight's volumes, but just agree that \$75 WTI with 12 a modest 1 percent escalator is right, and the dollar 13 CO2 with the 45 Q is reasonable. 14 Mr. McBeath tells you --15 (Video played.) 16 MR. WEHMEYER: Mr. McBeath tells you 17 the biggest driver on getting all of this oil that 18 Dr. Davidson saw is present to the bottom of the San 19 Andres is just the price of oil. The -- we brought 20 you this four-county appraisal in the San -- this is a 21 ROZ R-O-Z -- they were assuming, for their model, \$75 22 oil with a 2.3 percent escalator. 23 EIA data, I can go on and on about 24 escalators that are more aggressive than the modest 25 1 percent that Empire chose to apply here. Now, Page 43

1	
1	I we I found one thing we agree with Mr. McGuire
2	on. We it took a deposition, a bunch of sworn
3	statements, and two days in the stand. We found one
4	thing that Empire agrees with him on.
5	He said, "Justice delayed is justice
б	denied." That's a quote from Preston McGuire, on
7	May 20 of 2024. We could not agree more. We need
8	this commission to act now. Every day that goes by is
9	more harm. The graphs show it all. Look at these
10	volumes. All of the blue volumes, those are others.
11	You heard them testify in terms of
12	what Empire has ever injected, or its predecessor,
13	it's less than that little a little gray line.
14	There is a trend here, beginning in January of 2020,
15	and the trend is not good, and the trend only results
16	in the continued and total destruction of the state of
17	New Mexico's minerals.
18	You've heard in you've heard
19	Mr. McGuire say as you suck out, the pressure
20	plummeted. It's in his sworn statement. It's all
21	over the place. When the water supply well started,
22	and it was taken out of the San Andres, pressure
23	plummeted. Well, then, how on earth, if you put the
24	water back, does the pressure not shoot back up? He
25	had zero answer for that.

1 But there is a trend here. This is no 2 different than the Crane County trend by Goodnight. Every two years, they're doubling what they're putting 3 in to these formations. It will -- it's already 4 5 destroying. It will utterly and unfixably destroy 6 these reserves. 7 The -- we're -- we've got -- I did not 8 know, in his redirect, he was going to say there's a 9 plug in the well. We've got -- the entire workover report has now been admitted in evidence. Y'all will 10 11 have that opportunity to take a look back at. 12 There is no plug. There was no -- he 13 said there was a plug set in the Rhino well. That's completely false. They didn't calibrate their fluid 14 15 gun by taking into consideration the pup joints. Ιf 16 you actually counted those collars, 22 collars, if you 17 use the average of the longest joint of pipe, you get down to within two feet of the number that they've got 18 on their chart, here on the right. 19 20 If you use the wire line measurement, 21 you were dead on, if you actually account for the pup 22 The area of -- it's just going to get worse, joints. worse and worse. And we know that no one -- they 23 24 fussed "Why haven't -- why hasn't Empire started?" John McBeath will tell you, no one's going to spend 50 25

1	cents of capital in this EMSU until they are stopped.
2	(Video played.)
3	MR. WEHMEYER: And again, this is it
4	has to be permanently stopped. Nobody is these are
5	40 year life projects involving a billion dollars of
6	capital expenditure.
7	Nobody's going to spend a billion
8	dollars in capital, or 50 cents, for that matter, if
9	the result of this OCC decision is that Goodnight is
10	merely paused for five years, or six years, or seven
11	years, or that they only get to make a little bit of
12	waste; "we'll just let them make this much waste."
13	The project cannot be carried out
14	unless all waste injection is stopped, and if it's
15	stopped permanently, so that 40 years of planning can
16	be properly carried out. And Mr. McBeath wasn't asked
17	in terms of any kind of relatively or volume.
18	It was just the idea of somebody going
19	in to conduct a tertiary project with any volume of
20	commercial SWD in that zone. So in terms of requested
21	relief and what's Empire asking this commission to
22	do? Empire's asking the Commission to fill its
23	mission and protect new Mexico's minerals, protect the
24	BLM'S minerals, protect OCD's established oil units.
25	You heard Mr. McGuire say they took the

1 permit, the slightly earlier permit, as permission. 2 "Hey, State of New Mexico OCD, they're permitting, SWDs and oil units. Now, we want to get up out of the 3 Devonian. We want a piece of this San Andres too, 4 5 since the precedent has been set for permitting in 6 existing oil units." 7 That precedent should not be -- that is 8 erroneous. It wouldn't have happened had they been 9 truthful on their applications. It should certainly 10 not be perpetuated. This is the chance to stop it, 11 right here. 12 And we ask that this commission protect 13 Empire's hydrocarbons in the entire EMSU unit, exactly 14 like Paragraph 10 of the unitization agreement gave

15 them the exclusive right. Exclusive right. Not a 16 little bit of the right, not most of the right, 17 exclusive; no trash companies in their depths.

The Commission can do that by immediately stopping the injection, and denying the permits for more injection. This is the only -- again, there's no halfway in this. There's no "split the baby," there's no, "let's do it a little bit." This is the only resolution that avoids waste, and protects corelative rights.

25

I have ten minutes held back that I'm

going to get to react and wrap this up after 1 2 Mr. Rankin finishes. Again, thank you so much for your time and your attention. I look forward to 3 visiting and closing this out. 4 5 THE HEARING EXAMINER: Thank you, 6 Mr. Wehmeyer. 7 Mr. Rankin? 8 MR. RANKIN: Mr. Hearing Officer, I'm 9 anticipated, but I'm going to ask just for a short break so we can use facilities. 10 11 THE HEARING EXAMINER: Sure. All 12 right. Let's take 15 minutes. 13 MR. RANKIN: Thank you. 14 (Off the record.) 15 THE REPORTER: We are back on the The time is 10:15 a.m., New Mexico time. 16 record. 17 THE HEARING EXAMINER: Okay. And just for your information, this is Adam Rankin who will be 18 19 speaking. 20 Mr. Rankin, please proceed. 21 MR. RANKIN: Thank you, Mr. Hearing Officer. 22 23 Commission Chair Razatos, Commission 24 Members Dr. Ampomah and Mr. Lampkin, I just want to 25 reiterate Mr. Wehmeyer's appreciation for the Page 48

1 attention and consideration that the Commission and 2 each of you have given to this case, and that I know 3 you'll give, going forward, as you review the evidence 4 and prepare an order.

5 In Mr. Wehmeyer's closing, you heard a 6 lot of what I would characterize as personal attacks, 7 character attacks, and attacks on the company of 8 Goodnight, and its people, its experts, and the 9 testimony they provided; and only vague and 10 cherry-picked references to the data, evidence, and 11 testimony.

In fact, one of the clips that you were presented was of Mr. McBeath. Mr. Wehmeyer was telling you that he was saying that no operator would proceed with development, but in fact, what he was just saying was they would be concerned, and want to know about it.

He showed you a clip from the four-county study about the price escalators, to show that it was a higher price escalator than even what they were using. But if you noticed, there was a CO2 price escalator that they used in that study of 2.3 percent, which Empire didn't use.

24 So there's a lot of cherry-picking 25 throughout this case, and especially during closing.

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And rather than focus on character attacks, I'm going
 to focus more on the evidence.

3 Now, after weeks of oral testimony, and cross-examination, and hundreds of pages of written 4 5 testimony and exhibits, we're at the point now, where the Commission will make a decision that could 6 substantially alter the future of New Mexico oil and 7 8 gas production in the Delaware basin, and the State's 9 ability to safely and sustainably manage the disposition of its produced water, for good or ill. 10 11 The capacity for produced water 12 disposal in the state's portion of the Delaware basin 13 itself is now constrained, and that's common knowledge to everyone in the industry. So there's a lot at 14 15 stake with the substantial and growing demand for 16 produced water disposal in southeastern New Mexico 17 necessary to support continued oil and gas development in the state. 18 19 Now, the growing concerns about the 20 potential for induced seismicity in the deeper Delaware basin formations, and much of New Mexico's 21 22 produced water is now being shipped to Texas for 23 disposal because of those constraints. And that's also a concern, because 24 there's increasing disposal-related seismicity in 25

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1 And I can tell you that some of New Mexico's Texas. 2 largest producers are closely tracking this case to see whether the Commission will confirm the 3 availability of the San Andres in this area, going 4 5 forward, as a world-class produced water management 6 resource, because that's what this is. 7 It's a world-class resource. To date, 8 nothing else like it has been identified in New 9 Mexico. The Division confirms two things in its testimony submitted to the Commission; the long use of 10 11 the San Andres for disposal in this area, and 12 specifically calls out its capacity and "unique 13 quality for accepting injected water under vacuum, making it a preferred opportunity for expanded 14 15 capacity to satisfy the growing volume of produced 16 water that requires disposal." 17 The unique quality of the San Andres is at least one of the reasons the Division became 18 involved in this case, and that's why the Division 19 20 wanted a moderating program to ensure that the San 21 Andres disposal is not impacting the Capitan Reef, so 22 the San Andres can continue to be used for disposal. 23 The Oil Conservation Division is right 24 to want to protect it. Once the Division and 25 Goodnight reached agreement on monitoring, the

1 Division was satisfied that EPA's obligations or 2 requirements were being addressed, and no longer needed to request that relief from the Commission. 3 Another reason for the Division's 4 5 involvement was concern over adverse actions against 6 previously-issued Division injection permits. 7 Recognizing the far reaching consequences of an 8 adverse action against existing injection permits, the 9 Division highlighted the importance of taking such a drastic step only with an abundance of caution --10 11 MR. WEHMEYER: Mr. Harwood, we have an 12 objection to both of the last two slides. None of 13 this testimony has been -- these closing remarks are to be directed at gathering up the actual evidence 14 15 admitted. None of these witness statements were 16 admitted into evidence, and the witnesses were never 17 presented for cross-examination. 18 So with respect to Mr. Powell and 19 Mr. Goetz, these are not in evidence, and it's 20 absolutely improper to monologue about them. 21 THE HEARING EXAMINER: Mr. Rankin, I 22 was assuming that these were quotes from -- or, at least, I don't -- Powell's not a name I'm familiar 23 24 with. I was assuming that your previous quote for -- from Mr. Goetz, was part of his written 25

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1	testimony; is that not the case?
2	MR. RANKIN: That is the case.
3	THE HEARING EXAMINER: Okay.
4	MR. WEHMEYER: But, Mr. Harwood, that
5	that written testimony was never offered or received,
6	and the witness never appeared for cross-examination.
7	It is not in the actual record.
8	THE HEARING EXAMINER: I thought it was
9	in the actual record. If it's written testimony that
10	was submitted by OCD in this case, I'm not I'm more
11	concerned about this quote from Powell.
12	MR. RANKIN: If I may have an
13	opportunity to respond, Mr. Hearing Officer, both
14	quotes are from witnesses that were submitted, written
15	testimony that was submitted, of record with the
16	Commission, starting in August.
17	I'm just going to respond
18	to Mr. Wehmeyer also presented slides and
19	information that were not accepted into the record,
20	including, for example, the demonstrative that he had
21	Mr. McBeath speak to.
22	He specifically asked for that
23	demonstrative to be admitted to the record, appended
24	to the record. It was denied. Nevertheless, he
25	presented that on his closing, and I didn't object to
	Page 53

1 This is argument of Counsel, and the Commission that. 2 members can take it for what it's worth. 3 MR. WEHMEYER: May I reply, very 4 briefly? THE HEARING EXAMINER: I'm -- no, 5 6 Mr. Wehmeyer. I'm going to give Mr. Rankin, you know, a fair amount of latitude and leeway here. It is 7 8 closing argument. 9 But, Mr. Rankin, you know, you do need to really, pretty much, confine the argument to 10 11 evidence that's been presented. This is not a time to 12 bring up new information, and stuff that's not already of record in the case. 13 14 MR. WEHMEYER: And just -- Mr. Harwood, 15 for the due process record of Empire, here, again, 16 these witness statements, the last two, Mr. Powell and Mr. Goetz, have never been received and admitted into 17 evidence in this case. 18 19 They were filed as part of the 20 preliminary papers, but, just as we've done with every witness when they appear, this -- it does not become 21 22 evidence in this OCC proceeding until it's actually 23 received. And none -- neither of these have been 24 received, have been admitted. They are in no shape, 25 Page 54

