

STATE OF NEW MEXICO
ENVIRONMENTAL IMPROVEMENT BOARD

No. EIB 21-27(R)

IN THE MATTER OF PROPOSED NEW REGULATION,
20.2.50 NMAC - Oil and Gas Sector -
Ozone Precursor Pollutants

TRANSCRIPT OF PROCEEDINGS

BE IT REMEMBERED that on the 21st day of
September, 2021, this matter came on for hearing before
FELICIA ORTH, Hearing Officer, virtually through Cisco
Webex Meetings video conferencing, commencing at 9:00 a.m.

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1 HEARING OFFICER ORTH: Good morning. My name is
2 Felicia Orth; I'm the Hearing Officer appointed by the
3 Environmental Improvement Board to conduct a hearing in a
4 rulemaking docketed by the administrator as EIB 21-27. It
5 regards a proposed rule in relation to ozone precursor air
6 pollutants. Thank you for joining us this morning. We
7 begin this morning with public comment, and I will tell
8 you that I have on --

9 MR. ROSE: I was going to, but I wasn't sure if
10 that was --

11 HEARING OFFICER ORTH: Hold on. Lou, please mute
12 yourself. There we go. Let's see. Too many screens
13 open, trying to keep track of attendees and the Chat. All
14 right.

15 So let me tell you the names of the folks that we
16 have who have indicated a desire this morning to offer
17 public comment. The names are -- and I will call on you
18 in this order: Curtis Smith, Sister Marlene Parrot and
19 Sonia Soto. It is not required that you send us an email
20 before I invite your comment. It's just that I call on
21 the folks who did send us an email before I open it up
22 more generally.

23 Please remember that public comment is limited to
24 five minutes, and if there is more to say, I will invite
25 you to put your comment into writing and send it to Pam

1 Jones. All comments, like all testimony in this hearing,
2 is taken under oath and subject to questioning. So let's
3 start. Let me see if Mr. Smith is on the platform.

4 Curtis Smith. It does take me a moment to scroll through
5 the names, so pardon me while I do that. Connie, Colette,
6 sorry. We moved right from the C's to the D's. I don't
7 see Mr. Smith.

8 So I know that Sister Parrot is on the platform.
9 I saw her name. Let me get to you. There you are.

10 Sister Parrot, can you hear me?

11 SISTER PARROT: Yes.

12 HEARING OFFICER ORTH: Terrific. If you would
13 please raise your right hand. Do you swear or affirm that
14 you will tell the truth?

15 SISTER PARROT: I do.

16 HEARING OFFICER ORTH: Thank you very much. I
17 will start your five minutes now.

18 SISTER MARLENE PARROT,
19 having been first duly sworn or affirmed,
20 gave public comment as follows:

21 PUBLIC COMMENT OF SISTER MARLENE PARROT

22 SISTER PARROT: Dear Members of the Environmental
23 Improvement Board: I am Marlene Parrot, a Sister of Mercy
24 and member of New Mexico Interfaith Power and Light. I am
25 speaking today to encourage the EIB to vote to support and

1 strengthen the New Mexico Environment Department's draft
2 rule to address ozone precursor pollutants from oil and
3 gas operations. These are ethical issues that demand
4 protection of the common good.

5 Oil and gas operations also release hazardous air
6 pollution such as benzene, that is proven to cause cancer;
7 putting those living closest to oil and gas operations at
8 the greatest risk. More than 130,000 New Mexican live
9 within a half mile of oil and gas development. Rural
10 communities, tribal communities, children and the elderly
11 are especially at risk. New Mexico is home to some of the
12 worse methane pollution in the country. New Mexico is home
13 to two energy-producing regions that are among the
14 nation's most polluted: Eddy, Lea, San Juan, Rio Arriba,
15 and Chaves Counties, the five New Mexico counties home to
16 97 percent of the state's oil and gas wells are all at
17 risk of violating federal ozone standards of 70 parts per
18 billion.

19 More methane pollution means accelerated climate
20 change and an uncertain future for New Mexico's children.
21 Methane is a potent greenhouse gas, 84 times more powerful
22 than carbon dioxide in the near term. In fact, methane
23 pollution contributes to about 25 percent of the global
24 warming we are experiencing today. This rule is critical
25 for protecting both our health and climate by reducing

1 small forming volatile organic compounds as well as
2 methane, a powerful greenhouse gas responsible for 25
3 percent of climate change we are experiencing today.

4 While the environment department has put forward
5 a strong proposal, more work needs to be done to protect
6 communities and address major pollution sources to meet
7 Governor Lujan Grisham's goal of nation-leading rules to
8 cut pollution.

9 I would also emphasize that adequate funding for
10 inspections, monitoring and implementation of violations,
11 corrections, and fines be somewhat addressed. Please
12 adopt a strong final rule that protects communities and
13 addresses major sources of air and climate pollution.
14 Thank you very much.

15 HEARING OFFICER: Thank you very much.

16 All right. Sonya Soto was the next person who
17 indicated a desire to offer public comment this morning.
18 Ms. Soto, let's see if you're on the platform. In the
19 event you are on the platform and you'd like to make a
20 comment, please send a message through the Chat. If you
21 are struggling with the Chat function at all, call or send
22 a text to (505) 660-4305 and we'll get you -- we'll get
23 you taken care of.

24 Ms. Soto, I'm unmuting you. Ms. Soto, can you
25 hear me? Ms. Soto? Oh, there you are. I've unmuted you.

1 Can you hear me?

2 MS. SOTO: Can you hear me?

3 HEARING OFFICER ORTH: Oh, you're very soft. Can
4 you speak up, please?

5 MS. SOTO: Can you hear me now?

6 HEARING OFFICER: Yes, that's much better. Thank
7 you. Okay.

8 MS. SOTO: Okay.

9 HEARING OFFICER ORTH: Would you -- your first
10 name is spelled S-O-N-I-A and your last name is S-O-T-O?

11 MS. SOTO: Yes, ma'am.

12 HEARING OFFICER: All right. Would you raise
13 your right hand, please. Do you swear or affirm to tell
14 the truth?

15 MS. SOTO: Yes.

16 HEARING OFFICER ORTH: Thank you. Your five
17 minutes starts now.

18 SONIA SOTO,
19 having been first duly sworn or affirmed,
20 gave public comment as follows:

21 PUBLIC COMMENT OF SONIA SOTO

22 MS. SOTO: Dear Members of the Environmental
23 Improvement Board. I am a member of the CCFF and a
24 resident of Eddy County. I live in Carlsbad. I am
25 concerned about the methane pollution because of the

1 effects it has caused in this area. I support methane
2 rules and thank the Environmental Improvement Board for
3 this hearing. My grandson lives here in Carlsbad -- well,
4 we all do, and just seeing in the last ten years how much
5 Carlsbad has changed, it's very worrisome. I worry about
6 what kind of future he would have if we continue to live
7 here. We are, like, in a highly polluted area, county,
8 and our children need us to speak up for them and we -- we
9 need to make some changes for this area.

10 We're already experiencing impacts of climate
11 change. Our health, the air, the land, our water, like we
12 used to have a really nice river and it's just not the
13 same anymore. And I don't think we can ignore it anymore.
14 I think we need to make these changes now. Thank you.

15 HEARING OFFICER ORTH: Thank you very much,
16 Ms. Soto. I don't have anyone else indicating in the Chat
17 that they wish to offer comment. I don't see any other
18 unidentified call-in users.

19 Pam, did anyone else reach out to you to make
20 comment during this 9:00 session?

21 She may have stepped away. Oh, let me just --
22 oh. Vice-Chair Trujillo-Davis, absolutely.

23 VICE-CHAIR TRUJILLO-DAVIS: I just want to say
24 thank you to the two members of the public who spoke out
25 this morning. I understand it takes a lot of courage to

1 get on a platform like this and even to stand up in front
2 of the group when we all are gathered, so thank you for
3 taking the time to speak up.

4 HEARING OFFICER ORTH: Yes. Thank you.

5 Opportunities to offer nontechnical public
6 comment, it's at 9 a.m., 1 p.m. and 5 p.m. every day.
7 (Unintelligible.) To Pam Jones and identify the slot that
8 you are interested in. So I have a Chat message from
9 Sister Brown, asking if there's a Kyle on the call. And
10 there we go. I'm sorry, there's no Kyle on the call, but
11 please -- (unintelligible)

12 COURT REPORTER: Ms. Orth, you're cutting in and
13 out. It's Theresa, you're cutting in and out.

14 HEARING OFFICER ORTH: Oh, really? I'm not
15 getting any warning messages, but I will -- does it help
16 if I increase my volume?

17 COURT REPORTER: We'll see.

18 HEARING OFFICER ORTH: All right. I've just
19 heard from a staffperson saying that I'm not the one
20 cutting out, Theresa.

21 Okay. By the way, if it continues for you,
22 Theresa, although I do watch you carefully to make sure
23 that you're not waving your hands at me, it often helps to
24 turn off your camera, if you can.

25 MS. KATZ: Madam Hearing Officer, this is Lara

1 Katz; you're also cutting out for me as well, so I don't
2 know if it's -- I think it might not just be the court
3 reporter.

4 HEARING OFFICER ORTH: Okay. Well, thank you for
5 that. I'm getting mixed -- mixed messages. All right.
6 So let's turn from the -- let's turn from the technical
7 comment session back to the technical case. And when we
8 ended last night, we were in agreement that we would begin
9 this morning with modeling. So Ms. Katz?

10 MS. KATZ: Madam Hearing Officer, Mr. Knight is
11 going to be presenting Mr. Morris for the modeling.

12 HEARING OFFICER ORTH: Terrific. Thank you. You
13 might have said that and I didn't remember. So thank you.

14 Mr. Knight, whenever you're ready, do I need to
15 turn Mr. Morris into a panelist or do we already have him?

16 MR. KNIGHT: Yes, please, if he's not already.

17 HEARING OFFICER ORTH: Let's see here. Remind me
18 of the first name.

19 MR. KNIGHT: Ralph.

20 HEARING OFFICER ORTH: Ralph, thank you. There
21 he is. Okay.

22 VICE-CHAIR TRUJILLO-DAVIS: Can you send the
23 exhibit numbers for this witness?

24 MR. KNIGHT: Yes. Member Trujillo-Davis and
25 Madam Hearing Officer, members of the Board, we will be

1 Exhibit NMED 107 for the direct testimony and NMED
2 rebuttal Exhibit 11 for the rebuttal testimony.

3 And Madam Hearing Officer, the Department would
4 like to call Ralph Davis.

5 HEARING OFFICER ORTH: Okay. Thank you.

6 MR. KNIGHT: Or excuse me -- Ralph Morris. I'm
7 sorry.

8 HEARING OFFICER ORTH: All right. Mr. Morris,
9 can you turn on? There you are.

10 MR. MORRIS: Here I am.

11 HEARING OFFICER ORTH: I see you on the video and
12 you're unmuted. Do keep your voice up, please. And
13 apparently, we were speaking at higher speeds yesterday,
14 so -- toward the end of the day, so if you would please
15 take care to speak slowly. The transcript in this matter
16 is the official record.

17 If you would raise your right hand, please. Do
18 you swear or affirm to tell the truth?

19 MR. MORRIS: I do.

20 HEARING OFFICER ORTH: Thank you very much.

21 And it looks like Ralph and Morris are both the
22 standard spelling, so thank you.

23 RALPH MORRIS,
24 having been first duly sworn or affirmed, was examined
25 and testified as follows:

1 DIRECT EXAMINATION OF RALPH MORRIS

2 BY MR. KNIGHT:

3 Q. Good morning, Mr. Morris. Could you tell us
4 where you are employed?

5 A. I work for Ramboll U.S. Consulting, Inc.

6 Q. And how long have you worked for Ramboll?

7 A. Almost 27 years.

8 Q. And what is your current job title?

9 A. I'm a managing principal.

10 Q. And what are your job duties?

11 A. I have two main duties. One is I manage the
12 Central West Business Unit of Ramboll Environment and
13 Health; that consists of about 130 people and offices in
14 Northern California, Utah and Colorado. And they also
15 lead air quality consulting projects, many that have to do
16 with photochemical grid modeling and evaluating the
17 effects that emission controls have on ozone, particulate
18 matter, visibility, and deposition.

19 Q. Please describe your educational and professional
20 qualifications.

21 A. So I have a Bachelor's and a Master's in
22 Mathematics from the University of California. I started
23 my air quality consulting career back in 1979, modeling
24 ozone formation in the Los Angeles Basin. And since then,
25 I've developed numerous ozone and particulate matter

1 models and applied them in many different strategies and
2 studies. I was responsible for delivering the Urban
3 Airshed Model that was the first photochemical grid model
4 to the EPA, and that was used in the first set of ozone
5 SIPs back in 1994.

6 Since then, I've built other models that I've
7 used in the Ozone Transport Assessment Group. And when I
8 joined Ramboll and Environ back in 1994, I led or co-led
9 the development of the comprehensive air quality model
10 extension, which is the photochemical grid model that was
11 used in this particular study.

12 Q. What are some of your more recent photochemical
13 air quality modeling projects?

14 A. Well, the last two years I led the photochemical
15 modeling for the Western States Regional Haze SIPs, so
16 that was for the Western Regional Air Partnership. And
17 then I've also over the last few years, led the Denver
18 Ozone SIP modeling for the -- as a moderate -- excuse me,
19 as a serious ozone nonattainment area under the 2008 ozone
20 NAAQS. And I'm currently doing the modeling for Denver,
21 as a severe nonattainment area under the 2008 NAAQS, and a
22 moderate nonattainment area under the 2015 ozone NAAQS.
23 And then I also led the photochemical modeling for the New
24 Mexico Ozone Attainment Initiative that's the subject of
25 today's testimony.

1 Q. And a copy of your resume has been provided as
2 NMED Exhibit 107, correct?

3 A. That is correct.

4 Q. Okay. And you've submitted direct and rebuttal
5 testimony for this proceeding?

6 A. Yes, I have.

7 Q. Okay. Your full written, direct testimony
8 appears as NMED Exhibit 106 and your written rebuttal
9 testimony appears as NMED Rebuttal Exhibit 11; is that
10 correct?

11 A. That is correct.

12 Q. Do you have any changes to your written
13 testimony?

14 A. No.

15 Q. And do you adopt your written testimony here
16 today?

17 A. Yes.

18 Q. So, Mr. Morris, can you summarize the results of
19 the New Mexico Ozone Attainment Initiative Photochemical
20 Modeling Study?

21 A. Yes. I have a PowerPoint presentation to do
22 that.

23 Q. Okay. I think you should be able to share your
24 screen and begin that presentation.

25 A. My share button seems to not be working.

1 HEARING OFFICER ORTH: It takes me a second.

2 Hold on. Okay. Now you should have it.

3 MR. MORRIS: It still doesn't seem to be working.

4 HEARING OFFICER ORTH: It takes a second.

5 MR. MORRIS: Oh, there we go.

6 HEARING OFFICER ORTH: And by the way, in the
7 event -- I'm not getting a low band width signal for
8 myself, but in the event you see me go dark, that's all
9 I'm doing; I'm still sitting here, but I may turn off my
10 video if I continue to cut out. And I did just have --
11 okay. Please go ahead.

12 MR. MORRIS: Is my screen sharing? Is my screen
13 sharing?

14 HEARING OFFICER: Yes, it is.

15 Q. (BY MR. KNIGHT) Yes.

16 A. Okay. Good. Oh, so I'm going to talk about the
17 New Mexico Ozone Attainment Initiative Photochemical
18 Modeling Study. And this is all information that's in my
19 direct testimony or rebuttal testimony.

20 So, this is a yearlong study starting in April
21 2020 and -- or actually for a few months. And the steps
22 in doing this study was starting with the modeling
23 protocol. We're following EPA's Ozone Modeling Guidance
24 or SIP modeling, even though this wasn't a SIP. And the
25 next step was we did a work meteorological modeling to get

1 the meteorology for our modeling period. We had 2014
2 base-case emissions that we adapted from the Western
3 Regional Air Partnership. And then we did a CAMx, which
4 had a photochemical grid model 2014 base-case modeling and
5 allowed us to perform evaluations.

6 We developed new 2028 New Mexico oil and gas
7 emissions, projecting those through 2028. And then we
8 took the rest of the 2028 base-case emissions based on the
9 WRAP 2028 OTBa2. And those WRAP, 2014 and 2028 emissions,
10 are what was used in the Western States Regional Haze SIPs
11 so they've been extensively reviewed and evaluated and
12 documented.

13 We then did a CAMx 2028 base-case and a CAMx 2028
14 New Mexico oil and gas control strategy case, and that had
15 the rules we're discussing today. Then we assessed the
16 ozone impacts of the oil and gas controls. And, finally,
17 we did some ozone apportionment modeling of the 2028 New
18 Mexico oil and gas control strategy.

19 During the course of this study, we had a website
20 up in the WRAP website, where we documented the study as
21 it occurred, starting with the modeling protocols in May
22 of 2020. We had monthly webinars with the New Mexico
23 Environmental Division, and then we posted those as PDFs
24 up on the website. And then we had a couple of base-case
25 modeling reports and then the -- in May 2021, we had an

1 air quality technical support document, which my direct
2 testimony was based on that. And that was what was
3 reviewed by Mr. McNally and Mr. Blewitt.

4 So to just back up a little bit, a photochemical
5 grid model divides the domain that you're modeling into a
6 series of grid squares or an array of three-dimensional
7 grid squares, those stacked boxes. We get the
8 meteorological inputs from this Weather Research Forecast
9 Meteorological Model that gives you three-dimensional
10 meteorological variables like wind speed, wind direction,
11 temperature, pressure, water vapor, precipitation and all
12 of the meteorological, it's kind of a weather forecasting
13 model.

14 There's concentration around the outside of our
15 domain, that we call boundary conditions. So these are --
16 these come from a global chemistry model that WRAP ran for
17 2014. And then there are emission inputs, where you have
18 gridded low-level emissions that go directly to the first
19 layer of the model, and then elevated point sources that
20 have plume rise and go into the -- are injected into the
21 upper layer of the models.

22 And these emissions have to be processed to make
23 them hourly, gridded and speciated into the chemical
24 species used in the chemical mechanism. And finally, the
25 photochemical grid model itself, in this case, CAMx,

1 simulates the transport, its dispersion, the chemical
2 transformation and deposition of the pollutants within
3 this three-dimensional domain.

4 And there's the simple schematic of the PGM there
5 on the right. Of course, for the NMED Ozone Attainment
6 Initiative, we ran with three nested grid domains of
7 different resolutions, with an outer domain. The Northern
8 American domain had a 36 kilometer resolution. The inner
9 domain, there's a 12 kilometer Western US domain, and
10 those are the exact same domains used by WRAP for the
11 Regional Haze SIPs for the Western states. But then we
12 added a 4 kilometer grid resolution domain that covered
13 New Mexico and surrounding areas. And we covered -- made
14 sure we covered the San Juan Basin oil and gas and the
15 Permian Basin. So we actually went into Texas quite a bit
16 and into the Four Corner domains. So these domains are
17 two-way grid domains, that means that the pollutants flow
18 in and out of them in the CAMx simulation.

19 The boundary conditions that I mentioned were
20 based on the WRAPs 2014 simulation of the geoscanned
21 global chemistry models, so those are the concentrations
22 around the outer edges of the 36-kilometer domain. And
23 then we did -- we actually did two WRF simulations and
24 four WRF meteorological sensitivity tests and we picked
25 the meteorological inputs that gave us the best ozone

1 performance within New Mexico.

2 And then we had the 2014 emissions that were
3 based on the WRAP, 2014v2 emissions. That was, in turn,
4 based on EPA's national emissions inventory from 2014.
5 And then we also had the -- we also used the WRAP, the
6 2028 on the books A2 emissions for all 2028 emissions,
7 except for the New Mexico oil and gas emissions, where we
8 developed new base-case 2028 emissions.

9 We did a model performance evaluation, I'm just
10 going to one slide on that, because there's two reports on
11 that, but we used these standard model performance
12 criteria -- the ozone criteria, and normalized, meaning
13 biased. The goal is within plus or minus 5 percent. As
14 you can see on the right, there's a -- it shows the bias
15 at each site. And when they're gray, they're within plus
16 or minus 5 percent. If they're bright yellow, there's a
17 slight overestimation. And you can see there is a -- you
18 know, we're pretty much within the performance criteria at
19 all of the key monitors or -- so it would be the bright
20 yellow or gray, and it's within the performance goal at
21 most monitors.

22 We did evaluation in subregions looking at
23 Northern New Mexico, Central New Mexico, and Southern New
24 Mexico and found -- we did this with and without the
25 cut-off. That means that with no cut-off, we used all

1 observed and predicted ozone pairs. And with cut-off, we
2 only looked at the high end of the observed distributions
3 so that's only when we observed predicted pairs for ozone
4 greater than 60 ppb. And we always achieved the ozone
5 criteria, and we mostly achieved -- and almost always
6 achieved the ozone goal. It was just the Southern region,
7 without the cut-off, being slightly above the plus or
8 minus 5 percent goal.

9 And the NMOGA expert's modeling agreed that the
10 ozone performance we saw was good or better, as most PGM
11 applications that we've seen. And they agreed that it was
12 a reliable PGM modeling platform for evaluation of control
13 strategies in New Mexico.

14 So, moving to the part of the testimony that is
15 the New Mexico base and control emissions. The
16 differences on the left show the differences in NOx
17 emissions on top and VOC emissions on the bottom, between
18 the 2028 control strategy and the 2028 base-case. On the
19 left is the nonpoint oil and gas emissions. On the right
20 is the point oil and gas emissions. The only difference
21 between the 2028 base-case and the 2028 control strategy
22 was New Mexico oil and gas emissions.

23 And you can see the, you know, the VOC, NOx. You
24 can clearly see the San Juan Basin, and the Permian Basin
25 is showing there. These total emissions reductions in

1 that table there between the 2028 base and the 2028 oil
2 and gas control strategy is about a 45-percent reduction
3 in NOx emissions and a 50-percent reduction in oil and gas
4 VOC emissions. And the control strategy only assumed
5 controls in New Mexico.

6 I mentioned the 2028 New Mexico base-case, New
7 Mexico oil and gas emissions, and we projected those to
8 2028 using projected factors provided by BLM. They
9 provided those around September of 2020. In the 2028
10 control case, we did not implement controls. We provided
11 the base-case -- the 2028 New Mexico oil and gas base-case
12 emissions to Eastern Research Group, ERG, and they
13 implemented the controls and sent them back to us, and we
14 processed them for input into the photochemical grid
15 model. And as I mentioned before, the remainder of the
16 2028 emissions were based on the WRAP, the 2028OTBa2
17 scenario, the same scenario used for the Western States
18 Regional Haze SIP.

19 So we followed the EPA guidance for SIP modeling
20 and the recommended procedures for making ozone design
21 value projections, is to use the model in a relative
22 sense. I think Michael Baca talked about ozone design
23 values defined as a three-year average of the fourth
24 highest maximum daily 8 hour ozone concentrations.

25 So, to project and observe ozone design by moving

1 forward to the future year, you take the ratio of the
2 modeling results for this case, the 2028 scenario, to the
3 2014 scenario, and this ratio is called the relative
4 response factors. And you use that to scale the observed
5 ozone design value to get a future year ozone design
6 value. And the idea being that, by using the ratio of the
7 future to current year modeling results, you limit some of
8 the uncertainties in the model biases.

9 So we're predicting both in the current year and
10 predicting in the future year, so that ratios out. So you
11 get your future-year design value, the DVF, by just
12 multiplying the current-year design value by the relative
13 response factor. So this is using the model in a relative
14 sense. And the EPA default guidance is to use a current
15 design value based on a five year -- a three-year average
16 of design values, or five years centered on the base
17 modeling year, which was 2014. So we ended up using a
18 base-year design value based on an average design values
19 from 2012 to 2016. So that's DVC -- 2012-2016.

20 And all of these projections were made using the
21 EPA's software for model of attainment tests with the
22 default settings. So for the base -- 2028 base-case, this
23 is a table of projections of the future design values for
24 the 2028 base-case. Based on the 2012 to 2016 current
25 year design values, there are two sites that exceeded the

1 70 ppb 2015 Ozone NAAQS, and that's 72.0 at Desert View
2 and 71.3 at Santa Teresa, both in Doña Ana County.

3 In the future year, using this EPA default
4 guidance projection approach, all design values are below
5 the 70 ppb standard, with the highest one being in Desert
6 View, that's 67 ppb, which is right at 95 percent of the
7 NAAQS. And the reductions are anywhere from -2 ppb at
8 Hobbs County, Lea -- the Hobbs monitor in Lea County, and
9 -6.3 in La Union County -- La Union site.

10 This is a -- SMAT also has an unmonitored area
11 test, where it interpolates the base year design value
12 from 2012 to 2016. And then you do projections across in
13 every grid square, and this is a spatial map of 2028. On
14 the left is 2028 base-case ozone design value, and then
15 the differences between the 2028 from the control case and
16 the 2028 base-case.

17 The colder colors are reductions in ozone design
18 values between 2028 base and the 2028 control case. And
19 the warm colors are increases in ozone design values
20 between the -- excuse me -- sorry, this is the 2028
21 base-case and the 2014 base case. I'm getting ahead of
22 myself. So this is the -- so the maximum design value is
23 68 ppb in the 2028 base, and you can see there are
24 increases between 2014 and 2028 projected in those design
25 values in the San Juan Basin and the small spots in the

1 Permian Basin, but everywhere else in New Mexico there are
2 reductions because there are large reductions in things
3 like mobile source VOC and NOx between 2014 and 2028.

4 And then we get to the 2028 New Mexico oil and
5 gas control strategies, and these -- this shows the
6 reductions in the 2028 base-case ozone design values due
7 to the implementation of the control strategy. And we see
8 reductions by as much as 1.5 ppb at Navajo Lake and 1.2
9 ppb at Substation, and 0.8 at Bloomfield; those are all in
10 the San Juan Basin. In the New Mexico oil and gas control
11 strategy, the largest reductions of .7 ppb at Hobbs in Lea
12 County and .3 ppb at Carlsbad in Eddy County. So these
13 are reductions in 2028 ozone design value projections.

14 And now, these are the differences in 2028 ozone
15 design values from the 2028 base-case to the 2028 New
16 Mexico oil and gas control case. And you can see that
17 there are large reductions -- on the right there's
18 reductions in the design values; again, cold colors are
19 reductions and we see large reductions in the San Juan
20 Basin up here, with the reductions about as high as about
21 3 ppb. And then there's reductions as high as about, you
22 know, 1 to 1.5 ppb down in the Permian Basin.

23 And I don't know if you can see -- but you can
24 actually see the small pixel of areas of red where
25 actually ozone increased due to the controls -- the oil

1 and gas control strategy, and that's due to the NOx
2 disbenefit effects. In other words, if you can control
3 NOx, you can actually increase ozone locally, even though
4 downwind it's going to reduce the ozone. So you can see
5 that in these isolated spots in the Permian Basin and San
6 Juan Basin.

7 Okay. And so, this is looking at the modeling
8 results in a relative sense. We also looked at the
9 absolute modeling results on each day, and this is just
10 examples of the 2028 base on the left; 2028 control case
11 in the middle; and then their differences on the right for
12 two days. The top is June 4th, and that's the day when
13 there's a peak ozone of 74 ppb right on the border of New
14 Mexico and Colorado in the San Juan Basin.

15 And then, when you do the controlled case, that
16 74 ppb goes away and all of the -- there's an area of
17 ozone that's seen in the base case, and that's the yellow
18 color that's stretching into San Juan County and Rio
19 Arriba County, and that goes away with the New Mexico oil
20 and gas control strategy, so that all of the ozone that
21 was above the ozone standard in the base case, is below
22 the standard. That's in the middle, top.

23 And then on the right, you can see the large
24 reductions in ozone, by as much as 6 ppb -- excuse me --
25 as much as 2.8 ppb reduction. So that's a case in which

1 the control strategy reduces ozone on a day that was
2 above -- modeled above the standard on June 4th in the
3 base case, to below the standard in the control strategy.

4 The bottom is July 24th, where the peak ozone was
5 71.3. Again, it's right across the border in Colorado,
6 from New Mexico. And in the control case, the peak is 71
7 ppb, so that just barely exceeds the ozone NAAQS. And on
8 the right, you can see the differences in the ozone
9 concentrations on this day, and it was mostly reductions,
10 especially in the Permian Basin, but there is an area with
11 a 6 ppb increase in the middle of San Juan County. And
12 that's actually the location where the ozone is at 71 ppb
13 in the control case, so that's an indication of the NOx
14 disbenefits. In other words, that's -- a more VOC-limited
15 ozone reduction location because it's seeing the NOx
16 disbenefits occurring there.

17 Okay. So we looked at the sensitivity of the EPA
18 projection approach, to the base-year ozone current year
19 design value. These are the tables, the time series of
20 ozone design values from 2010 -- year ending 2010, to
21 2019. The red are shaded for ozone design values that are
22 greater than the 2008 75 ppb ozone standard. The yellow
23 is above the 70 ppb 2015 ozone standard, and the green is
24 above 95 percent of the 2015 ozone standard.

25 And what we're seeing is that, at least in

1 southern -- Southern New Mexico, the ozone design values
2 are going up over time. So, using the third year ozone
3 design value from 2012 to 2016, that's the EPA default
4 approach, does not account for these higher ozone design
5 values in the more current year. So what we did -- and
6 for example, you know, the 2012 to 2014 design value had
7 three sites over the 70 ppb standard; whereas, the more
8 recent 2017 to 2019 ozone design values had six sites over
9 the 2015 ozone NAAQS and three sites actually above the 75
10 ppb 2008 NAAQS.

11 So, the EPA modeling guidance suggests making
12 future-year ozone design value projections using
13 alternatives to the default approach, and one of the
14 things they do mention explicitly in the guidance is to
15 use an alternative to the base-year design value. And
16 we -- we felt this was justified, given this increase in
17 ozone design values over time. So we did this projection,
18 the sensitivity analysis, using the three-year design
19 value based on 2015 to 2019, the five-year period with
20 current design value.

21 In this case we had four sites that were above
22 the ozone NAAQS. And when we did the projection for the
23 base-case there was still one site above the ozone NAAQS,
24 at 71.2 ppb at Doña Ana -- or excuse me -- at the Carlsbad
25 site in Eddy County. And then, for the 2028 New Mexico

1 oil and gas control strategy, it actually reduced that
2 71.2 ppb down to 70.9, to below the ozone NAAQS. So this
3 is a case where with this sensitivity analysis, the
4 control strategy was sufficient to reduce the projected
5 ozone design value in the base case that was above the 70
6 ppb ozone standard to below the standard.

7 There are numerous more caveats in doing the
8 sensitivity analysis and uncertainties than the EPA
9 default approach, but this was a -- I felt this was
10 warranted, given the increase in the ozone design values.

11 We also did ozone source apportionment modeling
12 using the 2028 New Mexico oil and gas control strategy
13 emission scenario. We did two different source
14 apportionment runs; one was a source sector source
15 apportionment run to look at the constitutions of source
16 sectors, like natural emissions, fires, oil and gas point
17 sources, oil and gas nonpoint sources, electrical
18 generating U's, other point sources, on-road mobile,
19 nonroad mobile, and other anthropogenic. And then the --
20 let's see -- we'll call it the APCA of ozone apportionment
21 source sector analysis.

22 Then we did a second CAMx ozone source
23 apportionment analysis called OSAT, which is looking at
24 VOC versus NOx sensitive ozone formation. This provides a
25 measure of whether the ozone formation in New Mexico is

1 more sensitive to VOC or NOx conditions. And to display
2 that, I used this percent NOx sensitive ozone formation
3 metrics. So it goes from 0 to 100 percent, and the
4 percent VOC sensitive is supposed to be 100 minus percent
5 NOx sensitive.