1	form, or fashion, evidence in this proceeding.
2	THE HEARING EXAMINER: All right.
3	Mr. Rankin, I you know, that's a
4	fair objection. I hate to have people's closing
5	arguments interrupted, but if these statements are not
6	in evidence, and you continue to do this, you're going
7	to get continuing objections, and I'll start
8	sustaining them.
9	MR. RANKIN: Understood. Mr. Hearing
10	Officer, I have no further references to any the
11	Division's testimony that they filed in August.
12	THE HEARING EXAMINER: Okay. And so
13	your objection, Mr. Wehmeyer is duly noted.
14	MR. WEHMEYER: Thank you.
15	THE HEARING EXAMINER: Please proceed.
16	MR. RANKIN: We agree for the
17	Commission to make an adverse ruling against
18	Goodnight's existing injection, direct evidence needs
19	to clearly support it. There can't just be a
20	potential for an ROZ, or an indication of negative
21	impacts. The evidence should be clear and direct.
22	The Commission now has an abundance of
23	evidence, and the evidence, especially the direct
24	evidence, as opposed to inferred or interpreted
25	evidence, and opinion, or the arguments of Counsel,
	Daga 55

1 overwhelmingly supports Goodnight's position. 2 Let's walk through it. I'm going to address the evidence that we have establishing the 3 creation of the EMSU first. Before anything else, 4 5 before the EMSU was formed, in 1984, the San Andres in 6 this area was used as a water disposal zone, starting 7 in at least the 1950s. That's undisputed. 8 When the EMSU was created, in 1984, the 9 San Andres was included in the unitized interval, and the EMSU was formed around existing commercial 10 11 produced water disposal that was part of Rice's 12 existing EME disposal wells, that had already been 13 injecting into the San Andres. That also is 14 undisputed. 15 The San Andres was erroneously and 16 illegally included in the unitized interval of the 17 EMSU, not because it was productive of hydrocarbons, as is required, or as it had been reasonably defined 18 by primary production, as it also is required, but 19 20 because it was the only water source sufficient to 21 supply the proposed water flood. 22 The San Andres was used as a water supply source for the Grayburg water flood, even 23 24 though it was known at the time that it was not compatible with Grayburg water. There's no dispute 25

1 over that. 2 And at the time the EMSU was created, in 1984, the San Andres had no primary production, so 3 it was not reasonably defined by development, and 4 5 couldn't have been, and shouldn't have been included 6 in the unit interval. That also is undisputed. 7 The only oil test in the San 8 Andres -- in Goodnight's defined San Andres, in the 9 disposal zone in the EMSU was from 2005, decades after unitization, and that's from the EMSU 660 well, at the 10 11 very top of the structure. And it resulted in seven 12 barrels of oil, and more than 4,000 barrels on a pump 13 test. 14 Finally, we know the San Andres is an 15 aquifer because it was declared by the State engineer 16 to be subject to permitting requirements for beneficial use in 1965. And every one of the six 17 water supply wells in the EMSU was permitted by the 18 State engineer for water withdrawal. 19 20 That means that Gulf Oil's original application to unitize the EMSU, claiming the San 21 22 Andres was reasonably defined by development was 23 incorrect. The whole premise for its inclusion in the unit is invalid. 24 25 Under the Statutory Unitization Act, Page 57

1 the Commission has authority to unitize only pools or 2 portions of pools that are reasonably defined by 3 development. That wasn't the case for the San Andres. 4 It still isn't.

5 And the Commission has no authority to 6 unitize an aquifer that was not defined by hydrocarbon 7 development, because it belongs to the public, and is 8 subject to appropriation for beneficial use.

9 As to the EMSU itself, then, the 10 evidence for this hearing establishes the following 11 three things. The EMSU came to preexisting commercial 12 produced water in the San Andres, not the other way 13 around.

The San Andres is a saline aquifer, not an oil pool, and the San Andres should never have been included in the unitized interval. So let's go through the evidence -- the rest of the evidence in the case.

What does the evidence establish about communication between Goodnight's disposal interval and the overlying Grayburg reservoir? First of all, there's no direct evidence of any communication between these two separate reservoirs, and the interpreted evidence in opinions that Empire has presented, contending there is communication, are

1 based on conjecture, speculation, or completely 2 contradict what the direct evidence actually shows. Empire relies on four categories of 3 evidence to support their claim about communication. 4 5 None of them withstand scrutiny. They rely on 6 demonstration, attempt to demonstrate that there's fractures between the San Andres and Grayburg, that 7 8 there's water production data supporting the 9 communication, the chemistry data, and the model simulation. 10 11 I'm going to walk through each one. 12 Okay. Fractures, first. Dr. Lindsay's original 13 testimony relied on a fracture study in a single well that was limited to the lower Grayburg formation, and 14 15 did not even extend to Goodnight's identified 16 permeability barrier. 17 He testified that he did not even know 18 where Goodnight's permeability barrier was. He 19 prepared an updated fracture study on the same well, 20 the EMSU 679, for his rebuttal, but still did not show 21 any of the interpreted fractures crossed through 22 Empire's permeability barrier. 23 His updated fracture study stopped at 24 4,180 feet, and Goodnight's confining layer starts at 4,250 feet in the core. That's a gap of more than 70 25 Page 59

1	feet. Now, Empire has presented no direct evidence,
2	therefore, of fractures compromising Goodnight's
3	confining layer.
4	In contrast, the direct evidence from
5	the core, which has been correlated across the unit
6	area, and mapped by Goodnight, presented to the
7	Commission, confirms that the measured vertical
8	permeability in the core at Goodnight's barrier
9	establishes, in fact, a geological steel.
10	That is just one of many barriers to
11	vertical fluid migration across an interval of 150 to
12	200 feet within Goodnight's confining layer. So the
13	effectiveness of that confining layer and the lack of
14	communication through fractures is definitively
15	confirmed by the following.
16	First, the vertical separation and
17	production between the Grayburg and the water
18	management zone, or Goodnight's disposal zone,
19	including the six water supply wells that have
20	withdrawn more than 350 million barrels from that zone
21	with no documented oil production.
22	Two, measured and sustained pressure
23	differentials between the Grayburg reservoir and the
24	San Andres water management zone. That pressure
25	differential could not be have been maintained, and

1 cannot be maintained across such an extensive area if 2 there was actually vertical communication, as Empire 3 contents. And third, a consistent loss 4 5 circulation zone below Goodnight's confining layer across the entire EMSU area, as established and 6 confirmed by Empire. Two main, big-picture facts 7 8 alone emphatically prove the effectiveness of 9 Goodnight's confining layer, and that the reservoirs are separate and isolated. 10 11 First, they have different fluid 12 compositions and water chemistry. That's confirmed by 13 Empire's own experts. Second, they have drastically different material balance behaviors. Completely 14 15 different. 16 Now, let's get into the water 17 production data. Mr. West from Empire testified, in 18 his summary, that it is well documented that water is pluming up from the San Andres into the Grayburg. But 19 20 there's nothing in the literature papers or reports to 21 document that. 22 What the literature says is that edge water has been encroaching into the EMSU area since 23 24 the 1930s, and has been documented to be encroaching from the west, the southwest, the northeast, 25

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1	
1	southeast, and east, starting with the 1939 Bureau of
2	Mines Paper that is Goodnight Exhibit Cross
3	Exhibit 18.
4	And Dr. Lindsay confirmed that edge
5	water has been documented at the top of the structure,
6	350 foot vertical interval, making it accessible to
7	wells drilled there, depending on what zone they're
8	completed into.
9	So therefore, it's important to
10	understand what the in order to understand water
11	production, you have to understand and
12	that where the wells are completed, and how close
13	they're completed to the well water contact.
14	Finally, the EMSU is not reporting
15	anomalous water production values on a field-wide
16	basis. Empire is injecting 70,000 barrels of water
17	per day into the Grayburg, and producing 70,000
18	barrels of water per day out. That's the same
19	analysis that Mr. Love gave in 2000 to the Division,
20	when he said every all the water that we are
21	injecting is accounted for, except for edge water from
22	the Goats Seep.
23	If water truly was pluming up into the
24	Grayburg from the San Andres, you would expect to see
25	some indication of that in the field-wide water
	Page 62

production. Instead, you're seeing that it's balanced, and it does not -- that does not support the assertion that San Andres water is pluming up into the Grayburg.

5 Let's talk about the chemistry data. 6 Empire asserts that the chemistry of the Grayburg is 7 changing as a result of San Andres water, mixed with 8 Grayburg disposal fluids pluming up into the Grayburg 9 formation.

This water, they say, has higher TDS chlorides and sulfate concentrations than the Grayburg water. So if it's truly pluming up, you would see a clear signal in the Grayburg water chemistry, but there is no water chemistry signal, at all.

Instead, the water chemistry and the wells directly offsetting Goodnight's high-rate injection all show concentrations well within the historic field-wide ranges for those constituents.

Between 16 and 30,000 parts per million per TDS; 7 -- 15,000 parts per million per chlorides; and 12 to 2,800 parts per million per sulfate. In Mr. West's Exhibits I 11 and I 12, he reports even higher historic ranges, up to 60,000 parts per million for TDS, 32 parts per million for chlorides, and 4,000 parts per million for sulfates.

1	Empire's water chemistry simply is not
2	a fingerprint for Goodnight's disposal water, at all.
3	It is totally indistinguishable from historic
4	field-wide concentrations.
5	Let's talk about the model simulation,
6	now, that Empire relies on. Because they had no
7	direct evidence of communication, none, Empire turned
8	to a Reservoir model prepared by Dr. Buchwalter to try
9	to bolster their claims.
10	The problem is that the EMSU is so
11	complex, and the key data is so sparse or
12	non-existent, especially initial reservoir pressures
13	and early water and oil production data, that the
14	final model is not reliable, and demonstrably unable
15	to match real-world field data.
16	These problems are one of the reasons
17	that Goodnight experts recommended not trying to build
18	a model here. That, and there was more than enough
19	compelling, direct evidence. Not only was there
20	insufficient key data for Dr. Buchwalter, but the data
21	and input parameters that he did use did not match
22	reality.
23	This was addressed extensively in
24	Goodnight's testimony. He ignored actual data on the
25	complexity of the geology, and geological parameters,
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1 ignored the locations of actual well completions and 2 perfs, left out dozens of SWD wells and hundreds of 3 millions of barrels of disposal volumes, and ignored or underestimated the influence of Goats Seep 4 5 Edgewater. 6 All these problems created a model that 7 is inaccurate, unreliable, and not predictive, and 8 arguably pre-wired to provide a result designed to 9 support Empire's claims, that are unsubstantiated by any direct evidence. 10 11 Here are four examples. First, 12 Dr. Buchwalter's model predicts that for every million 13 barrels injected into the San Andres, the reservoir-wide pressure will increase between 4 to 10 14 15 PSI, or about 7 PSI on average. 16 Goodnight's recent shut-in pressure 17 monitoring test confirmed Dr. Buchwalter's model 18 completely misses the mark. After nearly 40 million 19 barrels of produced water were injected into 20 Goodnight's wells about -- over about nine months, the 21 reservoir pressure increased only minimally. 22 Second, Dr. Buchwalter's model predicts that 24,000 barrels of water per day is currently 23 24 migrating from the San Andres into the Grayburg. That's about 720,000 barrels per month, or six and a 25

half million barrels over a nine month period
 without -- with a predicted six and a half million
 barrels migrating into the Grayburg from the San
 Andres in less than a year.

5 Currently, you would expect to see some 6 impact on field-wide water production, but the EMSU is 7 not seeing anomalously high water production values, 8 at all. That totally contradicts Empire's contention 9 that the water is actually currently pluming up into 10 the San Andres, and that the model can be considered 11 accurate and reliable.

Third, when asked how to explain why EMSU field-wide water production values don't show any impact from Goodnight's injection, as he predicts, Dr. Buchwalter responded that the San Andres shut-in pressures will show the impact. But they don't.