6 So the APCA, the ozone source apportionment, was
7 designed to answer the question: What is the ozone
8 contributions of major source sectors in New Mexico to the
9 ozone concentrations under the New Mexico 2028 oil and gas
10 control scenario? Whereas, the OSAT, the VOC/NOx
11 sensitive source apportionment runs, is designed to answer
12 the question what is the relative importance -- the
13 relative sensitivity of ozone formation to VOC versus NOx
14 emissions.

15 So this is the contributions of the various
16 source sectors to the 2028 ozone design value under the
17 oil and gas control scenario. And there's -- we separated
18 the oil and gas into point, nonpoint and point. That's
19 kind of a surrogate, to where nonpoint is more production
20 in upstream oil and gas, while point is more the
21 midstream. But the, you know, the maximum contributions
22 of oil and gas nonpoint is about 3 ppb, and 1.9 ppb. And
23 that's comparable to other major source sectors, like EGU
24 point and on-road mobile, and greater than source sectors
25 like nonroad-mobile and nonEGU point. So even under the

1 2028 oil and gas control scenario they're still -- still
2 it's one of the major source sectors that are still
3 related to ozone in 2028 under the control strategy.

4 We also did the ozone results from the source
5 apportionment, and this is the -- the left is the maximum
6 ozone contribution for the nonpoint oil and gas and on the
7 right, it's for point oil and gas. And the maximum
8 contributions is 7.6 ppb for the nonpoint oil and gas, and
9 it occurs in the Permian Basin at the intersection of the
10 Eddy, Lea and Chaves Counties. And the maximum
11 contribution of oil and gas point sources is 5.4 ppb, and
12 occurs in just about the same spot, the intersection of
13 three counties. You can see that the nonpoint has a
14 substantial contribution in San Juan Basin, but point has
15 less contribution.

16 So the NMOGA expert had these plots in their
17 direct testimony, and we all agree that a vast majority of
18 the ozone in New Mexico comes from outside of New Mexico
19 or biogenic emissions in New Mexico. And so this is
20 contributions to the 2028 ozone design value from the APCA
21 2028 oil and gas controls -- oil and gas controls source
22 apportionment. And we're seeing that at least at these
23 three sites: Navajo Lake in the San Juan Basin, Hobbs
24 down in the Permian Basin, and Desert View in the Doña Ana
25 County in Sunland that runs along the nonattainment area,

1 that 91 percent and 96 percent of the ozone is coming from
2 nonNew Mexico anthropogenic emissions. So that's
3 emissions outside of New Mexico or biogenic emissions
4 within New Mexico.

5 But if you look at the New Mexico anthropogenic
6 emissions contribution and the contribution of oil and
7 gas, 55 percent of the New Mexico anthropogenic emissions
8 ozone contributions is from oil and gas and -- at Navajo
9 Lake and at Hobbs, 71 percent of the New Mexico
10 anthropogenic emissions contribution is due to the oil and
11 gas sources, and Desert View, being further away from the
12 oil and gas basins, it's 20 percent of the New Mexico
13 anthropogenic emissions contributions through the 2028
14 design value under the oil and gas control strategy is due
15 to oil and gas emissions. And these contributions would
16 be even greater in the base-case before the oil and gas
17 emission controls were implemented.

18 This is an example of two days of the OSAT, so
19 this is the VOC/NOx sensitive ozone. And I have a slide
20 to scale here. The ozone formation in New Mexico is
21 mostly NOx sensitive. The scale you see is reddish, and,
22 you know, from orange on up is 85 percent of the ozone
23 formation is NOx sensitive. So that means less than 15
24 percent is VOC sensitive over -- over most of New Mexico.

25 And the one exception to this is that the ozone

1 formation in the San Juan Basin is -- okay, this is --
2 this is one day, June 5th, but you can see that for all
3 anthropogenic emissions there's a little bit more VOC
4 sensitive-ozone in San Juan County. And for New Mexico
5 anthropogenic emissions, there's a little bit more.
6 You've got the blue, so that's getting down to almost
7 equal the VOC and NOx sensitive. And this scale was
8 picked because ozone formation in the vast majority of New
9 Mexico is more NOx sensitive than VOC sensitive. It isn't
10 an either/or, it's usually both, but this is not
11 surprising given the rural nature of most of New Mexico,
12 it would be mostly NOx sensitive.

13 So the conclusions from the New Mexico Ozone
14 Attainment Initiative Photochemical Modeling Study is that
15 New Mexico oil and gas emissions are estimated to reduce
16 ozone design values at the monitored sites by as much as
17 1.5 ppb; that's at Navajo Lake. And looking across New
18 Mexico, those reductions are as much as 3 ppb -- those
19 reductions in ozone design values and that's in the San
20 Juan Basin.

21 There are larger reductions in maximum daily
22 eight-hour ozone. I gave an example of June 4th, it was a
23 4.6 ppb reduction and for July 24th, a 2.8 ppb reduction.
24 And so the maximum, the highest reduction is 7.5 ppb due
25 to oil and gas nonpoint sources.

1 And then the 2028 New Mexico Ozone Source
2 Apportionment Modeling results say most of the ozone in
3 New Mexico is due to sources outside of New Mexico and
4 biogenic emissions. And across all of the sites is 83
5 percent to 99 percent of the ozone. And then in the 2028
6 ozone -- the 2028 design values for the oil and gas
7 control strategy is due to sources outside New Mexico.
8 And although modest New Mexico oil and gas emissions are a
9 major portion of the New Mexico anthropogenic emissions
10 contribution -- as I mentioned, it's 55 percent at Navajo
11 Lake, 71 percent at Hobbs and 20 percent at Desert View.

12 And then, ozone formation in New Mexico is
13 primarily NOx sensitive, with the exception of Northwest
14 New Mexico, which exhibited more VOC-sensitive ozone
15 formation conditions.

16 A few from my rebuttal report: One is
17 Mr. Blewitt states that the NM OAI study did not document
18 the 2014 and 2028 emissions. We did not document --
19 outside of the 2028 oil and gas emissions that we
20 developed, we did not document those in the air quality
21 technical support document for the Ozone Attainment
22 Initiative because these were taken out of the WRAP
23 Regional Haze inventories, which are some of the most
24 vetted and reviewed and documented inventories ever
25 developed by each one of the Western states. And they're

1 documented on numerous documents and websites and webpages
2 on the WRAP webpage. And that's where the documentation
3 resides for those 2028 and 2014 emissions. That's one
4 point.

5 Mr. Blewitt concluded that the modeling results
6 do not support the need for additional oil and gas
7 controls. From the technical information, you know, which
8 sources you control all in the SIP, I just do the
9 technical work. But some of the observations that -- and
10 facts in this matter is that the observed 2015 to 2019
11 ozone design values exceed 95 percent of the 2015 Ozone
12 NAAQS at all sites in New Mexico except Santa Fe. And the
13 AQCA requires the Board develop a plan to address ozone.
14 And my understanding is that part of these controls are
15 part of that plan.

16 There's a portion of Doña Ana County, that is
17 Sunland Park, it's designated as nonattainment, with an
18 attainment year of 2020 that it failed to achieve, thus
19 the area may be redesignated as moderate to nonattainment,
20 with a 2023 attainment year. And even with the
21 implementation of the Part 50 oil and gas controls, the
22 New Mexico oil and gas emissions are still a major
23 fraction of the New Mexico total anthropogenic emissions
24 contribution, which is the only -- the only sources that
25 the Board has the regulatory authority to control. And I

1 mentioned the 55 percent and 70 percent of the
2 anthropogenic emissions at Navajo Lake and Hobbs County.

3 Mr. Blewitt states that the New Mexico oil and
4 gas emissions didn't include production declines, or are
5 overstated, and they are -- it is included. These
6 projections project a collection of wells of various ages.
7 The emissions from a well are highest when they first --
8 when they first go online and they decline over time,
9 unless they're -- unless they're a refract.

10 So, in 2014, we have a collection of wells of
11 various ages, including some in decline, and then we
12 project those emissions forward using a collection of
13 wells so they still have wells of different ages. So
14 that's why the 2028 oil and gas emissions also have a
15 collection of wells of various ages and various stages of
16 decline.

17 Mr. Blewitt also states that we should have
18 separated values between the oil and gas VOC and NOx
19 controls. It could be done, but we didn't -- but it
20 wasn't, and in some cases, generally we look at control
21 measures as a combined VOC and NOx emissions control
22 because that's just what's done in standard practice. And
23 some control measures will obtain both VOC and NOx
24 emissions reductions, like reducing hours of operation, so
25 it doesn't make sense to look at the separate

1 contributions.

2 With that being said, the modeling did suggest
3 that ozone formation in New Mexico is mainly NOx
4 sensitive, with the possible exceptions of the San Juan
5 Basin, where there's a little bit more VOC sensitivity,
6 but still, that's mainly NOx sensitive.

7 Also there's some uncertainties in Mr. McNally's
8 attempt to split the oil and gas ozone contributions
9 between VOC and NOx emissions. And I -- I don't doubt his
10 basic conclusion that the NOx -- the oil and gas NOx
11 controls produce the majority of the ozone benefits, but
12 in my rebuttal report, I also listed some uncertainties in
13 his approach, that I don't need to go into details here,
14 but it just increases uncertainties because you just
15 can't -- the way he did it has more uncertainties.

16 And finally, when the ERG implemented the oil and
17 gas controls in the 2028 base-case emissions, they may not
18 have counted the NOx emission increases in some of the VOC
19 controls measures. And McNally suggested that not
20 including the NOx emissions increases, and these control
21 strategies, like flaring, would reduce any ozone benefit
22 from the VOC controls and could worsen the ozone air
23 quality.

24 The ERG provided an estimate of the NOx increases
25 due to the oil and gas VOC controls, and they estimated it

1 would increase NOx emissions by 67 tons per year. Now,
2 the ozone formation is nonlinear, I kind of did an
3 order-of-magnitude calculation and found that that 67 tons
4 per year increase in NOx emissions would produce a maximum
5 of about .002 ppb, so on the order of thousandths of a
6 part per billion.

7 And both myself and Mr. McNally's reported ozone
8 results to the nearest tenth of ppb, those increases of
9 NOx emissions in the -- in the oil and gas control
10 strategy would not have any material effect on the -- on
11 the ozone results. In fact, if it was 10 times higher, so
12 67 tons per year, would still have no material effect on
13 the ozone results.

14 And with that, I conclude my testimony.

15 Q. Thank you, Mr. Morris.

16 MR. KNIGHT: Madam Hearing Officer, this
17 concludes Mr. Morris's direct and rebuttal testimony and
18 he is available for questioning.

19 HEARING OFFICER ORTH: Thank you very much. I'm
20 not sure whether the questions would require a look at the
21 slides or not, so I think we'll leave it up for just a
22 little bit. Let me start with Ms. Fox. Ms. Fox, do you
23 have questions of Mr. Morris?

24 MS. FOX: Madam Hearing Officer, I don't, but I'm
25 going to defer to my co- ounsel, David Baake, who may or

1 may not have.

2 HEARING OFFICER ORTH: Thank you. Mr. Baake?

3 MR. BAAKE: I do have just a brief question.

4 HEARING OFFICER ORTH: All right.

5 MR. BAAKE: Thank you so much.

6 CROSS-EXAMINATION OF RALPH MORRIS

7 BY MR. BAAKE:

8 Q. So I did -- I wanted to ask briefly here, as I
9 understood the 2028 control strategy scenario, was based
10 on ER -- ERG's analysis of the rule; is that correct?

11 A. That's correct. I have no opinion on how they
12 implemented that.

13 Q. Okay. So, then, perhaps you're not the person to
14 ask about this, but if -- if there were provisions of the
15 rule that were not fully implemented by 2028, would -- I
16 assume that would affect whether that -- whether those
17 inputs were correct?

18 A. That's correct. I just used the emission
19 reductions that ERG implemented in 2028 in New Mexico oil
20 and gas emissions as they did. So they will be on later
21 this week, so...

22 MR. BAAKE: Okay. Okay. All right. Thank you.
23 No further questions.

24 HEARING OFFICER ORTH: Thank you. Ms. Paranhos?

25 MS. PARANHOS: Thank you, Madam Hearing Officer.

1 I have no questions for this witness.

2 HEARING OFFICER ORTH: All right. Thank you.

3 Professor Pacyniak or Mr. Jaynes?

4 MR. JAYNES: Thank you, Madam Hearing Officer.

5 No questions at this time.

6 HEARING OFFICER ORTH: All right. Thank you.

7 Ms. Devore or Mr. Vimont?

8 MS. DEVORE: No questions. Thank you.

9 HEARING OFFICER ORTH: Mr. Nykiel or Mr. Timmons?

10 MR. NYKIEL: No questions, Madam Hearing Officer.

11 HEARING OFFICER ORTH: Thank you. Mr. de

12 Saillan?

13 MR. DE SAILLAN: No questions. Thank you.

14 HEARING OFFICER ORTH: All right. Mr. Hiser?

15 MR. HISER: Madam Hearing Officer, we will have a
16 couple of questions for Mr. Morris, please.

17 HEARING OFFICER ORTH: All right.

18 CROSS-EXAMINATION OF RALPH MORRIS

19 BY MR. HISER:

20 Q. So, Mr. Morris, it's good to see you this
21 morning. And thank you for that explanation of the very
22 complicated photochemical grid modeling that you have
23 done. If you could turn to your direct testimony in NMED
24 Direct Exhibit No. 106. And for any of our Board members
25 who might want to follow along, it will be Exhibit 106.

1 On page 5 of your testimony you state that, and I
2 quote, "The biogenic VOC may not be the largest source
3 sector, but is usually still a large component of VOC
4 emissions." Does New Mexico include areas where biogenic
5 emissions are the largest component?

6 A. Yes. I would guess that over a majority of New
7 Mexico the biogenic emissions, you know, it's very rural
8 so the biogenic emissions -- VOC emissions would be the
9 largest source sector. It was only in the oil and gas
10 fields and the -- you know, Albuquerque, Las Cruces, in
11 the urban areas where it may not be the largest VOC source
12 sector.

13 Q. Thank you. And you talked a couple of places
14 here about NOx disbenefits. Is there any reason to
15 believe that the aerial extent of NOx disbenefit in New
16 Mexico is very great?

17 A. No. Generally, the -- generally, they're fairly
18 small, they're very isolated to where the source -- the
19 NOx source is located, when you reduce the NOx and the
20 ozone goes up.

21 Q. And in the one example on one of your slides -- I
22 don't -- unfortunately, I don't remember which one, in the
23 San Juan area, does it look like that's partially related
24 to the power plant up in the Four Corners area?

25 A. Yes, you get NOx disbenefits where there's high

1 NOx concentrations. And the Four Corners Power Plant was
2 assumed -- some of the units -- I forget -- Unit 4 and 5
3 will still be operating in 2028, so that produces high NOx
4 concentrations.

5 Q. Okay. Now, if we advance to page 11 of your
6 testimony where you're talking about the impacts to
7 proposed Part 50 at the top two sites in the San Juan
8 Basin, I think you said it was negative 1.5 part per
9 billion and negative 1.2 part per billion. But were the
10 results at the other monitors in the San Juan Basin about
11 .8 part per billion or less?

12 And it's page 15.

13 A. Yeah. I'm going to mine.

14 Q. Take your time.

15 A. I think it was, yeah.

16 Q. Oh, it's page 11. Sorry, it's page 11. I
17 misspoke. I misled you. I'm sorry.

18 A. In the San Juan Basin it's -- yes, .8 ppb to -1.5
19 ppb.

20 Q. Okay. And similarly, you state that the results
21 of the proposed Part 50 rule in the Permian Basin were
22 negative 7 or negative .7 part per billion at Hobbs,
23 negative .3 at Carlsbad; but aren't the results, negative
24 .2 part per billion, are less elsewhere within the
25 Permian?