17 After more than 960 million barrels injected into the San Andres, Goodnight's shut-in 18 tubing pressures remain on vacuum. In particular, the 19 20 Piper SWD has injected more than 27 million barrels 21 since 2012, but it shows that as soon as injection 22 pauses for a brief period of time, a month or two, the 23 pressure gradient can return to near initial levels, 24 0.352 PSI per foot at 4,368 feet, as measured in 2025, compared to 0.36 PSI per foot at 5,000 feet in the 25

1	EME, at 20 in 1959.
2	Goodnight's wells show only marginal
3	increases in pressure gradient over time, after
4	hundreds of millions of barrels have been injected,
5	contradicting Dr. Buchwalter's prediction.
6	Finally, and most troublesome, the
7	simulation appears to have been designed to make water
8	move up from the San Andres into the Grayburg, not to
9	address whether there are other more geologically or
10	hydro-geologically reasonable scenarios that could
11	explain the observed water in the EMSU.
12	Dr. Buchwalter initiated his final
13	model with a 35 percent irreducible water saturation.
14	That had the effect of making water in the Grayburg
15	largely immobile, starving it of water.
16	In combination with ignoring or
17	underestimating the Goats Seep edge water, lowering
18	the oil water contact, and ignoring well completions
19	and perfs, he drives water up into the San Andres,
20	ignoring other solutions that better match the data,
21	and the literature. In sum, Dr. Buchwalter's model is
22	unreliable, not predictive, and should be disregarded.
23	So what does the evidence show and
24	establish about purported impacts on EMSU operations,
25	actual operations, from alleged changes in water

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1 chemistry? First, Empire has shown no water chemistry 2 Instead, the water chemistry shows signal. concentrations completely indistinguishable from 3 historic field-wide levels. 4 5 Not only does Empire not show a change 6 in the water chemistry, but they also have not shown any actual impacts to their operations or equipment, 7 8 like increased costs or maintenance. We asked for 9 that in discovery. We got nothing. 10 What are the impacts? We got zero in 11 discovery. As a result of the alleged change in the 12 water chemistry, nor could they, for when -- 40 years, 13 the EMSU has been injecting and mixing known incompatible water from the San Andres and the 14 15 Grayburg as part of the water flood. 16 But even if there were, somehow, some 17 mixing from Goodnight's disposal volumes, Empire has not and cannot show any incremental impact or harm as 18 19 a result of Goodnight's disposal above the baseline, 20 historic, and ongoing corrosion and scaling issues caused by the long-term and continuing use of 21 22 incompatible San Andres water. 23 What does the evidence establish about purported impacts on Empire's planned ROZ operations, 24 as a result of the alleged increasing pressure in the 25 Page 68

San Andres disposal zone? But Dr. Buchwalter claimed
 that Goodnight's injection will pressurize the San
 Andres disposal zone, requiring Empire to purchase
 an -- at least an additional 10 percent or more of
 CO2.

But since 1959, more than 960 million 6 7 barrels have been injected into the San Andres, 8 resulting in a pressure gradient increase from 9 approximately 0.36 PSI per foot in Rice's well, to about 0.383 PSI, as calculated as an average pressure 10 11 gradient among ten of Goodnight's SWDs in April 2025. 12 Disposal simply has not increased San 13 Andres reservoir pressures, as Empire alleges, and

14 will not acquire -- require additional volumes of CO2 15 for an ROZ project, as claimed. What about this 16 potential ROZ?

Well, Empire presented different cases on petrophysics from two different experts, or groups of experts. The first was from Nutech. Empire claims that Nutech provided a high and low case, but really Nutech's witness disavowed the low case, and stood behind the original high case that Nutech actually presented.

24 The low case was calibrated to 25 uncorrected core water saturations, which results in

1 significantly overstating the interpreted oil 2 saturations. They picked m and n values based on trial and error. Talk about methods and data. 3 None of that's reliable. It should be excluded. 4 5 In the high case, the original case 6 they presented, it was also not calibrated to anything. There were no core oil saturations. 7 The 8 analysis does not honor production tests, mud logs, or 9 other field data. It wasn't even considered. 10 The interpreted oil saturations show 11 conventional mobile oil and intervals that tested 12 100 percent water. Again, not reliable. Now, Ops 13 Geologic -- they brought the Ops Geologic in, at the end of this case, to try to bolster their claims that 14 15 there is actually a potential ROZ. 16 Ops Geologics's high and low cases 17 interpret 60 to 80 percent oil saturations in the EMSU 18 water supply wells. Two of them, in particular, the EMSU 457 and the 458. The 457 produced 42 million 19 20 barrels of water, and not a drop of oil or skim oil 21 has been reported. 22 The 458 produced nearly 50 million barrels of water, and also not a drop of oil or skim 23 24 oil. EMSU's six water supply wells at the very top of the San Andres structure have produced more than 350 25

1 million barrels of water, and no reported oil or skim 2 oil.

That's all in the OCD Division records 3 as lines of zeros, every month and every year 4 5 reported. Ops Geologics's petrophysical analysis is not reasonable or reliable just based on this alone. 6 7 Ops Geologics's interpreted oil saturation profiles 8 across Goodnight's disposal zone also do not come 9 close to the oil saturation profiles of the only known analog commercial ROZ in the Tall Cotton Field. 10 11 Ops Geologics's interpreted oil 12 saturation profiles, while unreasonably optimistic, 13 are still intermittent and sparse across Goodnight's disposal zone, unlike a true commercial ROZ saturation 14 profile depicted in the Tall Cotton Field, and much 15 16 more like what Dr. Davidson has identified as 17 abandoned migratory pathways. Now, in contrast, NSAI honored the well 18 test data, the mud logs, and production data in its 19 20 analysis. Ops Geologic says that it did, but on multiple occasions, their petrophysical 21 22 interpretations conflict with mud logs, well tests, or 23 the actual production data on the well. 24 NSAI also honored the core data, and contrary to Empire's claims, all rock facie types were 25

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1 available in NSAI's petrophysical model with the 2 exception of the wax stones, which were excluded. 3 Ops Geologic says they calibrated to the core, but their oil saturations in their low case 4 5 is more than 100 higher than the actual core values. Ops Geologic also excluded substantial volumes of core 6 data reflecting the high end values, due to what they 7 8 call "extremely suspicious saturations." 9 This approach ignores actual direct evidence in order to arrive at an overly optimistic 10 11 interpretation, and calculable saturations. In 12 contrast, the accuracy and reliability of NSAI's 13 petrophysical model was confirmed in multiple tests, blind tests, against wells, and offsetting regional 14 15 fields, including the SSAU 40113R, the Maljamar 358, 16 and the NNMG SAU 552. 17 Every one of those wells confirmed, without any modification, Dr. Davidson's analysis was 18 accurate, reasonable, and reliable. The bottom line 19 20 on the claimed ROZ is that there is one ROZ, directly 21 below, and associated with the Grayburg producing oil 22 reservoir in the EMSU. 23 There's a -- continuous oil saturations 24 above 20 percent are potentially an ROZ interval, as defined by Dr. Trentham and Mr. Melzner. Oil 25 Page 72
1	saturations below 20 percent are not economically
2	viable. It has never been attempted.
3	The 679 core data supports a potential
4	for an ROZ down to minus 652 feet subsea, and not
5	below that depth, anywhere. But even assuming that
б	there is some potential ROZ that could be produced in
7	Goodnight's disposal zone, what's the evidence
8	established about Empire's projected ERZ economics?
9	Using NSAI's average oil saturation for
10	the top 400 feet of Goodnight's San Andres disposal
11	zone, and making only minor adjustments to Empire's
12	economic models to correct unsubstantiated
13	assumptions, Mr. McBeath showed how the project
14	economics go completely negative.
15	No changes were made, or even
16	attempted, to address opex or capex costs. But beyond
17	the unjustified pricing assumptions, the model is
18	inherently flawed from the get go. Empire assumes 400
19	net feet with 30 percent oil saturation, consistently,
20	across all patterns in the economic analysis.
21	But Mr. McShane, Empire's witness
22	testified that none of the interpreted logs in his
23	testimony calculated out to 400 net feet with 30
24	percent oil saturation. So Empire's economic model,
25	at the start, do not match their expert's own

1 analyses, and are grossly, overly optimistic on the 2 thickness of the ROZ, and its average oil saturation. Finally, and perhaps most importantly, 3 Empire's dimensionless curves for the oil and CO2 4 5 recovery. Those are really important here, which drive the projected economics, because they drive the 6 oil recovery, are completely unsupported by any 7 8 evidence or data. 9 Empire's dimensionless curve projects an 18 percent oil recovery after four hydrocarbon pore 10 11 volumes of CO2. That's unreasonably optimistic for an 12 ROZ, and not supported by any evidence. Data from conventional Permian fields 13 14 shows that average oil recovery of 11 percent after 15 four hydrocarbon pore volumes of CO2. Dr. Lake says 16 it will be more like one third of that, or about three 17 and a half percent recovery for an ROZ development. That agrees with Mr. Knights's 1 to 6 18 19 percent recovery, which he developed off the Tall 20 Cotton Field, which would substantially further impair Empire's project economics. 21 22 Bill Knights showed how, using the recovery factor from Tall Cotton, and Ops Geologics's 23 24 more reasonable, but still vastly over-optimistic low case, Empire would still need 15-year break-even oil 25

1 prices of between 200 and \$400 per barrel on tighter 2 ten-acre spacing even than what they're proposing for 3 their project in the EMSU to even approach being 4 economic.

5 Empire also uses a dimensional CO2 6 curve showing 95 percent CO2 recovery after one 7 hydrocarbon pore volume, substantially and 8 unreasonably boosting the project's economics. But 9 this dimensionless this curve is from an unknown 10 source, and is being used and relied on without any 11 evidence in support.

Fifty years of actual data shows that average CO2 recovery after one hydrocarbon pore volume is actually about 55 percent. That is almost half of what Empire is assuming the CO2 cover would be in its economic model.

17 Using a realistic CO2 recovery factor based on real data will substantially impair Empires 18 projected economics even further. In short, Empire's 19 20 economic models quickly go negative by simply 21 adjusting basic commodity pricing assumptions to more reasonable, substantiated values, but are guaranteed 22 to be completely torpedoed using real world oil and 23 24 CO2 recovery factors.

25

Empire's reliance on an unreasonably

1 inflated oil recovery and CO2 recovery, that returns 2 95 percent of injected CO2, is just plain unjustified. 3 Using a CO2 recovery factor of 95 percent just simply -- it almost cuts in half the most expensive 4 5 element of CO -- of the ROZ project, the cost of CO2. Incorporating, instead, a realistic oil 6 recovery factor, based on actual field data, and 7 8 derived from an actual commercial ROZ at the Tall 9 Grass, suggests that the actual recovery factor for 10 the EMSU will be more close to about 1 to 6 percent on 11 the high end, and maybe about three and a half percent 12 according to Dr. Lake. 13 And even using a mean value for CO2 recovery of about 55 percent, based on 50 years of 14 15 actual data, would almost double Empire's projected 16 CO2 purchase volumes. Now, updating Empire's economic 17 model with actual data-backed oil and CO2 recovery factors confirms that Empire's proposed ROZ project 18 will never be economic, under any definition. 19 20 Now, why should the Commission adopt Goodnight's world view on all this? Its experts are 21 22 aligned, and the facts and opinions are consistent across disciplines, and multiple independent analyses. 23 24 They all, independently, came to the same conclusions

25 on all the major evidentiary issues.

1 And unlike Empire, we did not restrain 2 or constrict our experts, in any way. We allowed them free range to go and search, find out whatever they 3 could to identify the support of their positions. As 4 5 you heard, in testimony from Mr. Melzner, Dr. Trentham, they were not provided any information, 6 7 other than the core, to review. 8 They didn't know about the water supply 9 wells, the depths. They had no detailed information, whatsoever, to support their conclusions or analyses 10 11 in their testimony. So what did they -- Goodnight's 12 experts review and agree on? 13 First, is the confining layer that 14 separates the two reservoir systems. Multiple data 15 sets confirm a pressure differential between the two 16 different reservoirs in the Grayburg production zone 17 and the San Andres disposal zone, that are separated by a barrier. 18 19 Mr. McGuire discussed the drilling 20 experience of Goodnight and Rice while drilling the 21 saltwater disposal wells in the EMSU. No losses 22 were -- occurred in the Grayburg, while major losses 23 occurred in the San Andres disposal zone. And all 24 experts agree with this observation. 25 Mr. McGuire, Mr. Knights and Page 77

Mr. McBeath all discussed different data sets that showed a measurable pressure difference between these two reservoirs. Mr. Knights took a more holistic view when looking at the difference in how these two reservoirs behave.

6 He discussed how the Grayburg oil 7 reservoir produced hundreds of millions of barrels of 8 fluid, hundreds of millions, from 400 wells, and 9 depleted and lost productivity to a point where the 10 Grayburg needed water injection in order to maintain 11 performance.

12 In contrast, while all that was 13 happening right above, the San Andres was able to 14 produce hundreds of millions of barrels of water, over 15 decades, never deplete, showing that these are two 16 absolutely isolated, separate reservoirs, just based 17 on basic geologic -- geology and engineering 18 principles.