1 A. Those are the only two monitors in the Permian
2 Basin were Hobbs and Carlsbad.

3 Q. So the other -- the other monitors there are the
4 balance of Southern New Mexico --

5 A. Yes.

6 Q. -- in your report?

7 A. Yes, in Lea and Doña Ana County.

8 Q. In page 12 of your testimony, am I correct in
9 reading that the proposed Part 50 rule perhaps contributes
10 6.5 part per billion to local ozone concentrations in San
11 Juan County, causing a NAAQS exceedance on one day that
12 might not have otherwise have occurred?

13 A. Yes, that was in my -- my presentation I just
14 made.

15 Q. Does EPA distinguish between a state control
16 strategy-caused exceedance and any other type of
17 exceedance, assuming that the control strategy exceedance
18 is ineligible for classification as an exceptional event,
19 in determining whether an area goes into nonattainment?

20 A. Nonattainment is based on monitoring data, not
21 modeling data. And the monitoring data does not
22 distinguish -- well, does not tell you where the ozone
23 came from, it's just a measured value.

24 Q. It's just a measured value, regardless of the
25 source?

1 A. Yes.

2 Q. On pages 14 and 15, you testify about the model
3 emissions inventory that you used, acknowledging that you
4 did not develop this inventory, at least in part. I know
5 that Ramboll has been integrally involved with the Western
6 Regional Air Partnership in developing the overall
7 inventory. But based upon the evaluation of what was
8 provided to Ramboll, was it consistent in quality and
9 depth with emissions inventories that have usually relied
10 upon government agencies and the Western Regional Air
11 Partnership in emissions forecasted?

12 A. I believe so. I didn't catch some of that
13 questions because I had some background noise here.

14 Q. I'm sorry, I can repeat it for you if you'd like.

15 A. Thank you.

16 Q. So, on pages 14 through 15, you testify about the
17 model emission inventory that you used, and acknowledging
18 that Ramboll did not develop this inventory, based upon
19 your evaluation of what was provided to Ramboll, is it
20 consistent in quality and depth to the emissions'
21 inventories usually relied upon by government agencies and
22 the Western Regional Air Partnership in emissions
23 forecasting?

24 A. Yes.

25 Q. In Figure 4 on page 19 of Exhibit 106, do you

1 know from your just general study of this area, what the
2 biogenic VOC emissions would be on the same tons per day
3 basis, approximately?

4 A. I can find that information, but I don't have it
5 off the top of my head. It would be probably much higher
6 than these --

7 Q. Okay.

8 A. -- because that's statewide.

9 Q. And then on Table 3 on page 20, the same
10 question: What would the biogenic VOC emissions be on a
11 tons per year basis?

12 A. I don't have that information off the top of my
13 head. I believe Mr. McNally had that in his report and
14 it's probably going to be in the air quality technical
15 support document of the Ozone Attainment Initiative.

16 Q. Would it likely be higher than the numbers that
17 you're seeing there?

18 A. Yeah. Yes, because New Mexico is mostly rural.

19 Q. The question for you, then, more generally on the
20 chemical relationship in the formation of ozone, does NOx
21 preferentially select anthropogenic VOCs over biogenic VOC
22 or will it simply react with whatever VOC is available?

23 A. Well, the reaction -- the total VOC -- and it
24 doesn't distinguish between anthropogenic and biogenic,
25 but it does -- some compounds are more reactive than other

1 VOC compounds.

2 Q. Right. There's a sort of a scale of reactivity?

3 A. Yes.

4 Q. So if we exclude the biogenic VOC in these
5 charts, does that have the apparent effect of flattering
6 the impact of the rule, when much of the inventory is
7 simply being unaffected and unchanged?

8 A. Well, the only -- the only emission you can
9 control are the anthropogenic emissions. You can't
10 control the biogenic emissions. So, you know, the rule --
11 the rule's going after the anthropogenic New Mexico
12 emissions, which is the only thing you can control.

13 Q. So if I circumscribe a circle of 100 marbles and
14 say that I can only choose between these four marbles, and
15 I choose two of those marbles, that's basically the --
16 what you're saying here?

17 A. In terms of --

18 MS. KATZ: I believe that Mr. Morris said that --
19 that it didn't distinguish between anthropogenic and
20 biogenic.

21 MR. HISER: Madam Hearing Officer, Mr. Morris
22 said that he limited the discussion to what was within his
23 perception of the Department's jurisdiction. And I was
24 saying if you simply do that, doesn't that cause the
25 number to go up.

1 HEARING OFFICER ORTH: All right. Mr. Morris, do
2 you understand the distinction being made by both your
3 counsel and Mr. Hiser?

4 A. Yes. I'm not sure if the analogy is a good one,
5 but, you know, I will say that there is more biogenic VOC
6 in New Mexico than there is anthropogenic VOC emissions.

7 Q. (BY MR. HISER) Thank you, Mr. Morris.

8 And then page 32 of your testimony -- and my
9 apologies to the Board for now sinking into jargon: You
10 discussed the 2018 -- and you variously referred to it, I
11 think, as the 2018 PCM or PGM guidance. Which is the
12 proper acronym so I use it correctly with you throughout?

13 A. Well, the 2018 EPA guidance is for ozone PM25 and
14 Regional Haze SIPs, so you call it the ozone modeling
15 guidance.

16 Q. Okay. And then, is there also photochemical grid
17 model guidance?

18 A. Well, that is the same thing.

19 Q. Oh, that is the same one. Okay.

20 So -- so we'll just call that the 2018 EPA
21 guidance for now. Does that guidance use relative
22 response factor, or RRF?

23 A. Yes, that was what I presented in my testimony.

24 Q. And is part of the purpose of that RRF to adjust
25 for sort of unknown and unknowable emissions and model

1 formulations, or emissions or the meteorology, to provide
2 sort of a correction factor?

3 A. Yes, it uses the relative change in the model
4 results so that if you have an -- for example, if you have
5 an overestimation, it's probably in the base in the future
6 year, and by taking the ratio you kind of figure that out.

7 Q. In page 41 of your testimony in Table 5, do you
8 agree that looking across the monitors the impact of the
9 proposed Part 50 rule appears generally greater in the San
10 Juan Basin than in the Permian Basin?

11 A. That's correct.

12 Q. In Section X of your report -- and this is
13 section Roman Numeral X, which is called Sensitivity of
14 the 2028 Ozone DVF Projections, The Current Year Ozone
15 DVC, isn't it true that you're no longer using the model
16 in a relative sense here, but now you're starting to use
17 it in an absolute sense?

18 A. No, this is section -- you're talking about
19 Section X?

20 Q. Section X, yes.

21 A. 8.6. No, this is the 2028 ozone design value
22 projection sensitivity test to the current year design
23 values. So, instead of using the design -- the current
24 year design values from 2012 to 2016, I used the current
25 year design value from 2015 to 2019.

1 Q. So in your testimony where you -- where you state
2 that you're now using certain values in an absolute sense,
3 what does that mean?

4 A. That means that they're going to be in the 2028
5 CAMx modeling results in an absolute sense, you know, as
6 they come out of the model, not in the relative sense, to
7 project those design values.

8 Q. So you're not -- it didn't go back and look at
9 the monitored differences in the past in this case? You
10 just used the straight model results?

11 A. Yes.

12 Q. Okay. Are the high ozone -- and I'm going to
13 backup and ask you sort of a more general question here.
14 Are the high ozone days that are projected in the work
15 that you've done, are they the same at each monitor or do
16 they vary across the monitors?

17 In other words, is it the same ten days at each
18 one or are they often a mix of days across the monitors?

19 A. No, it can vary across the monitors because
20 there's two monitors in close proximity. They may have
21 many of the same days, but these relative response factors
22 I mentioned are based on ten days, and they're likely
23 different days for, like, monitors up in the San Juan
24 versus monitors in the Permian Basin.

25 Q. Okay. And do you continue to agree that the CAMx

1 OSAT simulation estimates that ozone formation due to New
2 Mexico anthropogenic emissions is primarily NOx sensitive
3 across most of New Mexico, with the exception of the few
4 instances you've noted in the San Juan and even fewer in
5 the Permian Basin?

6 A. It's mostly NOx -- NOx sensitive across most of
7 New Mexico, and the possible exception in San Juan County
8 and there are some VOC limited, you know, small amounts of
9 VOC sensitive ozone elsewhere, too.

10 Q. And then, you never ran the model just looking at
11 NOx only or VOC only controls, right? You did different
12 ways of it, but you didn't just run the model with the NOx
13 or the VOCs? That was your testimony earlier. Did I
14 understand that correctly?

15 A. Yes.

16 Q. Why not?

17 A. Because we were looking at the control strategy
18 that was a collection of control measures that controlled
19 both VOC and NOx at the same time.

20 Q. Okay. You didn't think that there would be value
21 in trying to further tease out the relative sensitivities
22 of NOx and VOC?

23 A. Not in the time frame that we had to do the
24 study.

25 Q. Okay. Thank you. With that, I'd like to switch

1 over to your rebuttal testimony.

2 And Mr. Morris and Board members, that would be
3 NMED Rebuttal Exhibit No. 11. Let me know when you've got
4 that in front of you.

5 A. I've got it.

6 Q. Perfect. Thanks. In page 3 of your rebuttal,
7 you state that it's standard practice to regulate both VOC
8 and NOx, in critiquing Mr. McNally's testimony, sort of
9 implying that Mr. McNally was advocating a no-VOC control
10 strategy. Does industry support of a phase out of the
11 high bleed pneumatic devices within two years, a phase out
12 by 2030 of most other pneumatic devices, new controls on
13 existing storage tanks exceeding 6 tons per year, new
14 tanks 2 tons per year, leak detection repair requirements
15 on well sites and gathering and boosting stations, pig
16 launchers and receivers and hydrocarbon liquid transfers
17 sound like a no-VOCs control strategy to you?

18 MS. KATZ: Objection. Mr. Morris wasn't involved
19 in any of the testimony regarding, you know, or the
20 analysis and the actual rule requirements.

21 MR. HISER: I'm asking him directly for his
22 testimony, Ms. Katz.

23 A. I don't have an opinion on how the rule was
24 implemented in the 2028 New Mexico oil and gas emissions
25 because that was done by ERG.

1 Q. (BY MR. HISER) Okay. So why did you --

2 MS. KATZ: Do you mean his testimony where he's
3 identifying all of those provisions specifically?

4 MR. HISER: He states that it's not appropriate
5 to look at -- to look at parsing away the VOCs, implying
6 that we are suggesting that no VOC controls are
7 appropriate. And I'm just asking if he considered what
8 was actually in the record before he made that statement.

9 HEARING OFFICER ORTH: Which page of his
10 testimony? I'm sorry.

11 (Unintelligible.)

12 HEARING OFFICER ORTH: Hold on. Mr. Hiser, you
13 did refer to his rebuttal testimony, which is NMED
14 Rebuttal Exhibit 11, but which page are you looking at?

15 MR. HISER: Page 3, Madam Hearing Officer.

16 HEARING OFFICER ORTH: I'm sorry?

17 MR. HISER: Page 3.

18 HEARING OFFICER ORTH: Page 3. Thank you.

19 A. I don't think I ever characterized Mr. McNally as
20 promoting a no-VOC control strategy.

21 Q. (BY MR. HISER) All right. Fair enough.

22 In Section 2.3 of your rebuttal testimony on page
23 6, you state that Mr. McNally's analysis using the APCA
24 data which Ramboll provided has some uncertainties and
25 possibly is unreliable. Wasn't Ramboll's choice of

1 modeling approach, which processed the data using the APCA
2 protocols without preserving the previously -- the
3 previous data, what precludes Mr. McNally from being able
4 to make that analysis without a compromised data?

5 A. I listed several -- several points that led to
6 uncertainties in the way Mr. McNally processed the APCA
7 results to get the separate ozone contributions due to the
8 controlled oil and gas VOC and NOx emissions. One of them
9 is that it was the oil and gas control strategy, so it
10 wasn't the base case. Another is the use of the APCA
11 ozone tool. That doesn't preserve the ozone and VOC/NOx
12 sensitivity. It has a preferential treatment of that.
13 You should use the OSAT tool for that.

14 Q. Yeah, but I mean, wasn't it Ramboll that ran the
15 APCA analysis overall --

16 A. Yes.

17 Q. -- and provided the data, then, to Mr. McNally?

18 A. Yes.

19 Q. Okay. So that was really -- he used the data
20 that was available to him; is that correct?

21 A. That's correct.

22 Q. Okay.

23 A. He could have run his own analysis.

24 Q. By rerunning the entire model?

25 A. Yes.

1 Q. Isn't it true, Mr. Morris, that despite your
2 quibbles with Mr. McNally's statement, that you still
3 concede on page 8 of your rebuttal testimony, Lines 15 to
4 17: That there's no question that the modeling
5 indications that ozone formation in New Mexico is more NOx
6 sensitive than VOC sensitive, and it's likely due to that
7 a majority of the ozone benefits Part 50 shown in the
8 modeling are due to the NOx emissions reductions?

9 A. I think I just testified to that fact.

10 Q. And you don't -- and you have no reason now to
11 disagree with that prior testimony that you've made?

12 A. Yeah, probably most of the ozone reductions are
13 due to the NOx emission reductions, although VOC emission
14 reductions -- those ozone reductions are not zero.

15 Q. Okay. So does that mean that for most days that
16 controls on NOx on a ton-for-ton basis are going to be
17 more effective than controls on VOC on a ton-for-ton
18 basis?

19 A. That would be what I expect. We didn't analyze
20 that explicitly.

21 Q. In page 9 of your rebuttal, with regard to the
22 possible NOx emissions increase from -- resulting from the
23 controls that were contemplated under the Part 50 rule,
24 isn't it true that you really offered no opinion on the
25 accuracy of ERG's estimated emissions reductions, on this

1 topic?

2 A. Yes, I do not have opinion on ERG's emissions
3 reductions from the New Mexico oil and gas emissions.

4 Q. And by including that ERG rebuttal in your
5 summary on the last slide today, are you now adopting the
6 ERG approach, despite your earlier offering of no opinion
7 on that analysis, or do you continue to offer no opinion
8 on that analysis?

9 A. That analysis was if -- assuming that the ERG's
10 NOx emissions increases due to the controls is 67 tons per
11 year, that would have no material effect on our results or
12 even if it was 670 tons per year, it would have no
13 material effects on the ozone results presented by myself
14 or Mr. McNally.

15 Q. Finally, on page 19 of your rebuttal, you state
16 that "The observed 2017 to 2019 ozone design values exceed
17 95 percent of the 2015 ozone NAAQS at all monitoring sites
18 in New Mexico except Santa Fe." Is that true of Rio
19 Arriba monitoring site, if you'd considered the 2018 to
20 2020 design value?

21 A. I did not look at that, but I believe Michael
22 Baca testified to that effect yesterday.

23 MR. HISER: Okay. Thank you very much,
24 Mr. Morris. As always, it's informative and good to speak
25 with you about modeling issues. Thank you so much for the

1 work that you've done on this, it's really an impressive
2 amount of analysis.

3 That's all my questions, Madam Hearing Officer,
4 for Mr. Morris.

5 HEARING OFFICER ORTH: Thank you so much.

6 Mr. Rose, do you have questions of Mr. Morris?

7 MR. ROSE: I do, Madam Hearing Officer. Just --
8 hopefully just one since Mr. Baake had questions that
9 related to what I was going to ask.

10 CROSS-EXAMINATION OF RALPH MORRIS

11 BY MR. ROSE:

12 Q. Mr. Morris, in terms of the analysis that you
13 did, or the run that you did with respect to the ozone
14 initiative, it was -- as I understood your testimony, you
15 were given a set of reductions based on this rule, and
16 that's the only option that you looked at in terms of the
17 modeling; is that correct?

18 A. Well, we ran three scenarios -- the 2014 base
19 case, the 2028 base case, and this 2028 New Mexico oil and
20 gas emissions control case, and that's the only control
21 case we ran.

22 Q. Okay. Did that any -- any other options would
23 have been requested, and then, I take it, questions about
24 why this particular ozone control case, as opposed to
25 others, was modeled, we'd have to ask ERG about that?

1 A. Yeah, I think you'd have to ask New Mexico
2 Environmental Division as well as ERG.

3 MR. ROSE: Okay. That's all the questions I
4 have, Madam Hearing Officer.

5 HEARING OFFICER ORTH: All right. Thank you,
6 Mr. Rose.

7 Mr. Janoe?

8 MR. JANOE: No questions, Madam Hearing Officer.

9 HEARING OFFICER ORTH: Thank you. Mr. Butzier?

10 MR. BUTZIER: No questions. Thank you.

11 HEARING OFFICER ORTH: Thank you. Ms. Gutierrez?

12 MS. GUTIERREZ: No questions. Thank you.

13 HEARING OFFICER ORTH: Thank you. Mr. Neumann?

14 MR. COLCLASURE: This is Chris Colclasure for the
15 Commercial Water Group, we have no questions.

16 HEARING OFFICER ORTH: All right. Thank you,
17 Mr. Colclasure.

18 And Ms. Witherspoon?

19 MS. WITHERSPOON: No questions.

20 HEARING OFFICER ORTH: All right. Thank you very
21 much. I'm going to turn to the Board members now to see
22 if they have questions. If there's anyone else with
23 questions who is not a panelist, please reach out in the
24 Chat.

25 EXAMINATION BY THE BOARD OF RALPH MORRIS

1 HEARING OFFICER ORTH: Madam Chair, do you have
2 questions of Mr. Morris?

3 CHAIRPERSON SUINA: Thank you, Madam Hearing
4 Officer. At this point I don't have any questions, but I
5 do want to just thank the witness for -- for his extensive
6 work that they've -- that he's presented and also the
7 slides that have been very helpful. Thank you.

8 HEARING OFFICER ORTH: All right. Thank you.
9 Madam Vice-Chair Trujillo-Davis, do you have questions of
10 Mr. Morris?

11 VICE-CHAIR TRUJILLO-DAVIS: Yes, thank you, Madam
12 Hearing Officer. I do have a couple of questions. And I
13 just want to start off by thanking Mr. Morris also for his
14 presentation. It helps digest a lot of this information,
15 so thank you for that.

16 So I have some just kind of basic questions about
17 this. Mr. Morris, have you run this type of modeling in
18 the past for any other rules that were going to be
19 promulgated?

20 MR. MORRIS: In other locations?

21 VICE-CHAIR TRUJILLO-DAVIS: Yes, sir.

22 MR. MORRIS: Yes, I've done ozone SIP modeling
23 for somewhere between 10 and 20 cities, and that includes
24 the Denver Ozone SIPs dating back to 20 -- back to 2003.
25 And, for example, they have a Reg 7 oil and gas rule that

1 we have modeled. And so -- and I've done it for many
2 other locations throughout the U.S.

3 VICE-CHAIR TRUJILLO-DAVIS: And you use -- and
4 you used similar constraints when modeling those ones and
5 the ones for the current rules we're looking at right now?

6 MR. MORRIS: Yes. Generally, we look -- for an
7 ozone SIP, we do kind of an iterative process of controls,
8 see what the result is, and see whether we need more
9 controls. And this is -- this was kind of a mini SIP, in
10 that the time frame, you didn't look at, you know, all
11 other controls. Like, for example, we only looked at the
12 oil and gas control strategy. We didn't look at mobile
13 source or industrial source controls outside of the 2028
14 base case.

15 VICE-CHAIR TRUJILLO-DAVIS: And after those rules
16 were promulgated, have you ever gone back and looked at
17 that modeling and how it matches up to the real world
18 conditions after those rules have been in effect for a
19 while?

20 MR. MORRIS: Yeah, we've done that a couple -- a
21 couple of times. The problem is that you model future
22 year, you're assuming that -- in this case, we assumed the
23 2014 meteorology occurred in 2028, and usually meteorology
24 affects ozone greatly, so that when, like, a lot of areas
25 had -- like in 2007 -- or 20 -- or a 2017 attainment date

1 or something, and that year comes around and the
2 meteorology is actually different, and, like, for Denver,
3 we had a 2020 ozone attainment date, and when 2020 came
4 around, not only was the meteorology different, the
5 emissions were very different due to the COVID. So
6 it's -- the future year assumes the same meteorology range
7 as the current year, so -- so it's hard to do that, but
8 there are some retrospective studies that have looked at
9 that.

10 VICE-CHAIR TRUJILLO-DAVIS: And I don't know if
11 you can answer this, because it's probably a pretty big
12 question, but how -- when you look at those retrospective
13 studies, how accurate are you? I mean, statistically,
14 like, are you within some level of accuracy or is it
15 outside of that -- of that value?

16 MR. MORRIS: Well, in the past it was -- you
17 know, there was sometimes it was higher, sometimes it was
18 lower. More recently, we're seeing that the observed
19 ozone is higher than what we projected and to be -- and
20 part of that reason is due to climate change. Summers are
21 hotter, they have more -- they're more conducive to ozone
22 formation than in the past, so they produce more ozone
23 just because the meteorology is different.

24 VICE-CHAIR TRUJILLO-DAVIS: Would you -- would
25 you be able to maybe look at the effectiveness of those

1 previous rules, based on retrospective modeling?

2 MR. MORRIS: You could. You can't predict future
3 meteorology. I mean, this has been a -- the affects on
4 climate change on ozone has been, you know, it's known
5 that when you get hotter summers, you get more ozone.
6 It's called the climate penalty, which means that an ozone
7 control plan developed under current climate conditions
8 may be insufficient in the future under climate change.
9 So, factoring that in -- you have to factor that into the
10 evaluation.

11 VICE-CHAIR TRUJILLO-DAVIS: So the current -- the
12 modeling that you used in this one and the -- and the
13 meteorology conditions that were used, could you change
14 those conditions so that they had, like, worst case
15 scenario and we could see -- I mean, I'm not asking you to
16 do any of this. I'm just trying to get a sense of, can --
17 can a modeling go in that direction, where you change
18 meteorology conditions, and they're a little more headed
19 the direction that you're saying that we're going, with
20 increasing temperatures in the summer?

21 MR. MORRIS: It's -- you can't do it. It's very
22 complicated. You have to downscale climate model to
23 your -- in this case, a work model. It's just a very
24 complicated and intensive thing to do correctly.

25 VICE-CHAIR TRUJILLO-DAVIS: And where do you get

1 your parameters for that meteorological data?

2 MR. MORRIS: Well, we use the Weather Research
3 Forecast model. And it's like a numerical weather
4 prediction model -- well, it is a numerical weather
5 prediction model. And it ingests observed analysis fields
6 because we're doing retrospective modeling; we're modeling
7 an historical situation, so it does data simulation of
8 observations so that you match the current meteorology for
9 that year; in this case it was 2014.

10 VICE-CHAIR TRUJILLO-DAVIS: Okay. Thank you for
11 indulging my questions. I appreciate it and I appreciate
12 all the work that you did on this.

13 MR. MORRIS: Thank you.

14 HEARING OFFICER ORTH: Thank you.

15 Member Cates, do you have questions of Mr. Morris?

16 BOARD MEMBER CATES: No questions. Thank you.

17 HEARING OFFICER ORTH: Thank you. Member Bitzer?

18 BOARD MEMBER BITZER: A couple of quick
19 questions. Thank you, by the way, for a -- for a very
20 thorough presentation. Your credentials are impressive.

21 The one year slides had the little red dots,
22 where you were actually having in the -- I guess due to
23 mitigation equipment, there was little spots where the
24 number actually goes up. Would it be safe to assume that
25 those little red dots are away from population centers?

1 Those are -- or could those be co-located little red dots
2 with urban areas?

3 MR. MORRIS: Well, those little areas of ozone
4 increase is due to the New Mexico oil and gas controls are
5 probably located at a NOx point source -- oil and gas NOx
6 point sources. And so, you know, I don't know the layout
7 of the oil and gas point sources and the -- and the
8 population, but it's probably away from a population
9 center, but there could be a residence nearby, I just
10 don't know.

11 BOARD MEMBER BITZER: And then it seems to me
12 that where an enormous portion of our -- of our issue is
13 outside of our control, and that we're working within that
14 narrow band that we have some influence over. Would it be
15 possible, if we keep getting hotter and we stay warm
16 longer, that we could turn all of the oil and gas off in
17 New Mexico, no mining, no extraction whatsoever, and still
18 end up in nonattainment?

19 MR. MORRIS: It's possible that you -- that you
20 will get ozone exceedances and potentially nonattainment
21 due to sources outside of New Mexico. There are a few
22 provisions in the Clean Air Act to address that. There's
23 the Good Neighbor policy and also Section 179 B,
24 international emissions, but for demonstration, that you
25 can do.

1 HEARING OFFICER ORTH: Are you done, Member
2 Bitzer?

3 BOARD MEMBER BITZER: (Holding thumbs up.)

4 HEARING OFFICER ORTH: Okay. Member Garcia?

5 BOARD MEMBER GARCIA: Yes, Madam Hearing Officer,
6 I do have a question for Mr. Morris. Thank you, sir, for
7 your -- for your presentation. My question is regarding
8 the factors and parameters you took into account into this
9 modeling. I know you took into account increased
10 temperatures with climate change, et cetera, and the
11 production of ozone due to that. Also, projections of oil
12 and gas activity, you know, for the next seven, eight
13 years, et cetera.

14 Did you also take into account out of state
15 sources and what projections might be for Texas, for
16 instance, or influences of activity in Mexico? I know
17 that Doña Ana is a nonattainment area, and some believe
18 that much of that could be due to activities in Mexico, so
19 that has a big influence on nonattainment or could have a
20 big influence on nonattainment. So I'm wondering how you
21 factored in the out-of-state sources?

22 MR. MORRIS: Well, first, I -- for the climate
23 change, we assumed that the 2028 meteorology was the same
24 as 2014, so we did not factor in increased temperatures.
25 We did -- for the New Mexico oil and gas, we did get 2028

1 activity projections in New Mexico from the Bureau of Land
2 Management. And then for the sources outside of New
3 Mexico, we used the WRAP 2028 on the books emissions
4 scenario, so that's just -- that would be control
5 strategies measured that are on the books as of when they
6 made that emission inventory, which was probably a
7 year-and-a-half ago. So it included, you know, future
8 year controls on Texas sources, like, on mobile source
9 emissions.

10 For Mexico, I can't remember what the assumptions
11 were there, but those emissions are much more uncertain
12 than those in the U.S.

13 MEMBER GARCIA: Thank you. That's all my
14 questions, Madam Hearing Officer. Thank you.

15 HEARING OFFICER ORTH: All right. Thank you. I
16 believe I heard you say that was all of your questions.

17 Member Honker, do you have questions for
18 Mr. Morris?

19 MEMBER HONKER. Yes, thank you. And Mr. Morris,
20 I'd like to join my fellow Board members in thanking you
21 for the excellent presentation. Just one question. I
22 was -- I was a bit unclear on the point source -- point
23 source versus nonpoint source differentiation. Could you
24 elaborate a little bit on that, in terms of what you
25 considered a point source versus nonpoint?

1 MR. MORRIS: Okay. Well, the -- the nonpoint
2 sources are mainly the -- those sources at the well, so
3 these would be the upstream emissions at the well's sites.
4 And then the point sources will be, you know, sources that
5 have, like, a large compressor or a gas plant, so those
6 would be surrogate for the midstream sources. And so we
7 separated those out to try to get the separation of the
8 mainly upstream sources from the midstream sources.

9 MEMBER HONKER: Okay. That's helpful. Thanks.
10 I have no other questions.

11 HEARING OFFICER ORTH: Thank you, Member Honker.

12 Mr. Knight or Ms. Katz, will there be any
13 redirect? I don't see anyone reaching out through the
14 Chat to ask a question. Will there be redirect?
15 Mr. Knight?

16 MR. KNIGHT: Madam Hearing Officer, no, we have
17 no redirect for this witness.

18 HEARING OFFICER ORTH: Okay. Thank you very
19 much. Is there any reason not to excuse Mr. Morris?

20 MR. KNIGHT: None that I'm aware of.

21 HEARING OFFICER ORTH: All right. Thank you very
22 much, Mr. Morris, for your testimony.

23 MR. MORRIS: Madam Hearing Officer, can you
24 unshare me because I'm not sure how to do that in Webex.

25 HEARING OFFICER ORTH: Yes, I will do that right

1 now. We're going to take a break. I think this is a good
2 time for the break. And let's take 15 minutes and come
3 back at -- that would be 10:55. Yes, 10:55.

4 (Recess taken from 10:40 a.m. to 10:55 a.m.)

5 HEARING OFFICER ORTH: Ms. Katz or Mr. Knight?

6 Oh, I see Mr. Hiser on screen. Mr. Hiser?

7 MR. HISER: Thank you, Madam Hearing Officer. I
8 had a procedural question before we began with
9 Mr. McNally.

10 HEARING OFFICER ORTH: All right.

11 HR. HISER: Do you want us to move the admission
12 of all of the NMOGA exhibits at this time? Was that sort
13 of the agreement on how we're going to do this?

14 HEARING OFFICER ORTH: I think that would be --
15 that would be best. I didn't see objections to the NMOGA
16 exhibits.

17 HR. HISER: So I think that the one correction
18 that we would have is that we filed revised Hearing
19 Exhibits B and revised Hearing Exhibits 47, to be the ones
20 for use during the hearing. That is the redlines with
21 just the redlines.

22 HEARING OFFICER ORTH: Yes.

23 HR. HISER: So with that, I would move the
24 admission of the NMOGA exhibits.

25 HEARING OFFICER ORTH: Would you give us all of

1 the numbers?

2 HR. HISER: Yes, it is NMOGA A1 through A6, B
3 Hearing version, then NMOGA's 1 through -- count all the
4 way to the end -- 46.

5 HEARING OFFICER ORTH: Thank you.

6 MR. HISER: 47 Hearing version, and then 48
7 through 56.

8 HEARING OFFICER ORTH: 48 through 56, terrific.
9 My understanding is there were no objections to those, so
10 unless someone speaks up right now? All right. Those are
11 all admitted. Thank you very much.

12 (NMOGA Exhibits A1-A6, Revised B received into
13 evidence at this time.)

14 (NMOGA Exhibits 1-46, Revised 47, 48-56 received
15 into evidence at this time.)

16 HR. HISER: Thank you, Madam Hearing officer. If
17 we could bring Mr. Dennis McNally.

18 HEARING OFFICER ORTH: I believe I already made
19 him a panelist.

20 HR. HISER: So, Dennis, if you're with us, if you
21 could turn your video on and announce your presence.

22 MR. McNALLY: Hi, this is Dennis McNally. Can
23 you hear me okay?

24 HEARING OFFICER ORTH: Yes. Dennis is the
25 standard spelling. Would you spell McNally, please, and

1 keep your voice up?

2 MR. McNALLY: Yes. Thank you. It's McNally, M-C
3 cap N-A-L-L-Y.

4 HEARING OFFICER ORTH: Thank you. Raise your
5 right hand. Do you swear or affirm that you will tell the
6 truth?

7 MR. McNALLY: I do.

8 HEARING OFFICER ORTH: Thank you very much.
9 You're -- you're a little quiet. Am I the only one who
10 thinks you're a little quiet? No. The court reporter
11 also thinks you're a little quiet.

12 MR. McNALLY: I'll speak up. Thank you.

13 HEARING OFFICER ORTH: All right. Thank you very
14 much. And do you need screen presentation privilege?

15 MR. McNALLY: I would, please.

16 HEARING OFFICER ORTH: All right. I'll work on
17 that while Mr. Hiser introduces you.

18 DENNIS McNALLY,
19 having been first duly sworn or affirmed, was examined
20 and testified as follows:

21 DIRECT EXAMINATION OF DENNIS McNALLY

22 BY MR. HISER:

23 Q. Mr. McNally, can you please state what your
24 educate -- or what involvement is in this proceeding?

25 A. So I am -- have reviewed the photochemical grid

1 modeling conducted by -- for NMED on behalf of NMOGA.