Second, is the geology of the confining zone. Goodnight and NSAI all agreeing that there is a clear perm barrier, shown in the 679 core. Multiple experts reviewed and corroborated the log characteristics of the perm barrier. Goodnight and NSAI used different

25 techniques to define the perm barrier, and ultimately

1	
1	came to the same conclusion over what defines the
2	permeability barrier on a log with similar porosity
3	cutoffs.
4	Dr. Davidson's petrophysical models for
5	pathologies associated with the perm barrier confirmed
6	Mr. McGuire's statements on the permeability barrier
7	from literature review. Goodnight used this
8	agreed-upon barrier definition, and mapped the
9	confining layer across the field.
10	Dr. Davidson confirmed the correlative
11	per barrier and spot checked correlations. And
12	Mr. Tomastik also confirmed that there must be
13	isolation between the two reservoirs, using chemistry,
14	by confirming that the native water chemistry of the
15	San Andres and Grayburg are very different, proving
16	isolation.
17	The third item that Goodnight's experts
18	are all aligned on is whether there is a ROZ. Many of
19	Goodnight's experts did an independent analysis of
20	where the base of the purported ROZ is, and came to
21	the same conclusion.
22	Mr. McGuire placed the base of the ROZ
23	in the EMSU 679 at minus 652 subsea. Dr. Davidson and
24	Mr. Knights, using petrophysics, showed this base of
25	the ROZ occurring between approximately minus 660 feet
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1 subsea and minus 415 feet subsea.

Mr. McGuire and Mr. Knights, using well tests, also confirmed that there is no evidence that the disposal interval is a potential ROZ, while lower Grayburg, directly below the oil water contact, shows an indication of being a potential for an ROZ.

7 Fourth, the economics of the proposed 8 ROZ in the disposal zone. Mr. McBeath, using NSAI's oil saturation model showed that the alleged ROZ is 9 nowhere near being considered economic. Dr. Lake 10 11 confirmed this economic analysis by showing the 12 dimensionless curve and recovery factors used by 13 Empire are unrealistically, optimistic and artificially pump up their economics. 14

15 Finally, Dr. Davidson and Mr. Knights 16 showed that the original oil in place in the San 17 Andres disposal zone is grossly overstated by Empire, 18 in an attempt to show a potential commercial project. 19 Goodnight's experts and their opinions are all aligned 20 on each major evidentiary issue, while Empire's witnesses often told conflicting stories, didn't align 21 22 with the data, or didn't have the data to support 23 their conclusions.

What is Empire's true motivation here?
With the preponderance of the evidence so clearly

1 showing that there is no ROZ in the disposal zone, and 2 that there's no impact or impairment to Empire's, operations, Empire has no intent to pursue an ROZ in 3 Goodnight's disposal zone. 4 Every indication is that Empire is not 5 serious about this plan. Their main witness, 6 7 Mr. William West, devoted two paragraphs in his 8 testimony to explaining how they plan to set up their 9 ROZ, and a mere sketch of an economic model. 10 The Division already gave Empire 11 additional time to assess the prospects for additional 12 hydrocarbon recovery, and directed them to provide 13 monthly reports to the OCD and the State Land Office 14 on their project. 15 You would think that they would want to 16 report to the State Land Office, who owns 58 percent 17 of the minerals in the EMSU, all the work they were doing, to make real their vision. But they have not 18 19 done that. They're not serious. 20 It's just not feasible or practical to 21 do, nor does it make any economic sense, especially 22 for a company that is struggling financially, like Empire. So what's behind all this is that Empire 23 24 realized that they purchased at least \$72 million in plugging an environmental liability at the EMSU, 25

1 EMSU B, and AGU, for 17 million bucks. 2 Not only is Empire in a hole because of the massive liability they purchased, but they're 3 operating with more than eight -- with \$8.9 million in 4 5 negative working capital, and their status as a going concern remains uncertain because of their operations 6 in North Dakota and Texas have cost more than they 7 8 expected, and have not performed as they'd hoped. 9 Empire is suddenly in a huge hole, and they're starting to look for scapegoats. 10 The first 11 was Goodnight, probably because Goodnight is the 12 largest commercial disposal operator in the field. So 13 what Empire is doing, now, is seeking to devise a legal plan to bail themselves out of this financial 14 15 hole by attacking the regulatory framework and 16 Goodnight's permits in an effort to use the Commission 17 and courts to extract value from Goodnight and other disposal operators who obtained valid permits, issued 18 19 to them under the proper authority of the Division. 20 This is not speculation about an Empire's intent. It's already happened. Goodnight's 21 22 been sued, as well as Rice Permian Line Service, and

23 Pilot, in District Court. Mr. Wheeler with Empire 24 confirmed on the stand here in this case that Empire 25 plans to sue every disposal operator who they think

1 are impacting their units within about two miles. 2 And a press release issued just last 3 week with its first quarter results, Empire stated "Following" --4 5 MR. WEHMEYER: We object. More 6 information -- not evidence. This is not a summation of evidence in the record. This is Mr. Rankin going, 7 apparently, through the Internet, last week. Not in 8 9 evidence. Not appropriate. Nobody's been examined on 10 it. Nobody's sworn to the authenticity. Completely 11 inappropriate for closing argument, and Mr. Rankin 12 knows that. 13 THE HEARING EXAMINER: Mr. Rankin. 14 Yeah, I don't want you --15 MR. RANKIN: That's fine. 16 THE HEARING EXAMINER: Okay. 17 MR. RANKIN: We'll withdraw it. THE HEARING EXAMINER: Take it down. 18 19 MR. RANKIN: Take it down. Thank you. 20 So this is why we're really here. 21 Empire is using the Commission as part of its legal 22 strategy to extract value from third parties, who are conducting legally-valid disposal operations, that 23 24 have no impact on Empire's assets, and who are acting under the authority of valid permits issued by the 25

Division, under the laws of the state.

Empire has no actual plan to develop an ROZ in the disposal interval. Empire's plan is simply in litigation. Despite having no plan or proof of an actual ROZ, Empire is seeking damages from Goodnight and others for a non-existent, nonrecoverable resource, that can never be reasonably, practically, or economically developed.

9 Now, Empire claims they suspended their 10 operations in September 2023, because that's when they 11 just discovered Goodnight's injection. But that's 12 nonsense. Their current CEO and president, Michael 13 Morrisett, knew about it, starting in at least 14 September 2021, when Empire protested the Piazza 15 administrative application.

16 There's no technical or practical 17 reason why Empire could not conduct test operations 18 for a potential ROZ any time after they acquired the 19 EMSU, or the AGU, starting in March of 2021. 20 Goodnight doesn't have a disposal well within miles of 21 the AGU. It's folly to suggest that Empire suspended 22 its operations in the AGU because of Goodnight's operations. But remember, they don't have an actual 23 24 plan to develop that ROZ.

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1

The Commission should recognize Empire

strategy here for what it is, a ploy, without substance or merit. But Empire's ploy is not the reason the Commission should rule in favor of Goodnight in these cases.

5 The Commission should deny Empire's 6 applications to revoke Goodnight's injection authority 7 because Empire has not met its evidentiary burden on 8 any claim under any of the applications in which they 9 are the moving party.

10 We'll address this and all the other 11 legal issues in more detail in the findings of facts, 12 and conclusions of law, and the legal briefing. But 13 in short, Empire has failed to prove existing disposal 14 is, right now, causing waste by reducing or tending to 15 reduce the economic recovery of oil, causing any 16 impairment to correlative rights, drowning out by 17 water any stratum capable of producing oil or gas in paying quantities, or causing the premature and 18 irregular encroachment of water, or any other kind of 19 20 water encroachment that reduces or tends to reduce the 21 economic recovery of oil.

In contrast, Goodnight has met its evidentiary burden to show injection is not doing any of those things. As confirmed by the Division's notice of dismissal, with the agreed cap ten

1 monitoring program in place, Goodnight's injection 2 addresses the Division's obligations to EPA, and will 3 be protective of underground sources of drinking 4 water.

5 All five of Goodnight's applications 6 for new disposal wells, therefore, should be approved 7 including the Piazza well, pending de novo review 8 before the Commission. And the Commission should 9 approve Goodnight's application to increase the 10 injection rate of its Andre Dawson well.

Finally, the Commission should amend the EMSU unitized interval and special pool that governs the EMSU, to remove Goodnight's disposal interval defined as the top of the stratigraphic equivalent of the confining layer identified in Goodnight's structure map and cross sections, down to the base of the San Andres.

This would just be codifying in an order what should have been done from the creation of the EMSU, at the beginning, and what has been the de-facto operational arrangement since the EMSU was approved by the Commission, in 1984, a producing reservoir overlying a vast and laterally extensive, non-productive aquifer.

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MR. WEHMEYER: Mr. Hearing Officer, I

1 have another objection. All of this about what should 2 be done on the EMSU unit, that is a completely different proceeding that may, someday, proceed and 3 involve -- it will involve completely different 4 5 evidence, and it is legally and procedurally stayed, 6 right now. 7 Why Counsel would be suggesting that 8 this OCC has a matter before it to mess with the 9 properly-designated oil pool unit in EMSU, this is utterly irrelevant. This is not what's before the 10 11 Commission, and it's, in fact, legally stayed right 12 now. 13 THE HEARING EXAMINER: All right. 14 Well, I think --15 MR. RANKIN: May I respond? 16 THE HEARING EXAMINER: -- we can rely 17 on Mr. Shandler to advise the Commission of whether or 18 not the stuff is relevant or not. But go ahead, Mr. Rankin. 19 20 MR. WEHMEYER: I'd like to just 21 respond, briefly. There is a motion for summary 22 judgment that's been filed, and it has been stayed pending the merits of this case. So there is actually 23 24 a legal move. We have moved to actually do this in these proceedings. 25

1	THE HEARING EXAMINER: Well, the
2	question is, is it in these proceedings, or is it in
3	some other proceeding that this is tangentially
4	related to?
5	MR. WEHMEYER: I understand. We filed
6	the summary judgment motion immediately preceding the
7	commencement of this hearing, and the Commission ruled
8	that it would be stayed pending the outcome of this
9	merits hearing. So Mr. Shandler can address it.
10	THE HEARING EXAMINER: All right. Is
11	that motion filed in any of the case numbers that
12	we're here about, in these consolidated cases?
13	MR. WEHMEYER: Yes, it is.
14	THE HEARING EXAMINER: All right.
15	MR. WEHMEYER: And yes.
16	THE HEARING EXAMINER: Okay. Then,
17	overruled.
18	Please proceed.
19	MR. RANKIN: As I was saying, this
20	would be just codifying an order in an order what
21	should have been done from the creation of the EMSU,
22	at the outset, and what has been the de-facto
23	operational arrangement since the EMSU was approved by
24	the Commission in 1984.
25	A producing reservoir overlying a vast
	Page 88

and laterally extensive non-productive aquifer, below separated by an effective confining layer, with enhanced oil recovery in the oil reservoir above, and produce water disposal and water withdrawal occurring in the aquifer below; that's what's been happening for over 50 years.

Here's what we're asking for, that Empire's applications should be denied; Goodnight's applications should be approved; the EMSU unitized interval and special pool should be amended to exclude Goodnight's disposal zone.

Mr. Hearing Officer, Chair, and Commission Members, we appreciate your attention to this case, and all the details, and the testimony and arguments of Counsel.

16 I want to just make the point that, as -- in closing, that the Commission always retains 17 18 jurisdiction over these matters, and if, at any time in the future, Empire is able to put forward actual 19 20 evidence, they can always do so, and the Commission should not be afraid or be concerned about any ruling 21 22 against Empire here for closing or precluding them 23 from bringing forward evidence in the future.