2 Q. Okay. And they're ask -- I see hands up against
3 ears.

4 A. Okay. Sorry.

5 Q. Why don't you say that again just to make sure
6 the court reporter got it?

7 A. Yeah. I reviewed the photochemical grid modeling
8 conducted by NMOGA -- conducted by NMED on behalf of
9 NMOGA.

10 Q. Okay. And was part of that work looking at the
11 work that was done by Ramboll that Mr. Morris just
12 testified to?

13 A. That's correct.

14 HEARING OFFICER: Mr. Hiser, I'm sorry to
15 interrupt, but the Board members really would like to be
16 able to reach for the right exhibit.

17 MR. HISER. Ah, thank you, Madam Hearing Officer.

18 Q. (BY MR. HISER) So the exhibit that you're going
19 to be speaking to is NMOGA Exhibit No. 32; is that an
20 accurate copy of your resume?

21 A. It is.

22 Q. And then is your testimony found in NMOGA
23 Exhibits A4 and 45, which reflects your direct and
24 rebuttal testimony?

25 A. They are.

1 Q. And then, do you wish to make any modifications
2 to your prefiled or rebuttal testimony?

3 A. I do not.

4 Q. Okay. And then you're also going to be relying
5 on information found in NMOGA Exhibit No. 1. That's the
6 New Mexico Ozone Attainment Initiative Photochemical
7 Modeling Study; is that correct?

8 A. That's correct.

9 Q. And emission -- Exhibit 49, the EPA 2020 design
10 value reports?

11 A. That is correct.

12 Q. And then Exhibit 50, which is EPA's guidance on
13 development of model emissions rates for precursors of --
14 I think it's -- I don't have the full title before me, but
15 it's basically the MERPs guidance?

16 A. I -- I may make reference to that. I did make
17 reference to that in my rebuttal.

18 Q. Okay. Thank you so much. But, primarily, we're
19 going to be looking at NMOGA Exhibits A4 and 45?

20 A. That's correct.

21 Q. Okay. Thank you much.

22 Could you state your qualifications as they
23 relate to your participation in this hearing?

24 A. Sure. My educational background is I have a
25 Bachelor's degree in Chemical Engineering from the

1 University of Colorado and a Master's degree in
2 Atmospheric Sciences from the University of California.
3 I've been doing photochemical modeling since -- well, I've
4 worked on modeling developments from '85 to '87, and been
5 working on model applications of photochemical grid models
6 and the weather models, the meteorological models that
7 drive those models continuously since 1987.

8 Q. Have you prepared a summary of your direct and
9 rebuttal testimony?

10 A. I have.

11 Q. And those are the aforementioned Exhibits A4 and
12 45?

13 A. That is correct.

14 Q. Okay. Have you prepared a summary of this -- of
15 those exhibits and testimony?

16 A. I have.

17 Q. Would you like to provide that summary to the
18 Board at this time?

19 A. I would, please.

20 Q. Please proceed.

21 A. Can everybody see the presentation?

22 Q. Yes.

23 A. Okay. Thank you.

24 So, in my presentation I am building kind of on
25 top of the presentation that Ralph just gave. As always,

1 it was a great presentation that presented a whole lot of
2 work very quickly and concisely. So, nice job on that.

3 So, the conclusions of my modeling are pretty
4 simple, and this is just a straight quote out of my -- my
5 testimony, that "The ozone air quality benefits of the
6 proposed rule are quite modest. What, in fact, the rules
7 have are primarily the result of NOx control measures.
8 Additional controls on oil and gas VOC emissions are not
9 an effective means of controlling ambient ozone levels in
10 New Mexico except possibly for a limited area in
11 Northeastern San Juan County."

12 The NMED modeling approach that was used, I -- I
13 agree with as -- as Mr. Morris quoted me on, during his
14 presentation. The models that were used were consistent
15 with industry standards: the fourth meteorological model,
16 the smoke emissions model, the CAMx photochemical
17 modeling. I have no reason to disagree with the NMED's
18 emissions estimates and agree that the emissions that
19 were -- were put together by this, being based on WRAP
20 emissions are -- are very well vetted. And I feel real
21 good about that.

22 A performance evaluation was conducted and I have
23 no reason to doubt the modeling based on that performance
24 evaluation. It met the EPA modeling criteria or
25 guidelines, and it also -- it tended to overestimate in

1 some places and underestimate in other places, which tends
2 to be something that I like to see in the model. I don't
3 like to see anything that's systematically over or
4 systematically under, so I actually feel -- feel good
5 about the model.

6 Q. And so, Mr. McNally, before you move on to your
7 next slide, in addition to industry standards, would you
8 also find it was consistent with any applicable
9 governmental standards or guidance?

10 A. Yeah. EPA has put together guidance for the
11 applications of the air quality models for State
12 Implementation Plans. And as Mr. Morris pointed out, this
13 isn't really a State Implementation Plan, but it sort of
14 is; I agree that it's kind of a mini SIP, if you will.
15 And so, yeah, I feel like the guidance was -- was followed
16 in the most -- in most cases. And the -- there was
17 some -- the guidance gives some flexibility and there's
18 some of the flexibility that was taken, I don't
19 necessarily agree with, and I'll talk about that during my
20 presentation.

21 Q. Thank you.

22 A. So the NMED analysis assessed the model impacts
23 both in an absolute and relative sense. The majority of
24 the report -- this would be the report is primarily what
25 I'm referring to as the PSD that was put together by

1 Ramboll. Most of that was based on relatives, but part of
2 it was absolutely. So as we've -- as already has been
3 talked about. You know, absolute is the model's -- the
4 concentrations straight out of the model.

5 In a relative sense, what we do is we scale
6 observations based on changes in the model concentrations.
7 I really prefer the relative approach; it's consistent
8 with EPA guidelines. It does recognize the uncertainty in
9 the model estimates. These models are phenomenally
10 complex, there's -- and -- and have -- there's a lot of
11 uncertainties in the modeling -- in the model
12 formulations. There's uncertainties in the model input
13 and I think by using the modeling in a relative sense,
14 you're accounting for some of that, you're recognizing, I
15 guess, is a better term -- some of the uncertainty in the
16 model estimates.

17 I further think, though, that it's important to
18 use modeling -- model observations that are centered on
19 the base year. That was done in the majority of the
20 presentation in the PSD analysis, but in Mr. Morris's
21 previous presentation and in his testimony he also used a
22 period that was not; he used more recent observations on
23 that. And that makes me uncomfortable because the -- in
24 Mr. Morris's presentation he talked about how the design
25 values are based on three three-year averages. And that

1 EPA guidance says they should be centered.

2 When you get -- one of the nice things about that
3 approach is, it does take into account the fact that the
4 meteorology is -- is specific to a certain year. And the
5 way that these -- it's an average of an average -- I
6 don't -- I talk about it in my rebuttal, I don't need to
7 talk about it here. But that base year, in this case
8 2014, gets weighted heavily in this average of averages
9 that gets used. And I think that the model is much
10 better -- much better when that is used.

11 If -- if the NMED had wished to use more recent
12 observations in the -- in the modeling, then what should
13 have happened is a new modeling base year should have been
14 developed for a later year. You know, if it was desired
15 to use, you know, the 2017 through 2019 design values
16 there should have been -- a base year should have been
17 developed for, you know, 2019, or as late as -- as could
18 have been used based on data availability.

19 So, the -- Mr. Morris presented this already, but
20 the 2028 model projections, what we see is that there's
21 a -- between the base year 2014, now to 2028, there was a
22 2. -- a 5.6 parts per billion up in Northern New Mexico;
23 5.9 parts per billion in Bernalillo County; 5.2 parts per
24 billion in Southern New Mexico. And this is the changes
25 before -- without the rule being implemented.

1 The rule emissions impact -- and I -- I have no
2 opinion as to how -- how good an estimate these are, how
3 appropriate these are to -- these estimates are. But, you
4 know, the oil and gas NOx in the future year went from
5 about 120 -- or 102,000 tons per year to 56,000 tons per
6 year, about, you know, a decrease of about 46 tons per
7 year or 46,000 tons per year, a 45 percent reduction. And
8 the oil and gas VOCs went from 211,000 tons per year to
9 105, about a 50 percent reduction. So, basically, a lot
10 of control -- a lot of -- a lot of tons.

11 And the impacts of these tons are presented in
12 the next slide, on slide 7. That one showed a 1 and 1/2
13 part per billion maximum up in Northern New Mexico in San
14 Juan. Other monitors in San Juan, we have .8 part per
15 billion decrease in Bloomfield, and -1.2 at Substation.
16 There was about 1/2 a part per billion in Bernalillo
17 County, and then about a .7 parts per billion down in
18 Southern New Mexico. So with those -- those, you know,
19 roughly 46,000 tons of NOx and that 105,000 tons per year
20 of VOCs, we ended up with a fairly modest ozone decrease.

21 A lot of my analysis is based on work that was
22 done doing additional analysis on modeling that was
23 already conducted by Ramboll, by Ralph, for NMED. And one
24 of those analyses was they did an APCA source
25 apportionment simulation, to look at the contribution of

1 oil and gas emissions after the controls were put in
2 place.

3 Now, the slide I'm going to show next is -- it's
4 important, that this is not the contribution of the rule.
5 This is the relative view of the ozone formed from oil and
6 gas VOCs versus oil and gas NOx emissions after the rule
7 were applied, because that was the simulation that was
8 done by NMED.

9 Ralph mentioned the fact that we could have made
10 a model run on this. And the modeling was supplied by
11 NMED, and gave permission for Ramboll to deliver that.
12 They did a great job, they delivered it in a timely
13 manner. And thank you so much to both of them for making
14 this data available in time to be able to do the -- quite
15 a bit of analysis that had to happen on this.

16 And we did kick -- or I did kick around whether I
17 should make the model simulation on that. And what I
18 determined was that, while there is uncertainty in the
19 analysis of the NOx and VOC contributions, that is a
20 downside. On the plus side, it's nice for consistency
21 sake, to be using modeling that was conducted by NMED for
22 the rule.

23 And if I start making model runs on different
24 computer systems, we can get a little bit different
25 answers. As I start perturbing model input, that just can

1 lead to more inconsistencies, and I thought it was better
2 to accept the uncertainties in using the APCA analysis
3 than to do -- than to introduce inconsistencies based on
4 doing new modeling.

5 So what we ended up seeing on this was, now, when
6 we model the contribution of the 56,000 tons per year of
7 NOx and 105,000 tons per year of VOC, we find that there's
8 about 1/2 a part per billion maximum occurring in the San
9 Juan County up in the San Juan Basin. There's a tenth of
10 a part per billion at two monitors in Bernalillo
11 County/Santa Fe area, Central New Mexico, with many of
12 those -- with 5 of those 7 monitors showing less than .1
13 part per billion impact. And then down in Southern New
14 Mexico, the maximum impact was a .1 part per billion at
15 less than half of the monitors in Southern New Mexico.

16 So of the VOC contributions, we're pretty small.
17 The NOx contributions are a maximum of, you know, 2, 2 and
18 1/2 parts per billion up in the San Juan Basin at Navajo
19 Lake; .6 parts per billion in Central New Mexico; and up
20 to .9 parts per billion at Carlsbad down in Eddy County.

21 Looking at that same relative response to these
22 contributions that we -- that we looked at before, we
23 also, like Ralph presented earlier, we also looked at the
24 unmonitored area analysis. And what we see there on the
25 left is, this is the contribution of this 56,000 tons per

1 year of NOx across the state. What we see there is that
2 up in the oil and gas basins, we see the majority of the
3 contributions.

4 On the left is the NOx, on the right is the
5 contribution with the same scale of the VOC emissions.
6 And what we see on that is this 105,000 tons per year of
7 VOCs, we have less than -- less than 1/2 a part per
8 billion in the -- there's half a part per billion in the
9 San Juan Basin, with a few limited areas in Northeastern
10 San Juan County, going over, going up into the half part
11 per billion, and then nothing over a half part per billion
12 down -- down in the Permian Basin. So the -- so that
13 concludes, I mean, a summary of my judgment of the
14 modeling.

15 In the rebuttal there was some -- in the rebuttal
16 testimony, I also had a comment about some of the National
17 Park Service testimony. And in that, their -- their
18 presentation, they -- it would be easy to interpret their
19 presentation to say that they're using ethane as a
20 surrogate for VOC emissions. And I think ethane is really
21 useful as a tracer for oil and gas emission sources.

22 Oil and gas sources tend to have more ethane
23 emissions than other sources -- other anthropogenic
24 sources or biogenic sources for that matter. So it's a
25 useful tracer, but it's a little misleading because ethane

1 is not regulated as a VOC since it's, as EPA calls it,
2 negligibly reactive. So, while there can -- there can be
3 ethane emissions from -- from the oil and gas activity,
4 it's not forming very much ozone from that, so... It's
5 just more of a comment to keep track.

6 And then, I'm just going to close it with my
7 conclusions again, but I'm not going to bore you all by --
8 by reading it again.

9 So thank you for your time. And thank you,
10 Ralph, for doing the heavy lifting of introducing the
11 study for me so I didn't have to.

12 Q. Thank you, Mr. McNally.

13 MR. RISER: I have no further questions.

14 HEARING OFFICER ORTH: Thank you, Mr. McNally and
15 Mr. Hiser. Ms. Katz or Mr. Knight, do you have a question
16 Mr. McNally?

17 MS. KATZ: No questions from the Department,
18 Madam Hearing Officer.

19 HEARING OFFICER ORTH: All right. Thank you.
20 Ms. Fox?

21 MS. FOX: No questions. Thank you for your
22 presentation, Mr. McNally.

23 HEARING OFFICER ORTH: Ms. Paranhos?

24 MS. PARANHOS: No questions, Madam Hearing
25 Officer.

1 HEARING OFFICER ORTH: Thank you. Professor
2 Pacyniak?

3 PROFESSOR PACYNIK: No questions, Madam Hearing
4 Officer.

5 HEARING OFFICER ORTH: All right. Thank you.

6 Ms. Devore or Mr. Vimont?

7 Mr. Nykiel?

8 MR. NYKIEL: No questions. Thank you.

9 HEARING OFFICER ORTH: Thank you. Mr. de
10 Saillan?

11 MR. DE SAILLAN: Yes, Madam Hearing Officer,
12 thank you. I have a few questions.

13 HEARING OFFICER ORTH: Go ahead.

14 CROSS-EXAMINATION OF DENNIS McNALLY

15 BY MR. DE SAILLAN:

16 Q. Good morning, Mr. McNally. And I want to thank
17 you also for your presentation. I just have a few
18 questions here. Now, the gist of your testimony as I
19 understand it, is that the proposed regulations, if
20 they're put in place, would only have very modest
21 beneficial effect on air pollution in New Mexico; do I
22 have that right?

23 A. That's correct.

24 Q. And as I understand it, the effects that you're
25 looking at are at monitoring stations located in a

1 relatively small number of locations around the state, and
2 particularly in those counties that are affected here; is
3 that correct?

4 A. I did look at the -- at the impacts at the
5 stations, but I also looked at the impacts away from the
6 stations, as I showed in my earlier unmonitored area
7 analysis.

8 Q. Okay. And -- but, nevertheless, that's a limited
9 number of stations when you look at all of the -- all of
10 the air and all of the area that we're talking about in
11 New Mexico?

12 A. I agree that, yeah, the stations, there are
13 limited stations in New Mexico, but, again, I did look at
14 areas not at the monitors also.

15 Q. Thank you. So there -- there are going to be
16 areas where the pollutant levels are actually lower or
17 they're actually higher than what your model predicts; is
18 that correct?

19 A. Well, the impacts of the oil and gas are -- are
20 just what the model had, and within limits; if there are
21 limitations in the model, there could be higher
22 contributions or lower contributions.