The point is that today, they haven't yet done so, and until they do, Empire should not be

1 allowed to terminate Goodnight's operations, and 2 Goodnight should be allowed to go about its business 3 with the approval of its additional disposal 4 operations. 5 We appreciate your time and 6 consideration, and I'm grateful for the opportunity. 7 Thank you. 8 THE HEARING EXAMINER: All right. 9 Thank you very much, Mr. Rankin. I appreciate it. 10 So Mr. Wehmeyer, you reserved, I think, 11 15 minutes for rebuttal; is that correct? 12 MR. WEHMEYER: I think procedurally, I 13 might suggest we check with the other parties. I 14 don't know if they have argument or not, but I would quess they get to go before me. I'm happy to go 15 16 ahead. I -- but I would assume --17 THE HEARING EXAMINER: That -- I 18 don't -- I guess, I really don't care. I mean, you want to rebut what Mr. Rankin said, or you want to 19 20 rebut what everybody says? MR. WEHMEYER: I'll hold to rebut what 21 22 everybody says. 23 THE HEARING EXAMINER: All right. 24 Fine. 25 Then, Mr. Beck, I'll turn it over to Page 90

1	you for Rice.
2	MR. BECK: Question: "Sounds to me
3	that you're trying to utilize the Commission to, more
4	or less, right some wrongs that Empire should have
5	probably known better?" Answer: "Yes, sir."
6	The Commission isn't here to right an
7	awful business decision that Empire made. Its
8	responsibility and its jurisdiction are to prevent
9	waste, and protect correlative rights, based on facts
10	developed in this hearing, for applications to the OCD
11	that are here before the Commission.
12	Empire has not met its burden to prove
13	that any of Goodnight's injection operations caused
14	waste, or that revoking their permits would, in any
15	way, protect correlative rights. Empire's VP of Land
16	and Legal, Jack Wheeler, knows that, and that's why he
17	let slip, in questioning with Dr. Ampomah, exactly
18	what Empire is improperly asking the Commission to do.
19	What he answered, when he was asked if
20	Empire is trying to utilize the Commission to, more or
21	less, right some wrongs, is, "Yes, sir. When I've
22	done this, and I've probably done six to 700
23	acquisitions in my career, and every single time, my
24	approach to the due diligence was significantly
25	different than what I've been able to determine that

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1	Empire did back in 2021."
2	Mr. Chair, Commissioners, Hearing
3	Officer, Counsel, thank you all for your time and work
4	on this. On behalf of Rice and Permian, I want to
5	thank you for the work that you've done, and the work
6	that has to come.
7	Empire became aware of the \$56 million
8	in plugging liability in August of 2023, when Empire
9	was responding to Goodnight's subpoena for this
10	matter, and when it got a notice of compliance from
11	the State Land Office.
12	In 2023, Empire came to recognize that
13	the property that it bought for \$17.8 million came
14	along with well over \$70 million in liability. Let's
15	talk about what we're here for the Commission to
16	decide, waste and protecting correlative rights.
17	It's important to recognize what is the
18	Commission's duty in this hearing. This is the
19	July 2nd order on the scope of the hearing. It was
20	amended, and what the jury instructions, as
21	Mr. Shandler said, for this Commission, are written in
22	this paragraph, "Whether granting the application by
23	Goodnight would applications by Goodnight would,
24	one, impair correlative rights or cause waste pursuant
25	to Section 7-2-11."

1 Continuing on, "Whether granting the 2 applications by Empire would prevent the impairment of correlative rights or waste, pursuant to Section 3 70-2-11." Now, waste is defined in 70-2-3. What it 4 5 says is "Waste includes underground waste as those 6 words are generally understood in the oil and gas business, whether it reduces, or tends to reduce the 7 8 total quantity of crude petroleum oil or natural gas 9 ultimately recovered." So that means recovered in the oil and 10 11 To prove waste, Empire has the burden gas business. 12 to prove that there is oil and gas that would 13 ultimately be economically recovered. 14 The New Mexico Supreme Court, in 1962, 15 in Continental Oil Company against the Oil 16 Conservation Commission, laid out what preventing 17 waste and protecting correlative rights means, where the rubber hits the road. 18 19 Pointed out that our legislature define 20 these terms, summarizing it consists merely of one and 21 opportunity to produce, only insofar as it is 22 practical, of actual -- in this case, oil, in the 23 pool. 24 The Supreme Court said "To state that problem in a different way, the Commission must 25

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1 determine, from a practical standpoint, that there is 2 a certain amount of oil here in the acreage." Ιt contains a certain amount of oil. And Empire must 3 prove that there is a determined amount of oil that 4 5 could be produced, and obtained. Now, Empire is not before the 6 7 Commission, here, applying to produce hydrocarbons 8 from the alleged ROZ. As Mr. Wheeler testified, it's 9 not allowed to do tertiary recovery, right now. Empire would have to apply to the Commission to do 10 11 that, and be granted approval. 12 Empire has not done that. Why? Tt. 13 estimates that it would be ten years, because, as this commission saw, Empire does not have the evidence to 14 15 show that there is an ROZ, or that it can produce in 16 the oil and gas business, any hydrocarbons from that 17 Waste does not equal potential ROZ, that is ROZ. 18 potentially recoverable. 19 Now, Mr. Wehmeyer said to you, and I 20 wrote it down, that Empire could meet its burden by proving "any one of these things. That one, there is 21 22 an ROZ in the Grayburg; or two, there is an ROZ in the 23 San Andres; or three that there is communication with 24 the Grayburg." 25 That is not accurate. Empire has to Page 94

1	meet every one of those to meet its burden to prove
2	that there is waste, or to prove that Goodnight's
3	injection is impairing corelative rights.
4	To find waste, the Commission must find
5	that not only hydrocarbons exist, that there is an
6	ROZ, but they must find that they "could be produced."
7	A potential ROZ does not suffice. It must find an
8	actual ROZ that could be produced.
9	Now, there has been no evidence that
10	hydrocarbons anywhere in the disposal zone exist, let
11	alone that they can be produced by Empire. Empire is
12	the only one who ordered Empire to stop doing anything
13	in relation to the EMSU.
14	Now, this is from Mr. Wheeler's
15	testimony. Asked the question, "Yesterday, you said
16	you were ordered to stop doing anything with the EMSU;
17	right?" Answer: "Yes, sir." Answer Question: "You
18	got, sort of, ahead of me there. But I was going to
19	say that order came from Empire, not from anyone else
20	outside of Empire; right?" "That's correct."
21	"And you've adhered to that? You
22	haven't done anything else with the EMSU, in terms of
23	further development here; right?" "Yes, sir." "You
24	haven't taken any cores of any wells?" "No, sir."
25	"You haven't taken any mud logs of any wells?" "No,

1	sir." "You haven't taken any logs of any wells?"
2	"No, sir." "You haven't drilled any new wells in the
3	San Andres to test for oil?"
4	But even Empire bucked that trend,
5	when, after this hearing started, in February,
6	March of 2025, this year, they applied for permits to
7	drill three new wells to prove the ROZ. Filed those
8	applications in February or March of this year.
9	There is nothing impairing Empire from
10	going and testing to prove up the alleged ROZ. So the
11	question the Commission must answer is whether
12	Goodnight's operation are producing waste or impairing
13	correlative rights, right now, which Empire hasn't
14	proved.
15	There's no evidence no direct
16	evidence of communication from the disposal zone.
17	There's been a lot of discussion on the San Andres
18	pick, or the top of the San Andres. As you just heard
19	discussions, it's been made clear the Commission is
20	not deciding here, whether the San Andres was properly
21	made part of the unit, originally.
22	There's been a lot of discussion of how
23	no one has seen injection into a unit before. That's
24	because the definition of a unit is that the zone must
25	have been produced before, and there's no evidence the
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	rage 90

1 San Andres was produced before on the EMSU. 2 The inquiry the Commission is making is whether Goodnight's disposal is impairing Empire's 3 There's no evidence. Dr. Davidson -- you production. 4 5 heard a lot about what Dr. Davidson, about -- said 6 about the alleged ROZ. 7 But let's look -- as opposed to a 8 soundbite, let's actually look at what Dr. Davidson 9 said. Dr. Davidson said the testimony was that he went in and took the San Andres interval above the 10 11 yellow band, calculated the oil saturations in there, 12 and came to the conclusion that the economics may be 13 questionable. But then, when questioned on whether or 14 15 not there was an ROZ that existed all the way down to 16 the Grayburg, Mr. McBeath said there was an alleged 17 resource for that. "Based on the discussions we're 18 having now, sounds like you're saying that at least there is an ROZ in the upper San Andres." 19 20 Dr. Davidson said, "I think there very 21 well could be, but again, I have a different opinion. 22 I think they look more like migration pathways. They may or may not be aerially continuous, but I can't say 23 24 with certainty they're not there." 25 They've seen residual oil in the two

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wells and corded into that upper San Andres. And again, if Empire feels strongly about that, go for it. I think they should go for it. But I don't think that the injection operations, deep, are going to impact it.

6 Now, this was a portion you heard a part of. "We've established" -- Question: "We've 7 8 established that there are oil saturations above 20 9 percent, as you plotted here; is that correct?" "Yes." "Then tell the Commission why you say that 10 11 there is no ROZ?" "I didn't say there's no ROZ in the 12 upper San Andres. Again, I have -- I may have a 13 little difference of opinion there from Trentham and 14 Melzner.

When I look at actual ROZs that have been established, I see pretty repeatable profile and saturations for the top of the ROZ to the bottom, and I don't see that straight line, about 40 percent in the 679 or the R R Bell data. That doesn't mean it's not an ROZ; it just means it doesn't have a profile that matches what other ROZs have.

22 My contention is that the injection 23 operations that are occurring below this yellow band 24 are not likely to impact it."

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Now, we looked at the yellow band that

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1 he said is the barrier between the injection zone and 2 any communication up with the Grayburg, and asked about this. He said, "In my view, that's a region 3 that contains multiple potential vertical permeability 4 5 barriers in the form of bedded anhydrides. However, the preponderance of the data, 6 when you look at it, it's lost circulation. You look 7 at the injection volumes, you look at the fact that we 8 9 don't see any direct evidence that major water is 10 moving up that's impacting the Grayburg water flood. 11 In other words, we're not saying what 12 we're producing -- we're not seeing we're producing 13 way more water than we're injecting, which would imply that there's major communication up." 14 15 My conclusion is the preponderance of 16 the evidence suggests that the yellow interval is 17 providing reasonable protection between the injection zone and the water flood operations above that yellow 18 19 highlighted area. 20 Until we see evidence, concrete 21 evidence, by way of pressure, or the fact that we're 22 producing more water than we're injecting, I'm pretty comfortable in saying that I think those two zones are 23 isolated from one another." 24 25 So Dr. Davidson testified that he can't Page 99

1 say with any certainty that an ROZ doesn't exist in 2 the upper San Andres. He did not say that an ROZ 3 existed. He said what he saw was migration pathways, now abandoned, from long ago. 4 5 Injection has been going on for more 6 than 60 years in the San Andres. An ROZ is not recoverable through ordinary means. That's what it 7 8 is. It requires CO2. It's not wasted away by 9 injection. 10 Now, the real question here, and the 11 answer, is that Dr. Davidson's, Mr. McGuire's 12 separation of the injection zone from the Grayburg, 13 and any operations, and any alleged ROZ in the upper San Andres, is supported by common sense and 14 15 operational reality. 16 The question is, how could Empire 17 pressure up the water flood it's doing in the Grayburg, when there is a vacuum zone underneath, if 18 there isn't an effective barrier in between? Rice's 19 20 saltwater disposal wells operate on vacuum only, as 21 they have for only 60 years, and as they continue to 22 operate today. 23 If they operated on only vacuum, and 24 there was communication pressuring up, of the San 25 Andres into the Grayburg, how could they operate on

1	vacuum? With the evidence here, there is no waste.
2	It's not evidence an ROZ exists, let alone the ROZ
3	could somehow be produced.
4	And this, after Empire says it's
5	expended \$30 million in this litigation. We've heard
6	a lot about the State Land Office, and that it owns 58
7	to 59% of the mineral interests. Now, you heard from
8	Mr. Wheeler that Empire went to the State Land Office
9	to get support for this, your testimony that he had
10	written support.
11	Of course, that's one of the many
12	things he had to go back and change. He changed that,
13	and said, actually after those discussions with the
14	State Land Office asking for support, they didn't have
15	it. They didn't have it in written form. They didn't
16	have it in oral form.
17	The only evidence of waste is evidence
18	that supports denying Empire's applications. It's
19	evidence that 60,000 barrels per day of disposal from
20	13 different oil and gas operators would be stopped if
21	Goodnight's injection is revoked.
22	That evidence weighs in favor of
23	denying Empire's applications. As Mr. McGuire pointed
24	out, despite the misleading evidence and
25	cross-examination, if you look at the actual data for
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1 oil and wastewater production, they've gone up 2 significantly since 2023, and continue to go up. 3 Empire did not do its due diligence. It relied on a marketing pamphlet from XTO that 4 represented, not as Mr. Wehmeyer told you on his 5 closing argument, an ROZ; it represented a potential 6 7 ROZ. A potential ROZ of 350 feet, where the bottom 8 was negative 700 subsea. 9 Now, when Mr. Wheeler was reviewing 10 that, reviewing the first page, it says under that 11 description, "Three existing units, EMSU, EMSU B, AGU, 12 all have infill drill, and well, and ROZ potential; 13 right?" "Yes, sir." "What does potential mean to 14 you?" "Reserve reports, you basically have three 15 categories. You've got proven, probable, and 16 possible. So potential would fall into the category 17 between possible and probable." "That's what it means to you? "Yes, sir." 18 19 It's not even provable. It's not even 20 probable. Somewhere between probable and possible. 21 Now, you heard Mr. Wehmeyer question Mr. McBeath about 22 his experience with ExxonMobil, and what a great company it is, what a successful producer of oil and 23 24 qas it is. 25 Now, when I went up and asked

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1 Mr. McBeath that -- knowing all he does about 2 ExxonMobil, what a great company it is, what great returns it makes for its shareholders, that after 3 ExxonMobil identified this potential ROZ, it went 4 5 ahead and sold the properties, because ExxonMobil recognized that this was not recoverable economically. 6 7 Now, what should the Commission do? 8 Well, the Continental Oil company gives the Commission 9 the answer. Commission should conclude that Empire 10 has not proven that Goodnight's injection is producing 11 waste, or impairing corelative rights; Empire hasn't 12 proven that the injection zone contains "a certain 13 amount of oil that could be produced and obtained"; should deny applications to revoke Goodnight's 14 15 injection permits, permits that were approved by the 16 Oil Conservation Division at a contested hearing. 17 And it should allow Empire to go 18 forward with its three applications, from March or 19 February, to drill to the bottom of the San Andres, to 20 perform the three types of coring wells -- coring for those wells that said it did, and to allow them to 21 22 bring evidence back before this commission of an ROZ, 23 and an ROZ that can be produced. And at that point in time, the 24 Commission can decide on whether to allow Empire to go 25

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1 ahead and do that. 2 Thank you. THE HEARING EXAMINER: Thank you, 3 Mr. Beck. Appreciate it. 4 5 Mr. Suazo, closing remarks for Pilot? 6 MR. SUAZO: Yes. Thank you, 7 Mr. Hearing Officer. 8 Good morning, Mr. Chair, Commissioners. 9 Miguel Suazo with Beatty & Wozniak, appearing on behalf of Pilot. 10 11 First of all, I'd like to thank you all 12 for the opportunity to present a closing statement 13 today on behalf of Pilot, and largely in support of Goodnight's applications. 14 15 You know, the record developed in this 16 proceeding, through weeks of exhaustive testimony, 17 cross-examination, and pages of technical evidence, 18 Pilot thinks points to one conclusion, and that is 19 that Goodnight's operations are consistent with New 20 Mexico Law and sound engineering practices. 21 Pilot feels that Empire has failed to 22 meet its burden to justify either revocation of 23 Goodnight's injection permits or denial of its pending 24 applications. And however the Commission decides this case, you know, they're well aware -- you all are well 25 Page 104

aware that the industry is watching.

1

2 And industry's watching because they're concerned about the impact and the reverberations that 3 the decision in this case will have on the EMSU, and 4 5 beyond the EMSU. So you know, in looking through the record, last night, you know, let's start with the 6 core issues which are waste, correlative rights, and 7 8 technical viability. 9 You know, throughout this case, we've heard Empire repeatedly claim that Goodnight's 10 11 injection operations are impairing future recovery 12 from an alleged ROZ in the San Andres and the 13 Grayburg. But time and time again, Empire's own 14 15 witnesses either failed to quantify the alleged 16 recoverable oil, or conceded that their conclusions 17 are speculative, or based on outdated or uncalibrated data, or admitted that further data and years of study 18 19 would be needed to support their vision for the 20 development of this area. 21 And I was looking at Dr. Lindsay, which 22 is, as you know, Empire's central geologic witness. 23 He admitted that he had not evaluated whether the oil 24 in place was technically or economically recoverable. 25 He testified that there's no evidence

1 of lateral communication between the Capitan Reef and 2 the EMSU, and that deeper core samples would be needed, whether an -- to determine whether an ROZ in 3 the San Andres could even support a viable project. 4 5 And the questioning, and especially 6 from Commissioner Ampomah, highlighted the absence of commercial viability and concrete reservoir 7 8 engineering data. And that was apparent throughout 9 this proceeding. 10 Empire's petrophysical witness, we also 11 believe, faltered. Mr. Dewellyn admitted that he had 12 never before performed a petrophysical analysis for 13 ROZ development, and used log data uncorrected for water saturation, which we think is a critical flaw 14 15 that undermines Empire's oil saturation claims. 16 And he also acknowledged that he relied 17 entirely on Empire's provided data, without calibration, because of concerns over cost. Empire's 18 19 Engineers included Mr. Merrick and Mr. West, who could 20 not show that production data to confirm ability of 21 oil, or any measurable interference with operations in 22 the Grayburg. 23 Mr. Merrick, as Mr. Rankin mentioned, 24 relied on Nutech data, and admitted that he was not asked to evaluate either reserves or recoverability. 25 Page 106

And Mr. West also testified as to speculative models for chloride migration, but conceded that there was no per-well data pre 1970, and he had no direct evidence that Goodnight's injection was impairing Empire's operations.

And Goodnight's engineering witness, Mr. McBeath, thoroughly, we think, rebutted Empire's assumptions and showed that Empire saturation claims are inconsistent with 100 percent water production in the field.

11 Now, I really feel like Commissioner 12 Ampomah's questioning in this case was really 13 instructive in telling, seemingly, to me, that his core focus was on the core concern of whether there's 14 15 sufficient evidence to determine that the San Andres 16 contains a commercially viable ROZ that justifies 17 denying Goodnight's applications or revoking its permits. 18

And, you know, throughout this case, I think that witness after witness has failed to provide that evidence. Even Mr. Trentham, Empire's ROZ expert, admitted that his views were based on analogs and not EMSU-specific engineering or economic data. He conceded he had no production cost estimates and based his assumptions on highly generalized recovery

1 factors from unrelated projects. Now, Empire's 2 claiming an imminent threat to recoverable hydro 3 hydrocarbons. We think that's further undermined by 4 5 Mr. Wheeler's testimony. Mr. Wheeler conceded that Empire did not do meaningful due diligence before 6 acquiring the EMSU, not even a site visit. And you 7 8 know, I think Mr. Beck, you know, greatly touched on 9 this point. 10 You know, they learned of this massive 11 plugging liability, and other burdens, and they're 12 trying to use the Commission as a tool to address 13 their lack of due diligence. 14 Empire's entire case, as we see it, 15 hinges on a speculative ROZ recovery scheme, for which 16 there's -- it has no current regulatory authority, but 17 it could certainly pursue. Empire would need to 18 return to the Commission for approval of a tertiary 19 recovery project, conduct more core sampling, develop 20 reservoir models, build CO2 pipelines, source CO2. 21 And they admit that will take, you 22 know, many, many years. Goodnight, by contrast, has presented a compelling and well-supported case 23 24 grounded in regulatory precedent and engineering integrity. Mr. McBeath and Dr. Davidson, we think, 25
1 established that the San Andres has long functioned as 2 a non-productive aquifer and disposal zone. And Mr. Davidson is a world-class 3 petrophysicist. He explained that neither the profile 4 5 nor the data support ROZ classification within the 6 disposal interview. And he also confirmed that 7 isolation exists between Goodnight's disposal zone and 8 the Grayburg, and that therefore, no waste or 9 impairment of correlative rights is occurring. 10 So in summary, Pilot believes that 11 Empire's claims are built on hypotheticals, marketing 12 brochures; and Goodnight's cases, grounded in the law, 13 field data, sound reservoir engineering, and decades of regulatory precedent. 14 15 So to grant Empire's applications would 16 set, we think, a dangerous precedent, one where 17 hearsay and speculative future plans outweigh proven compliance, economic necessity, and scientific rigor. 18 19 So today, Pilot respectfully asks the 20 Division to deny Empire's applications to revoke 21 Goodnight's permits to the approved Goodnight's 22 pending applications, and reaffirm that the San 23 Andres, within the EMSU, is a valid disposal zone, 24 unless and until new data from Empire or others justifies a departure from settled law and practice. 25

1 The evidence simply doesn't support 2 Empire's requested relief. We feel that Goodnight has met its burden, and Empire has not. And it's 3 important that the rule of law, the integrity of the 4 5 Commission's permitting process, and the regulatory 6 certainty upon which New Mexico's oil and gas industry 7 depends, demand nothing less. 8 Thank you. 9 THE HEARING EXAMINER: Thank you, 10 Mr. Suazo. 11 All right. Mr. Wehmeyer, this is your 12 15 minutes to rebut not one, but three closing 13 arguments. 14 MR. WEHMEYER: Thank you, Mr. Hearing 15 Officer. 16 I'll just take this a little bit in the 17 order that Mr. Rankin raised it, and I think that his organization and what he chose for the substance of 18 19 his presentation perfectly encapsulates this company, 20 Goodnight, and their dirty tactic. It's truly in 21 their bone marrow. 22 As we start, I gave him too much 23 credit. The statements -- the two statements he 24 started with, neither one of those are even sworn. 25 That was something that Mr. Moander drafted. A lawyer Page 110

1 drafted that. So ignoring it hasn't been received in 2 evidence, what he chose to lead with was prepared by a 3 lawyer; not a scientist, not somebody with the OCD, a 4 lawyer.

5 With respect to the scope of the 6 hearing, there is an entire hearing order that was 7 issued as part of this case, identifying the scope. 8 In no way, shape, form, or fashion does that scope of 9 the hearing include this commission somehow modifying, 10 changing, reforming the EMSU oil unit.

The motion for summary judgment that he spoke of, there's an order from Chairman Razatos that -- on March 4, 2025, that denied that motion for summary judgment.

With respect to the scope of this hearing, that was clarified in an order, also issued as part of the proceedings. And so the slides that he led with, not sworn testimony. In fact, they were created by Mr. Moander.

And with respect to the scope of the hearing, you don't have to take my word. Mr. Beck helpfully volunteered in his closing remarks that that is outside the scope of this hearing. It is pending other places, that are not here, and that are stayed. And we can certainly have that fight.

1 But again, all of the stuff about the 2 EMSU, those arguments are about what he wants to have happen to a unit order that has been unchallenged and 3 unchanged for over 40 years. With respect to the OCD 4 5 testimony, the settlement that Goodnight cut, at the 6 finish line, literally at the finish line, before 7 Mr. Goetz, is exactly what the OCD was asking 8 Goodnight for, from day one. 9 They chose to make the deal, at the 10 finish line, that OCD wanted from the very first day, 11 precisely so that you didn't hear OCD's testimony. 12 The reason you didn't hear those folks is because they 13 cut the deal that OCD wanted from the very start, at 14 the finish line, to keep you from hearing it. 15 The pressure data, it is -- again, if 16 you go back and look at the pressure data, if the rate 17 of injection goes over 1500, the algorithm in the 18 system immediately sets it to zero. So it appears 19 that there is no injection volumes, even though there 20 are injection pressures. 21 That was an error in the system. This 22 is explained in Mr. William's sworn statements. That accords with all of the other data that we've heard 23 The idea that they still come back to that in 24 about. these closing arguments is just -- you slap your head. 25

1 It's only the kind of conduct that a company like 2 Goodnight is capable of. On the pressure, you heard Mr. McGuire 3 talk about the vast drop -- the fast and drastic drop 4 5 of pressure upon sucking the water out, as part of the water supply wells. How on earth do you not have that 6 7 identical rapid increase in pressure as you put it 8 back? 9 And again, Dr. Lake and others have 10 testified to that rapid pressure increase that's being 11 observed, and it was proved by that wire line 12 measurement in the Rhino well at 750 subsea. Tt's 13 proved by the entire trend of water levels, even if you take it off of their fluid gun readings. 14 15 With respect to the economic modeling, 16 Mr. McBeath was asked if you have any critique of what 17 Empire has prepared here, other than the WTI and the 18 CO2 pricing. Where is it? He didn't offer any other variation, whatsoever. 19 20 And, in fact, the dimensionless curve 21 is a dimensionless curve that Goodnight's own experts 22 have used. Mr. McBeath confirmed that it was the scope of the work here for the Goodnight experts to 23 24 merely pick on what Empire's done, as opposed to performing ground-up analyses here, in support of 25 Page 113