23 Q. Okay. Thank you.

24 And -- and for example, areas that are close to
25 an oil and gas facility -- and I know -- and I understand

1 that that meteorology and wind direction, and there are
2 going to be a lot of factors that are going to affect
3 this, but as a general matter, areas that are located
4 closer to oil and gas facilities are generally going to
5 have higher levels of ozone and other pollutants; do you
6 agree with that?

7 A. Yeah, areas in the -- in the -- in the vicinity
8 of the emissions sources do tend to have higher ozone
9 concentrations. That can be from the oil and gas regions;
10 it could also be like, you know, in the Albuquerque/Santa
11 Fe area from other emissions sources, too.

12 Q. Okay. Thank you, Mr. McNally. I don't have any
13 other questions.

14 HEARING OFFICER ORTH: All right. Thank you,
15 Mr. de Saillan.

16 Let's see. Mr. Janoe. Oh, no, I'm sorry. I
17 skipped over Mr. Rose. Mr. Rose?

18 MR. ROSE: No questions.

19 HEARING OFFICER ORTH: Thank you.

20 Mr. Janoe?

21 MR. JANOE: No questions.

22 HEARING OFFICER ORTH: Okay. Mr. Butzier?

23 MR. BUTZIER: No questions. Thank you.

24 HEARING OFFICER ORTH: Ms. Gutierrez?

25 MS. GUTIERREZ: No questions. Thank you.

1 HEARING OFFICER ORTH: Thank you.

2 Mr. Colclasure?

3 MR. COLCLASURE: No questions. Thank you.

4 HEARING OFFICER ORTH: And Ms. Witherspoon?

5 Okay. I'm going to turn to the Board members in the
6 event they have questions. If you are not a panelist,
7 you're on this platform and have a question, please reach
8 out to me in Chat. So let me start with Madam Chair.

9 EXAMINATION BY THE BOARD OF DENNIS McNALLY

10 CHAIRPERSON SUINA: Madam Hearing Officer, I just
11 have a couple of questions -- maybe just one.

12 Mr. McNally, going back to the presentation that we had
13 earlier by Mr. Morris and some of the rebuttals that he
14 had for Mr. Blewitt's presentation the day before; so I
15 just want to make sure I'm clear. So I know in his
16 presentation earlier on Slide 26 of 28, that he presented
17 this morning, he said in evaluating emissions control
18 strategies for reducing ozone concentrations, the standard
19 practice is to evaluate the combined effects of control
20 strategy VOC and NOx emissions reductions and ozone
21 concentrations.

22 So I know in your conclusion, you were saying
23 that primarily -- primarily, the role is focused on -- or
24 the result of the NOx control measures would be the -- any
25 benefit, as you put it, or modest benefit. So could you

1 just walk me through -- I guess, in Mr. Morris's
2 testimony, the standard practice and what's your
3 perspective on what that standard practice is, if there is
4 a standard practice, and how you see that and how you see
5 in your conclusion, we should look at NOx versus the VOC.

6 MR. McNALLY: Yeah. So when they -- in a normal
7 SIP development, what tends to happen is you will first
8 develop the future -- the future case. And then you'll
9 assess that, and that will say if you're -- if you're out
10 of the attainment. If you're in attainment, then you're
11 lucky, you -- the rules that are already on the books will
12 get you into attainment, you're done, write your SIP and
13 turn it in.

14 If you're out of attainment, then what you're
15 going to do is you're going to put together controls to
16 get that area into attainment. And normally, what we'll
17 do is you'll start with some fairly broad brush, not
18 really a rule, but broad brush emission perturbations, I
19 would say. So let's go in and let's cut the anthropogenic
20 NOx by 25 percent; and separately, let's cut the
21 anthropogenic VOCs by 25 percent, and then maybe we would
22 do a simulation where we would cut both.

23 And that would give you an idea of, is the area
24 more NOx sensitive, more VOC sensitive, or maybe equally
25 sensitive. Once you have that -- that data available to

1 you, then you would use that to guide what control
2 strategies you might want to look at. Maybe -- maybe you
3 would -- you know, maybe that would point you toward more
4 of a NOx controls kind of a strategy, or maybe more of a
5 VOC strategy.

6 And that sort of a step doesn't appear to have
7 taken place here. You know, they got to the future year
8 and then they applied -- then they applied a control to
9 that, to say where it would get. And I think, had that
10 initial NOx look, versus VOC look happened, maybe the rule
11 would have been structured in a different way.

12 CHAIRPERSON SUINA: Thank you for your response,
13 Mr. McNally. I just have another follow-up question to
14 that. So I guess I'm looking at the standard practice in
15 the industry. Have you seen in -- and I don't know if you
16 have experience working beyond New Mexico in other areas
17 where we're looking at these models. Do you have that
18 experience?

19 MR. McNALLY: Yeah, I do. I've worked
20 extensively in the Northeast, in Denver, and a lot of work
21 in Houston.

22 CHAIRPERSON SUINA: Okay. And in those models --
23 or in those analyses, is it the standard practice to look
24 at the VOC and NOx emissions reductions on the ozone
25 concentrations and the impacts?

1 MR. McNALLY: I'd say in the screening before
2 you're developing strategies, yes, but oftentimes when a
3 strategy does get modeled, since you've already been
4 informed by whether you need VOC control or NOx control,
5 it -- it would not be typical that you would break out the
6 impacts of each pollutant specifically.

7 CHAIRPERSON SUINA: Okay. Thank you for that.
8 Thank you, Madam Hearing Officer.

9 HEARING OFFICER ORTH: Thank you. Vice-Chair
10 Trujillo-Davis, do you have questions of Mr. McNally?

11 VICE-CHAIR TRUJILLO-DAVIS: Hello, Mr. McNally.
12 Thank you for your presentation, I appreciate it. I just
13 have one or two quick questions here. You were mentioning
14 that ethane is not -- is a good tracer, but it can be
15 misleading in analysis; is that correct?

16 MR. McNALLY: That's correct.

17 VICE-CHAIR TRUJILLO-DAVIS: Currently, does
18 ethane -- do you see reductions in ethane with the current
19 reduction equipment, like a VRU, closed C patches, things
20 like that? Do you see ethane reduce as well, or does it
21 not seem to be impacted by those other measures?

22 MR. McNALLY: You know, I would expect ethane
23 con -- ethane emissions to decrease as controls on other
24 VOCs from oil and gas activity decrease, are -- are put
25 into place.

1 VICE-CHAIR TRUJILLO-DAVIS: Okay. So I just want
2 to understand where you were talking about what's
3 misleading. I don't think I understood that point.

4 MR. McNALLY: So when the Park Services, part of
5 their field program that they did, they collected ethane
6 concentrations and then, as surrogates for where -- what
7 the source of the VOC emissions were coming from. But
8 then in the -- in the presentation, what I think they
9 should have done was, showed what the full VOC
10 concentrations are, not just what the ethane
11 concentrations are. Because the full VOC contributions
12 will also include things like biogenics from -- maybe from
13 motor vehicles, and the signatures would be pretty
14 different.

15 VICE-CHAIR TRUJILLO-DAVIS: Ah, I understand.
16 Thank you very much for clearing that up for me.

17 HEARING OFFICER ORTH: Thank you. Member Cates,
18 do you have questions of Mr. McNally?

19 BOARD MEMBER CATES: Yeah, a couple of quick ones
20 here. Good morning, sir. Thanks for the testimony. So
21 just a point of clarification: is it your view that the
22 rules we're -- that we're considering if they're
23 implemented, they're going to have a minimal effect
24 overall, in terms of, you know, the state as a whole? Is
25 that -- is that your -- did I understand that correctly?

1 MR. McNALLY: Yeah, it's a pretty modest -- a
2 modest impact.

3 BOARD MEMBER CATES: Right. Now, if you look at
4 the hot spots down -- I'm thinking about your maps. If
5 you look at the hot spots in the Permian Basin and up
6 around Farmington, would it be your contention that the
7 effect of these rules, if implemented, would have a
8 minimal impact there as well?

9 MR. McNALLY: I've just switched back to the
10 slide that shows this, Mr. Cates. So the impacts are --
11 there are local impacts that are higher than at the
12 monitors, that I presented certainly, but the impacts are
13 still on the range of, you know, under a very limited area
14 of 3 to 4 parts per billion from these controls, and
15 primarily from the NOx.

16 BOARD MEMBER CATES: So then -- so then you would
17 say, you know, in addition, your position would be, then,
18 in addition to having sort of an extremely modest impact
19 statewide, that the impact locally would be modest as
20 well; is that what you're saying?

21 MR. McNALLY: Yeah, given -- well, given the 70
22 parts per billion standard, whether what is modest, what
23 is -- I mean, those are soft numbers, if you will. But
24 this rule is not going to have a large impact.

25 BOARD MEMBER CATES: Okay. That's all I've got.

1 Thank you very much.

2 HEARING OFFICER ORTH: Thank you. Member Bitzer?

3 BOARD MEMBER BITZER: Yeah, real quick. On
4 the -- on the modest impact on the VOCs up in the
5 Farmington area, part of that modest impact drifts over
6 the border into -- what is that Animas La Plata region of
7 Colorado. Would this modest impact potentially -- and
8 this may be a question for the state, I don't know -- but
9 would this modest impact potentially have an impact on our
10 ability to retain and/or enhance our good neighbor
11 obligations under EPA's good neighbor rule?

12 MR. McNALLY: I'm afraid I don't know how to
13 answer that.

14 BOARD MEMBER BITZER: I'm sorry. That could
15 maybe be a question later for the environment staff, too,
16 because I think that drifts back over onto cross their
17 side of the border. That's all I had.

18 HEARING OFFICER ORTH: All right. Thank you.
19 Member Duval?

20 BOARD MEMBER DUVAL: Yes. Thanks, Mr. McNally.
21 I appreciate your testimony. I am curious about some
22 points that might seem a little overly academic, but I
23 think you're in a good position to answer these. So the
24 weather inputs into the model, I was a little confused
25 about that. You made mention that it was, I believe,

1 2014, that the simulations were based on. I mean, were
2 there any -- was there any, like, spin-up process going to
3 that, or was it just using the meteorological data from
4 that single year, using -- based -- that the projections
5 were based on?

6 MR. McNALLY: Yeah, so the model was just run for
7 the ozone season of 2014.

8 BOARD MEMBER DUVAL: Okay.

9 MR. McNALLY: But the model was run with a 15-day
10 spin-up, if you will.

11 BOARD MEMBER DUVAL: Okay.

12 MR. McNALLY: We start the -- the model
13 initialization is based on the global model -- the global
14 model simulation, which is at a very coarse resolution.

15 BOARD MEMBER DUVAL: Sure.

16 MR. McNALLY: And the model is run for 15 days,
17 to sort of flush, you know, that's to get two waves across
18 the country to wash that out, and then the model starts to
19 be used for the simulation that we're going to use, but,
20 yeah.

21 BOARD MEMBER DUVAL: Because I was -- I was
22 curious, because I mean, there's obviously
23 publicly-available data like the CMIP, future climate
24 projections from -- from that. I'm -- I'm assuming you're
25 familiar with -- with that framework?

1 MR. McNALLY: Generally available -- or generally
2 familiar with the climate models.

3 BOARD MEMBER DUVAL: Yeah. So I was just
4 curious, like if -- if we're -- and this, again, could be
5 a question for the state if they were the ones that were
6 running the models, but, you know, I think it would be
7 standard practice to, you know, validate with known
8 meteorological parameters, and then run forward with
9 projected climate simulations. So kind of like modeling
10 within the model in a sense, if you're trying to get at
11 what projections for, say, 2028 or 2050 or 20100 would be,
12 that, like, we should be using future climate projections,
13 and not relying on, you know, potentially a single data
14 year.

15 MR. McNALLY: I -- I certainly don't disagree
16 with your assessment on that, but the -- if you're -- if
17 you're using a model to look at control strategies, you
18 have to be able to isolate cause and effect in the model.
19 And the way that we do this is in the current -- as was
20 done here and is typically done in the air quality
21 community is, we make an assumption that the weather in
22 the future year, in this case 2028, is going to be
23 identical to what the weather was on -- in 2014.

24 BOARD MEMBER DUVAL: And that's -- and that's
25 exactly my point, that that's a -- that's an unreasonable

1 assumption.

2 MR. McNALLY: And it's -- and that's because
3 you've got to anchor some degrees of freedom in order to
4 isolate what the impacts of the emissions are.

5 BOARD MEMBER DUVAL: I understand the challenges
6 of doing that, yes, but I mean, I think you see my point,
7 too, that like --

8 MR. McNALLY: Yes, I do.

9 BOARD MEMBER DUVAL: There are frameworks that we
10 could use with -- with, you know, pretty well vetted --
11 and it wouldn't just be one model, right? I mean, there's
12 like 15 that you could do a suite and put some error bars
13 around this, too. Instead of just saying it's going to be
14 7 percent that, you know, we have -- we have, you know, a
15 confidence interval around some of these numbers. So --
16 and I apologize for missing this morning's presentation.
17 I was actually -- I was teaching. But, yeah, I need to
18 look more at the morning's -- I'm assuming this is all
19 being recorded and I'll look at this morning's testimony,
20 but, yeah. I think I will end my statements with a quote
21 that I'm sure you're familiar with by George Box, that
22 "All models are wrong, some are useful."

23 MR. McNALLY: Thank you.

24 BOARD MEMBER DUVAL: All right. I'm done.

25 HEARING OFFICER ORTH: All right. Thank you,

1 Member Duval. Member Garcia?

2 BOARD MEMBER GARCIA: No questions. Thank you.

3 HEARING OFFICER ORTH: All right. Thank you.

4 And Member Honker?

5 BOARD MEMBER HONKER: Yes, just one question, and
6 thanks for the very interesting presentation. I believe
7 later in the hearing we're going to be looking at examples
8 of approaches that Pennsylvania and Colorado have taken.
9 I was curious as to whether you had reviewed any modeling
10 that either of those states had done, to support any
11 revisions they've made in their programs?

12 MR. McNALLY: So, in Colorado, we were -- until
13 very recently we were a subcontractor to Ramboll in
14 putting together those SIPs. So we've been involved in
15 putting together SIPs in Colorado since, I think, about
16 2003. So I'm pretty familiar with how the modeling was
17 put together. I am certainly less familiar with how the
18 emissions inventories were put together to support that
19 modeling.

20 BOARD MEMBER HONKER: Okay. And do you have any
21 familiarity with the Pennsylvania program?

22 MR. McNALLY: I do not have familiarity with
23 Pennsylvania.

24 BOARD MEMBER HONKER: Okay. All right. Thank
25 you. No other questions.

1 HEARING OFFICER ORTH: All right. Thank you.

2 Madam Chair, I understand you have a follow-up?

3 CHAIRPERSON SUINA: Thank you, Madam Hearing
4 Officer. I apologize. This came up as I was listening to
5 the other questions. Mr. McNally, I just wanted to get my
6 head around, you know, as Member Duval said, we get all of
7 these values out of numbers, and we're trying to look at
8 data and trying to look at various, you know, aspects
9 objectively, scientifically. So you used the term
10 "modest." And in one of the -- I think in your -- one of
11 the conclusions or one of the statements, what do you see
12 as modest? What's your definition of modest?

13 MR. McNALLY: So that's a great question. I
14 would think -- I would say a modest is -- is a way of
15 looking at what is -- it really comes down to a value, I
16 guess. And I see modest as being, it's not going to have
17 the -- it's a lot of controls that's going to get not a
18 huge impact; it's going to get some impact. So it's --
19 it's very difficult -- and I -- and I -- to quantify
20 exactly. I mean, is it -- is it 3, not 4? Yes. No, I
21 wouldn't say that. It's more of just a feeling on the
22 number.

23 CHAIRPERSON SUINA: Yeah. And I'm just trying to
24 get my head around that. And we're -- so you're looking
25 at modest as maybe not solely in the quantifiable terms,

1 and more in looking at modest as other inputs; is that --
2 is that how I understand your definition?