1 anything that Goodnight could actually come here and, 2 with a straight face, urge to the Commission. This idea about this is an effort to 3 extract value, the OCC doesn't have purse strings. 4 5 They're -- when you issue your order, there's not 6 going to be an a damage award on that. This is about stopping the destruction of the natural resources. 7 8 And that has nothing to do with the District Court 9 proceeding, whatsoever, that can involve damages. This is no different than what 10 11 Goodnight said, as part of its Texas case, that 12 Mr. McGuire was asked about. They literally defended, 13 at the Railroad Commission of Texas, on the basis 14 that, "Hey. We've already done all the waste there. 15 You can't, Railroad Commission of Texas, stop the 16 commission of waste, because we've already done it. 17 Let us just go answer in damages over in the District 18 court case." 19 The idea that this is somehow, some 20 kind of a ploy or a game, that Empire would spend 21 millions of dollars to prepare this case and bring it 22 for presentation to you all as part of some kind of a 23 damage recovery is complete nonsense. 24 And if you wanted to indulge that, you would have to believe that William West and all of the 25 Page 114

1 other Empire witnesses are just liars. Mr. West took 2 the oath, and he sat in the box, and credibly told you exactly what the plans are here, and what will happen 3 as soon as the saltwater injection stops. 4 5 They are literally calling Mr. West and the other Empire witnesses liars. While we talk about 6 that from -- credibility is absolutely something that 7 8 the Commissioners, you, as fact finders here, you need 9 to assess. Credibility comes in things like 10 11 education, and credentials, what work actually 12 happened here. But credibility also comes in how do 13 you react to the questions? Empire presented witness after witness that sat in those chairs, listened to 14 15 your questions, listened to the questions of Counsel, 16 and answered precisely the questions that were asked. 17 What did Goodnight offer here? Witness after witness who evaded, wouldn't answer the 18 19 question. Mr. McGuire thought it was comical. He 20 acknowledged, many times, "I'm just not going to answer the question." 21 22 You couldn't get a straight answer out of the Goodnight witnesses. And that absolutely goes 23 24 to this issue of credibility, which is incredibly important. And we heard all three of the closing 25

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1 arguments here talk about how important this is to oil 2 and gas producers. 3 If this was so important to Rice, or Permian, or Owl, where is their witness? Did you see 4 5 them bring anybody here to testify to the OCC, or to participate in any kind of a meaningful way as part of 6 7 these proceedings? 8 For that matter, did we see any 9 Goodnight witnesses? Not one single Goodnight witness 10 could be bothered to come all the way to Santa Fe, New 11 Mexico, to talk about the harm that they've occasioned 12 on Empire's EMSU, and on the State of New Mexico's 13 Minerals. Not one single employee of Goodnight came 14 here, could be bothered to come here, to Santa Fe, to testify. It's a company that just, to its bone 15 16 marrow, does not care. 17 I'll address, briefly, some of Mr. Beck's remarks. I think he's -- thankfully, we 18 19 have Mr. Beath's testimony -- McBeath's testimony, 20 correct, Mr. Beck. The testimony he cited about 21 probables and possibles, you know, PUDs, PDP, those 22 are SEC concepts. 23 There are entire rules under the 24 monographs about how you book SEC reserves, and what the SEC lets you testify -- lets you report to the 25 Page 116

1 public. Mr. McBeath confirmed SEC reserves have 2 nothing whatsoever to do with this proceeding. I do not want the Commissioners to be 3 misled, as you talk about, "probables," that the SEC 4 5 lets you book. Completely different concept than the 6 preponderance standards that are applicable to your consideration of the issues here before you. That's 7 8 just a matter of Mr. Beck not understanding. 9 MR. BECK: Mr. Hearing Officer, I 10 certainly object to that statement, and I think it 11 violates the Chair's direction for decorum. And I sat 12 back while Mr. Wehmeyer laughed, and threw his arms up 13 during Goodnight's closing, and during my closing, and I didn't say anything. 14 15 But I certainly take offense to that 16 statement, and I think it violates the Chair's 17 instruction on decorum. 18 MR. WEHMEYER: I have a response I'm 19 very happy to make on that. 20 THE HEARING EXAMINER: You know, I'm -- your objection, Mr. Beck, is noted. But people 21 22 get a fair amount of leeway in cross-examination. And, you know, if they want to throw barbs at each 23 24 other, well, I think the Commission can take it for what it's worth. But your objection's noted. 25

1 Go ahead, Mr. Wehmeyer. 2 MR. WEHMEYER: Again, the idea that 3 Mr. Beck would, in terms of the participation he's contributed to the proceeding, that he would choose to 4 spend time on SEC probable and possible reserve 5 categories, with all of the regulations and federal 6 7 applicability to that, somehow bring it here, that 8 that has anything to do with what's before this 9 commission, is completely laughable. 10 We absolutely agree that what the 11 Commission is doing here is vitally important. 12 Absolutely, this is important. If this Commission 13 finds, by a preponderance, that there is an ROZ in the San Andres, we are done. The saltwater injection must 14 15 stop. 16 And we've proved that with the 17 testimony of, actually, Goodnight's witnesses. The 18 testimony we showed you, as part of these closing 19 remarks, was Goodnight's witnesses agreeing to these 20 issues. 21 Mr. Beck and Mr. Rankin struggled to make their case using the testimony of their own 22 23 witnesses. We didn't even go into detail into all of 24 the testimony from Mr. McShane, and Dr. Lindsay, and Dr. Trentham, and Mr. Birkhead, and Mr. Bailey. 25 Page 118

1	
1	Over and over again, these witness
2	credibly sat in the chairs, listened to your
3	questions, talked about their qualifications, the data
4	they looked at, the methods they employed, and the
5	conclusions that they reasonably came to.
6	And all of those point the exact same
7	direction as the Goodnight witnesses have conceded;
8	there's a ROZ in the San Andres. The reason it's not
9	being developed is because of Goodnight. And it must
10	stop, for that oil to not be wasted and lost.
11	Additionally, we know there's a ROZ in
12	the Grayburg as well. If this commission finds that
13	there is communication, and that saltwater injection
14	is leaving into other formations, at that, we're done
15	here, too.
16	If the Commission finds that by a
17	preponderance of the evidence, that the Grayburg is
18	threatened, that is waste; the Commission must step in
19	to protect correlative rights, at that interval at
20	that basis.
21	Again, I just will close by saying, on
22	behalf of Empire, how vitally important we think this
23	case is for the state of New Mexico. They are asking
24	you to set a standard that it is okay to permit in,
25	and inject into unitized intervals, in violation of
	Page 119

1	Empire's, and its predecessor's, and others' rights,			
2	and those established by things like Section 10 of the			
3	unit agreement. That is this is not the place.			
4	There is no reason, whatsoever, to set that precedent			
5	in New Mexico, or for future OCD conduct.			
6	And coming back to the water volumes,			
7	we were clear, these are they Goodnight says			
8	it's a Delaware water servicer. The volumes you see,			
9	straight off of the dashboard of drilling info,			
10	Inveris, is the that's the Delaware water, off of			
11	that dashboard of Inveris.			
12	Because they said that if they want to			
13	say that there's more saltwater volumes that the			
14	Commission could should consider, guess what that			
15	does to the market share of Goodnight. It gets even			
16	smaller.			
17	The idea that this Commission's actions			
18	in protecting one 14,000 acre spot in New Mexico is			
19	somehow going to have any effect, whatsoever, outside			
20	of those 14,000 acres, on any operator, on any SWD			
21	operator, is completely unsupported in any of this			
22	evidence.			
23	Now, if the Commission goes the other			
24	way, and allows trash disposal companies to put salt			
25	water into an existing, producing oil unit, that's a			
	Page 120			

1 whole different standard. I do understand, at that 2 point, why all of the producers that they cite would 3 be watching up here on our Zoom. If the precedent we're going to set is 4 5 that the OCD and OCC condones injecting into 6 designated, productive oil units in New Mexico, I understand why a lot of producers would be pretty 7 8 concerned about the OCC taking that tack. 9 Again, for my group, I very much thank everyone for their time and attention. We look 10 11 forward to being helpful with the briefing to come, 12 but anticipate that that's going to be a pretty short 13 process, because this injection should have never 14 started. It needed to stop from the get -- it needed 15 to stop yesterday. We need it to stop today. 16 Thank you, very much. 17 THE HEARING EXAMINER: Thank you, 18 Mr. Wehmeyer. 19 All right. Chairman Razatos, I see 20 it's about a quarter to noon. Do you need to -- think 21 we can -- I just wanted to talk with the parties about 22 findings of fact, and conclusions of law. But I don't 23 think that'll take long, and I think we can get you 24 out of here in time for a noon lunch hour, if not before. Does that work for you, Mr. Razatos? 25

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1					
1	MR. RAZATOS: Yes, that's totally fine,				
2	as long as I can get out of here a little just a				
3	little before 12.				
4	THE HEARING EXAMINER: Okay. Yeah, the				
5	goal is to I mean, we'll be completely done with				
6	this. If we can do that, we'll be completely done				
7	with this, at that point. All right. And we'll just				
8	adjourn the entire proceeding, a concept, which, at				
9	some points in time, during this process, I was not				
10	necessarily optimistic we would ever reach. But here				
11	we are.				
12	All right. So folks, let me ask both				
13	sides. I'll start with Empire. Findings of fact and				
14	conclusions of law, I'm assuming that you'll want x				
15	number of days after the full transcript is available.				
16	Thoughts, Mr. Wehmeyer, or the Empire				
17	team? I think Shaheen's coming forward?				
18	MR. WEHMEYER: Yeah. So we have all of				
19	the transcripts, except for the last four days. So we				
20	do not see these transcripts as being cause to delay				
21	anything. Again, it's just the last four days				
22	lacking.				
23	We also it's out of our control on				
24	how fast these things come back in. There is video				
25	available, so if anybody thinks that something is				
	Page 122				

1 vitally important, this is all recorded. So they have 2 that.

3 And we have some -- they've been doing a wonderful job, but we have some new stenographers 4 5 that have come in over the last couple days. So our 6 concern is just we don't want this tied to hearing transcripts that could be multiple months away, just 7 8 not knowing on when they'd come in.

9 In terms of the concrete timing, I think Ms. Hardy can address that in more detail. But 10 11 again, we do have great concern because this is 12 happening in our unit, as we speak. We need this 13 resolved promptly, that it would be tied to a -- not a firm date on transcripts. 14

15 THE HEARING EXAMINER: Well, we can tie 16 it from today. I mean, it can be x number of days from today, instead of when the transcript is ready, 17 as long as the parties agree. 18

19 MR. WEHMEYER: I think tying it from 20 today is very appropriate, and lets everybody know that this is going to be concluded, and lets Empire's 21 22 ownership and management know that we're going to be prompt on getting to a decision here. 23

THE HEARING EXAMINER: Mr. Rankin, your 24 25 thoughts?

1 MR. RANKIN: Thank you, Mr. Hearing 2 Officer. We had been discussing, and my colleague had been discussing with Counsel, over with Empire, about 3 potential timeframes and other parameters for closing. 4 5 Empire had suggested that the filings 6 be no later than June 23rd, and that they had 7 suggested 30 pages for findings of fact, conclusions 8 of loss, single spaced; and 25 pages for legal 9 briefing, double spaced. That's more than we had proposed, but 10 11 we're happy to accommodate them, and have additional 12 capacity for findings of fact and briefing. We had 13 proposed a little bit longer timeframe than they had, to complete all the work, and review all the records, 14 15 and testimony, and evidence. 16 It's substantial, more than the standard that we're -- that is normal. So I think 17 we're happy to have a firm date. It's fine with us, 18 but June 23rd is a little bit earlier than we would 19 20 prefer. So we would ask that the -- that we set 21 22 a deadline of July 3rd, before the holiday, for a 23 deadline to file the findings of fact, conclusions of 24 law, and the legal briefing. 25 And then I think we'd also discussed Page 124

1 having an opportunity for response on the legal 2 briefs. We had discussed ten -- or we had discussed ten days out of the rules. They had proposed ten 3 calendar days. It was a little bit tight, so we would 4 5 ask for, you know, ten days under the rules, which 6 would not include the weekends, in order to file a response to any legal briefing with -- I think we had 7 8 agreed no reply briefs; is that right? 9 Is that right, Dana? No reply brief? 10 So ten days -- our proposal would be 11 ten days including -- not including weekends, 12 following the legal brief for a response. 13 MS. HARDY: Mr. Examiner? 14 THE HEARING EXAMINER: Yes? 15 MS. HARDY: Can I -- Empire did -- we 16 did talk with Mr. Rankin and Mr. Jurgensen, and I 17 wanted to give you our proposed dates, because we did -- we can modify them, somewhat, from what we had 18 19 initially proposed to them. 20 I think it's our position that, as 21 Mr. Wehmeyer said, we don't need hearing transcripts 22 for the legal briefs. So we would propose to file those 30 days from today, or no later than June 23rd, 23 24 since we already have several of the transcripts, and we don't necessarily need them for the legal briefs. 25

1 And then regarding findings and 2 conclusions, we would propose to submit those 15 days after the final hearing transcript is available. 3 So we would propose to separate between the legal brief, 4 5 and the findings and conclusions. 6 THE HEARING EXAMINER: Okay. Before we 7 further discuss this, Chairman Razatos is trying to 8 get out of here to make a lunch meeting, I think. 9 Chairman Razatos, unless you think you 10 actually need to hear all these details, we could fill 11 you in on what ends up being agreed to, if you'd like 12 to take off now. I -- you know, it -- of course, up 13 to you, but wanted to give you that opportunity, and also an opportunity if you had, you know, closing 14 15 remarks to make at the conclusion of this whole 16 hearing, whether you wish to make those now? 17 Thank you, Mr. Hearing MR. RAZATOS: Officer. I will take you up on me potentially 18 19 leaving. I don't have any closing remarks. And if 20 you could just fill me in, I would appreciate it. I 21 apologize that I do need to leave. I'm sorry. I 22 didn't know how -- where we were going to be at. 23 But I thank everybody for their 24 patience and diligence in trying to make everything work as smoothly as possible. 25

1	And, Mr. Hearing Officer, I'll just
2	wait to have you fill me in on these, and details.
3	THE HEARING EXAMINER: Okay. Thank
4	you, Chairman Razatos. And all right. I appreciate
5	that.
6	MR. RAZATOS: Thank you.
7	THE HEARING EXAMINER: Then
8	we'll okay. So getting back okay.
9	So what I heard from you, Ms. Hardy, is
10	briefs by your proposal is briefs by June the 23rd
11	of '25, and findings of fact and conclusions of law, I
12	didn't write that down, but it was a timeframe tied to
13	the briefing?
14	MS. HARDY: Mr. Examiner, actually,
15	I've clarified with Empire, and we would propose that
16	both documents do be filed at the same time, or that
17	the deadline be the same, because I think it makes
18	sense for the Commission to look at them together.
19	So we would propose the findings of
20	fact, conclusions of law, and the brief, due either 14
21	days after the final hearing transcript is uploaded to
22	the case file, but in any event, no later than
23	June 23rd, because we do want to have this
24	THE HEARING EXAMINER: I don't want to
25	get into language that ends up being a contractual
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1 issue. Let's pick a date, either from today, or from when the transcripts are ready and filed, but let's 2 not have an either or. 3 MS. HARDY: Then we would just propose 4 June 23rd for both. 5 6 THE HEARING EXAMINER: June 23rd. And 7 Goodnight wants an extra week. I tell you what. I'm 8 going to err on the side of giving everybody an extra 9 week. That way, if there is any hold up or delay in 10 the transcript, it's more likely to be available, and 11 not become an issue. So how about we actually --12 THE REPORTER: Well, actually, just, 13 kind of -- I'm sorry, Mr. Harwood. This is Trevor, 14 the reporter. I figured it might be a little helpful. 15 Our estimated transcript turnaround date for today's 16 part of the transcript would be June 5, 2025, if 17 that's helpful to you, at all? 18 THE HEARING EXAMINER: It is helpful. 19 Does that help the parties? 20 MS. HARDY: I think so, Mr. Examiner. 21 And I think that would definitely make the June 23rd 22 date work. 23 THE HEARING EXAMINER: All right. Well 24 I'm going to give Mr. Rankin the extra week. I mean, 25 a week's not going to matter, one way or the other, I Page 128

,				
1	don't think, to either side, given the length that			
2	this proceeding has taken already.			
3	So am I hearing, then, that everybody			
4	would agree to their initial briefs and their findings			
5	and conclusions by July the 3rd of 2025?			
6	MR. WEHMEYER: What's the matter with			
7	June 30th?			
8	MR. RANKIN: That's acceptable to			
9	Goodnight.			
10	MR. BECK: It's fine with Rice and			
11	Permian.			
12	MR. SUAZO: That works for Pilot.			
13	THE HEARING EXAMINER: I'm sorry.			
14	Okay. Did I hear Mr. Suazo say yes?			
15	MR. SUAZO: Yes.			
16	THE HEARING EXAMINER: All right. And			
17	then my understanding then, is that everybody agrees			
18	to response briefs within ten days after			
19	June excuse me, July the 3rd, the ten days not to			
20	include not to count the weekends?			
21	MS. HARDY: And we had proposed that we			
22	do count the weekends, Mr. Examiner. We had proposed			
23	ten calendar days, and they proposed ten business			
24	days. So that's the difference. And again, we would			
25	just like to have this matter decided as quickly as			
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1 possible. 2 THE HEARING EXAMINER: I understand, 3 but the -- you know, we'll follow the Civil Procedure rule on that. I think it's anything under 11 days, 4 5 you don't count the weekend. So we'll go with Goodnight's request on that. So ten days for response 6 briefs after July the third, not counting weekends, or 7 holidays, if there are any. 8 9 MR. WEHMEYER: It's July 17th. 10 THE HEARING EXAMINER: Okay. Which, I 11 guess, if -- let's clear this up now, since deadline 12 for briefing is July the 3rd, so don't count the 4th. 13 MR. WEHMEYER: July 18th. 14 MS. HARDY: So July 18th would be the 15 deadline for response briefs. 16 THE HEARING EXAMINER: I'm terrible at 17 arithmetic, but I'll take your word for it. 18 All right. Now, there was -- was there 19 discussion about page lengths on findings and 20 conclusions and/or briefs? MR. WEHMEYER: Yeah, we had discussed 21 22 that, and had proposed -- and are willing to accommodate Empire's proposal, I think, 25 pages, 23 24 single space, for findings of fact and conclusions. 25 And 20 pages, Dana, for the legal Page 130

1	briefs?			
2	MS. HARDY: We had 25 pages for legal			
3	briefs, and 30 pages for findings of fact and			
4	conclusions of law. Single spaced on the findings and			
5	conclusions, which is typical for the Commission, the			
6	Division.			
7	MR. RANKIN: That's acceptable to			
8	Goodnight. Do we want to put a limit on response			
9	briefs, with the ten pages for response briefs?			
10	MS. HARDY: That's fine.			
11	MR. RANKIN: Okay.			
12	THE HEARING EXAMINER: Okay. So			
13	30 pages on findings and conclusions. Did I hear that			
14	right?			
15	MS. HARDY: Yes.			
16	THE HEARING EXAMINER: And 25 a			
17	single space. And 25 pages on briefs, the usual			
18	double spacing.			
19	MS. HARDY: Correct.			
20	THE HEARING EXAMINER: And ten pages on			
21	response briefs?			
22	MS. HARDY: Correct.			
23	THE HEARING EXAMINER: Okay. That's			
24	all of record.			
25	Rice and Pilot, are you guys on board			
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1 with that? 2 MR. BECK: It's fine with Rice. MR. SUAZO: That's fine with Pilot. 3 4 THE HEARING EXAMINER: All right. 5 Dr. Ampomah, any questions? THE REPORTER: I'm sorry. This is the 6 7 reporter. I was thinking that the attorney for Rice 8 and Pilot was both Mr. Suazo. Who was the one who 9 answered just before Mr. Suazo? Sorry for this. 10 THE HEARING EXAMINER: That's Matthew 11 Beck. B-E-C-K. 12 THE REPORTER: Thank you. Sorry. Just 13 getting mixed up a little bit. Sorry for the 14 interruption. 15 THE HEARING EXAMINER: That was just a 16 joke, Dr. Ampomah. You don't have to ask any 17 questions to these guys. I don't need to -- I 18 probably don't need to keep you gentlemen here for all 19 of this, come to think of it. But you're --20 MR. AMPOMAH: If -- I have one guick 21 question. I was asking if we can get the 22 presentations from the conclusions that was presented 23 today? THE REPORTER: And also, I don't know 24 25 who was just talking. Can I find out who was just Page 132

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1 talking?

2	THE HEARING EXAMINER: Yeah, that's			
3	MR. AMPOMAH: Dr, William Ampomah.			
4	THE REPORTER: Got you. Thank you.			
5	THE HEARING EXAMINER: Okay.			
б	MR. WEHMEYER: For the part of Empire,			
7	we would very much appreciate the opportunity to			
8	provide you with the closing slide presentation. And			
9	I misspoke. One of them was a Mr. Birkhead's slide			
10	that I spoke in percentages as opposed to millions of			
11	barrels and oil per place, in section. So I'm glad			
12	you'll get that to have that correction at the bottom,			
13	not of the percentage.			
14	THE HEARING EXAMINER: All right.			
15	Do you have any objection, Mr. Rankin,			
16	to both sides I guess everyone's, Rice, and			
17	Pilot I guess, Pilot didn't present any documentary			
18	backup during closing, but is everybody agreeable that			
19	what they referenced during closing be made available			
20	to the Commission?			
21	MR. RANKIN: That's agreeable, and I			
22	will exclude the reference to the press release that			
23	Empire had submitted for media consumption. But I			
24	will exclude that with my submission.			
25	MR. WEHMEYER: We would also ask that			
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1	Mr. Moander filings, that Mr. Rankin provided, those,			
2	two slides also be excluded.			
3	THE HEARING EXAMINER: Yeah. I would			
4	agree. The things that are not in evidence, that were			
5	referenced in your closing, Mr. Rankin, don't include			
6	those.			
7	MR. RANKIN: Understood.			
8	MR. SHANDLER: This is Mr. Shandler			
9	from the New Mexico Department of Justice. So just to			
10	tell the parties, we may not get to it at the			
11	July meeting. I don't think it's been scheduled yet.			
12	It's usually in late July, but that's a lot of			
13	material. It's possible, but you can tell your			
14	clients July or August.			
15	MR. WEHMEYER: Thank you, very much.			
16	THE HEARING EXAMINER: All right.			
17	Mr. Shandler, anything further from the			
18	Commission before we bang the virtual gavel and bring			
19	this proceeding to its final conclusion?			
20	MR. SHANDLER: This is Zach Shandler			
21	from the Department of Justice. Nothing further.			
22	THE HEARING EXAMINER: Well, all right,			
23	folks. Thank you. I, for one, have learned an awful			
24	lot during the course of this proceeding, and so I			
25	appreciate the opportunity and privilege to be here			
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1	for what little I if any, that I contributed to it.			
2	So appreciate everybody's time and			
3	attention.			
4	And, Mr. Arnold, I believe we'll be off			
5	the record, at this time, in these consolidated cases.			
6	Thank you, all. Everybody's free to			
7	go. We're adjourned.			
8	THE REPORTER: The time is 12:04 p.m.,			
9	New Mexico time. We are off the record.			
10	(Whereupon, at 12:04 p.m., the			
11	proceeding was concluded.)			
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1	CERTIFICATE			
2	I, TREVOR ARNOLD, the officer before whom			
3	the foregoing proceedings were taken, do hereby			
4	certify that any witness(es) in the foregoing			
5	proceedings, prior to testifying, were duly sworn;			
б	that the proceedings were recorded by me and			
7	thereafter reduced to typewriting by a qualified			
8	transcriptionist; that said digital audio recording of			
9	said proceedings are a true and accurate record to the			
10	best of my knowledge, skills, and ability; that I am			
11	neither counsel for, related to, nor employed by any			
12	of the parties to the action in which this was taken;			
13	and, further, that I am not a relative or employee of			
14	any counsel or attorney employed by the parties			
15	hereto, nor financially or otherwise interested in the			
16	outcome of this action.			
17	TREVOR ARNOLD			
18	Notary Public in and for the			
19	State of Texas			
20				
21				
22				
23				
24				
25				
	Page 136			

1	CERTIFICATE OF TRANSCRIBER
2	I, STEPHEN SMALE, do hereby certify that
3	this transcript was prepared from the digital audio
4	recording of the foregoing proceeding, that said
5	transcript is a true and accurate record of the
6	proceedings to the best of my knowledge, skills, and
7	ability; that I am neither counsel for, related to,
8	nor employed by any of the parties to the action in
9	which this was taken; and, further, that I am not a
10	relative or employee of any counsel or attorney
11	employed by the parties hereto, nor financially or
12	otherwise interested in the outcome of this action.
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15	STEPHEN SMALE
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