3 MR. McNALLY: Yes, I'm looking at modest impacts
4 of the -- yes, I guess that would be a safe assumption.

5 CHAIRPERSON SUINA: Okay. Thank you so much. I
6 appreciate that clarification.

7 HEARING OFFICER ORTH: All right. Thank you.
8 Mr. Hiser, will you have any follow-up?

9 MR. HISER: I think just perhaps two questions,
10 Madam Hearing Officer.

11 REDIRECT EXAMINATION OF DENNIS McNALLY

12 BY MR. HISER:

13 Q. Mr. McNally, Chair Suina, I think, asked a really
14 good question about the standard practice that was used.
15 And she asked you, I think, a little about your experience
16 potentially in Houston and Denver. In those areas, have
17 those agencies looked at the balance of where the
18 emissions reductions are more effective or less effective,
19 in trying to craft the emission control strategies? So
20 whether NOx is more effective or VOCs are more effective
21 in the Houston Basin or the Denver Basin?

22 A. Yeah, when you do -- when you're doing the
23 analysis on that, you certainly do take into account
24 spatial, the spatial impacts of that. Do the -- do the
25 controls impact areas that are maybe close to attainment

1 or have a large population? So, yeah, you do -- you do
2 examine spatial -- spatial impacts of control.

3 Q. And then if I could have you back up to slide 9
4 of your presentation? And so, when you're talking a
5 little bit about the modest impact that Chair Suina just
6 asked you about, was part of where you're coming from,
7 that as you look at 56,000 tons a year of NOx or 105,000
8 tons a year of NOx, and then you look at what the part per
9 billion impacts, or in this case, point-part per billion
10 impact of that, that's sort of what you're saying is the
11 modest; it seems that there's a small movement in the
12 ambient concentration for a whole lot of tons on the
13 emissions side?

14 A. That's -- that's what I was trying to say. Thank
15 you.

16 MR. HISER: Okay. Thank you. That's all of my
17 questions.

18 HEARING OFFICER ORTH: I'm sorry. Mr. Hiser?

19 MR. HISER: Yes.

20 HEARING OFFICER ORTH: I'm sorry. Mr. Hiser,
21 Member Duval has reached out to ask another question and
22 if you need follow-up after that, we'll certainly allow
23 it. Member Duval.

24 FURTHER EXAMINATION BY THE BOARD OF DENNIS McNALLY

25 BOARD MEMBER DUVAL: Yeah, thanks again for your

1 time. I bristled a bit at the dismissal of ethane as a --
2 as a tracer. You know, why do we use tracers? It's
3 because it's an easier thing to measure than the actual
4 thing. Right? So, I don't know, I guess I was a little
5 confused at the -- what seemed to be dismissive of the
6 ethane data, when it's a really good proxy because, you
7 know, it's a very simple hydrocarbon and it's easy to
8 measure and we know that it literally traces, i.e.,
9 correlates, with these other VOCs. So I was just a little
10 confused as to why that would be sort of dismissed in the
11 other presentation -- you know, from the other
12 presentation.

13 MR. McNALLY: I apologize if it came across as I
14 was being dismissive. Because I think I stated, that I
15 think it's a very useful thing, but I think when you start
16 looking at the ozone-forming potential of air, you should
17 be looking at the VOCs in that air, not at the ethane
18 concentrations in that air. That's -- that's my only
19 point on it.

20 BOARD MEMBER DUVAL: Granted. Yeah. Okay. And
21 I didn't mean to impugn; I just -- I wanted to make sure
22 that it's like clear to maybe folks that don't have the
23 same background that you do, that, you know, like the
24 reason you use a tracer is because it's an easier molecule
25 to measure with given instrumentation, and perhaps like a

1 more sophisticated, you know, gas analysis system. So I
2 just wanted to make that point.

3 MR. McNALLY: Thank you.

4 BOARD MEMBER DUVAL: Thank you.

5 HEARING OFFICER ORTH: Thank you. Is there
6 anything further, Mr. Hiser?

7 MR. HISER: No, Madam Hearing Officer.

8 HEARING OFFICER ORTH: All right. Thank you. If
9 there's no reason not to excuse Mr. McNally, we will
10 excuse him. And thank you very much for your testimony.

11 MR. McNALLY: Thank you.

12 MR. HISER: Thank you, Madam Hearing Officer.

13 HEARING OFFICER ORTH: All right. I'm the
14 presenter again. All right. Where are we going next? I
15 know the names of the other witnesses who will be
16 testifying on modeling, but I'm not sure exactly what
17 order they're going to be testifying in. I see Mr. Rose
18 on the screen.

19 MR. ROSE: We have Mr. Blewitt who has testimony
20 on the modeling as well, but in terms of order, we could
21 go next. I don't think there is any preference, but
22 however you want to handle that.

23 HEARING OFFICER ORTH: All right. Would folks
24 prefer to break for lunch, knowing that we would have to
25 break, you know, in about 15 minutes or so anyway? How do

1 you feel about that, Mr. Rose?

2 MR. ROSE: That would be fine, I think. I don't
3 know how long Mr. Blewitt's direct is going to take, but
4 my sense is it will be about the 15 minutes, and any
5 questioning probably would be better if it directly
6 followed his testimony, as opposed to there being a gap.
7 So I think I'd prefer breaking now and then reconvening
8 after the public testimony at 1:00.

9 HEARING OFFICER ORTH: Okay. I'd rather not take
10 an extra long lunch, if there is something else we can do
11 now. Let me see here. Ms. Katz, I don't know if you have
12 any ideas. It might be possible to take someone who, for
13 example, is already on the platform, by way of a public
14 comment just to get us a little closer to noon.

15 Oh, if we reconvene at 12:30, that's a question
16 from a Board member, then we could take a whole half hour
17 of technical testimony before 1. How does that sound?

18 MR. ROSE: That would be fine, Madam Hearing
19 Officer.

20 HEARING OFFICER ORTH: All right. And I see
21 Ms. Katz nodding. All right. So let's adjourn for lunch.
22 It's 11:45, we'll return at 12:30 with Mr. Blewitt. Thank
23 you, all.

24 (Recess taken from 11:46 a.m. to 12:30 p.m.)

25 HEARING OFFICER ORTH: All right. We're back

1 after our lunch break. And I have a request, Ms. Katz, if
2 you're on, please, and I think this will just take a
3 second.

4 MR. ROSE: I don't see her.

5 HEARING OFFICER ORTH: Okay. So here's -- here's
6 the request for confirmation. I hoped this would be a
7 quick confirmation. The plan is to complete modeling, the
8 economic analysis and small business before going to the
9 Environmental Law Center direct. I mean, that's my
10 understanding. I just -- oh, there's Lara. Ms. Katz?

11 MS. KATZ: Yes. Sorry, my computer is being
12 really slow; I can hear everything you're saying, but I'm
13 not being able to come up right away. So can you -- so
14 say the order that you just said one more time?

15 HEARING OFFICER ORTH: So complete modeling, the
16 NMOGA economic analysis and small business topics before
17 moving to the Environmental Law Center direct, which I
18 think is Pasqual.

19 MS. KATZ: No, so that's not the plan. I think
20 what we would like -- because we're trying to have the
21 economist -- neither my -- let's see. So, yeah, I don't
22 think NMOGA's economist is available today and my
23 economist is not either. So what we're trying to have
24 that -- that -- the economic analysis and small business
25 facility go tomorrow first and second. And so once we're

1 done with the modeling, we're asking to move things up,
2 like, so, yes, the Environmental Law Center's direct, CCP
3 direct, NAVA, and some of these other ones -- you know,
4 other topics, so that we can get through those today and
5 start tomorrow with the economics.

6 HEARING OFFICER ORTH: I'm sorry. And to the
7 extent that poses any kind of challenge to Professor
8 Pacyniak, NAVA, CCP, I think he's going to have to
9 communicate with you offline, I think would be best.

10 PROFESSOR PACYNIK: No challenge at all.

11 HEARING OFFICER ORTH: Oh, okay. Thanks so much.
12 Thank you, Mr. de Saillan for coming on screen as well.

13 Mr. Rose, let's move to Mr. Blewitt.

14 MR. ROSE: Mr. Blewitt's on, we need to, I guess,
15 bring him into the inner sanctum here so that he can
16 testify.

17 HEARING OFFICER ORTH: Okay. He's in purgatory,
18 I guess. Let's bring him on. This will take me just a
19 second. I'm sorry. For some reason I thought I had made
20 him a panelist, but maybe I'm thinking of yesterday.

21 All right. Mr. Blewitt is a panelist. And will
22 Mr. Blewitt need presentation privileges?

23 MR. ROSE: He will and this should be a very
24 familiar exhibit because that's what he started with
25 yesterday. And, hopefully, we've got him in the right

1 slot here now for that exhibit. And for those folks who
2 may not have seen their in-box this morning, we had an
3 amendment to that or an addition to that exhibit, which I
4 circulated this morning. So there was an additional slide
5 that is included in this amended slide deck.

6 HEARING OFFICER ORTH: Okay. Thank you very
7 much. He's on and he has presentation privileges.

8 MR. ROSE: And I guess he needs to turn on his
9 camera and have at it.

10 HEARING OFFICER ORTH: All right. Mr. Blewitt,
11 you're still under oath.

12 MR. ROSE: Let's see if he's on. There he is.
13 At least I think I see him. No, I guess not.
14 Mr. Blewitt, are you on?

15 MR. BLEWITT: Yes, I'm here. Can you hear me?

16 MR. ROSE: I can hear you, I can't see you. Oh,
17 there you are.

18 HEARING OFFICER ORTH: I can see him. I can see
19 him.

20 MR. ROSE: I can see him now. Mr. Blewitt -- and
21 for reference, Mr. Blewitt's direct and rebuttal testimony
22 is IPANM Exhibit 6 for direct and 12 for rebuttal and
23 he'll be speaking as to that.

24 DOUG BLEWITT,
25 having been previously duly sworn, was examined and

1 testified as follows:

2 REBUTTAL DIRECT EXAMINATION OF DOUG BLEWITT

3 BY MR. ROSE:

4 Q. Mr. Blewitt, yesterday, you explained or
5 summarized your education and work background. With
6 respect to modeling, could you advise the Board on your
7 experience, particularly as it relates to photochemical
8 modeling?

9 A. Yes, I would be glad to. I've had -- I've had a
10 great deal of experience in being involved in
11 photochemical modeling starts. Let me just kind of run
12 down the list very quickly here. I was involved in the
13 early Regional Haze WRAP modeling work group as the air
14 quality control commissioner for the state of Colorado. I
15 was deeply involved in the original SIP development for
16 Denver and hosted a modeling -- a series of modeling
17 workshops to discuss the modeling that would be going on
18 on that. I've been involved in three different EIS
19 applications with extensive development work by me
20 regarding emission inventories for oil and gas sources
21 that looked at the climate for both NOx and VOCs.

22 I was involved in the WRAP western project from
23 the start and really got that work initiated and helped
24 secure funding for that. I've published two peer-reviewed
25 papers on stratospheric intrusion using Geoscan and CAMx.

1 And I participated extensively in the Four Corners
2 modeling work that was done on the first go-around of the
3 Four Corners Task Force.

4 Q. And Mr. Blewitt, is there anything in terms of
5 your credentials that you wanted to add with respect to
6 this topic?

7 A. Yes. I am a certified consulting meteorologist
8 and I have been since 1985.

9 Q. Mr. Blewitt, can you give us a summary of your
10 direct and rebuttal testimony? And if you want to go
11 ahead and use the PowerPoint presentation, I think that
12 now would be the time.

13 A. Yes.

14 MR. ROSE: Madam Hearing Officer, does he have
15 presentation rights here?

16 MR. BLEWITT: Is that showing up?

17 MR. ROSE: Not yet.

18 HEARING OFFICER ORTH: The share button ought to
19 work for you.

20 MR. ROSE: There we go.

21 MR. BLEWITT: There we go.

22 Q. (BY MR. ROSE) Let's see. If you'd make it
23 bigger, I guess.

24 A. What I'd like to do is, I'd like to go back to
25 this first slide that we talked about yesterday. And I --

1 I guess I'd like to highlight several point on this slide.
2 I think there's an issue of significance that we -- that
3 we need to think about. A lot of the controls/benefits
4 that we're talking about, are less than a ppb. And I
5 think the accuracy of those -- those estimates, and that's
6 what models provide us, are really, you're in the --
7 you're in the area where some of these may not be really
8 significant, they may not be real, they may be just
9 totally lost in the uncertainty of the model. That
10 doesn't mean they're wrong. It just means that the error
11 bars on those calculations are really probably quite big.
12 I don't have things that I can point to, but that's sort
13 of my gut-level reaction with them and based on 40 years
14 of modeling.

15 The next point I'd like to make is, we talked
16 about this yesterday, but I really want to go back to
17 this: The concept of, we have a base case for 2028, which
18 is not well defined. I'll talk more about that later.
19 But Mr. Baca said that that might not be federally
20 enforceable, and I think from talking as a former
21 regulator being on the Colorado Air Commission, and as
22 somebody who has worked for an industry for a number of
23 years, that -- that leaves a lot of uncertainty, because a
24 single source can't have two sets of emission limits; one
25 which reflect federally-enforceable and the other that are

1 only state-enforceable for the same pollutant.

2 So I think NMED really, and the Board really need
3 to think about this issue of enforceability and what do
4 these -- in whatever ultimate plan you implement, what
5 does that mean in terms of regulation and -- and
6 enforceability by other parties.

7 HEARING OFFICER ORTH: Mr. Blewitt, is it
8 possible to expand the size of your slide there?

9 MR. BLEWITT: Sure, I can do that.

10 HEARING OFFICER ORTH: Thank you.

11 MR. BLEWITT: Is that better?

12 HEARING OFFICER ORTH: It is better. Thank you.

13 MR. BLEWITT: I talked about this yesterday, and
14 I want to expand upon this further. Mr. Morris identified
15 the 2014 base case and we talked about the 2028
16 future-year base case. Now, I think this needs to be
17 discussed a little bit more because it's not a simple
18 answer, as Mr. Morris alluded to. I looked through the
19 entire WRAP west side more than once, and I was unable to
20 find any documentation on what was in this base-case
21 inventory.

22 And I think for the Board and NMED, this is --
23 this is important, because this ultimately will be somehow
24 involved in some sort of regulation. And I also -- in
25 the -- in the technical support document, there were two

1 references to inventories that were used to develop it. I
2 requested those inventories through NMED, I received them,
3 and, unfortunately, there was not enough -- there was no
4 details other than a tabular list of numbers and emissions
5 rates that you could actually confirm those emission
6 rates.

7 I -- I have also done some work reviewing Mancos
8 EIS. And the Mancos EIS is related to this work through
9 the four-state modeling effort that was done by New
10 Mexico, Colorado, Wyoming -- maybe it's a three-state.
11 And in looking at the work that was done for Mancos, BLM
12 did account for decline in that inventory, but only
13 included it for greenhouse gas emissions. They did not
14 include it for compressors. And so, I really have -- have
15 doubts whether -- whether decline was properly accounted
16 for or not.

17 That may be a moot point in some respects, other
18 than to say the emission inventory may likely overestimate
19 emissions. The modeling results provide a picture that I
20 think is quite important for everyone to understand.

21 And then, there's the last case, which is the
22 2028 future-year case, with additional controls on oil and
23 gas. And the point I want to make here is that unless the
24 2028 base case is implemented, the controls on oil and gas
25 will not satisfy the objectives that we're -- we're --

1 that we have in this hearing. So it's important to keep
2 that in mind.

3 Okay. I think we can just skip that slide, I've
4 pretty much covered that.

5 This is a slide that's from a combination of
6 Table 4-6, 4-7 and 4-9 in the technical support document.
7 And what you see is, unfortunately, what's in the
8 technical support document tends to -- to look at the
9 differences as percents, not absolute values. So,
10 there -- there was a 16-, 17,000 ton-per-year increase in
11 oil and gas emissions for -- for nonpoint, which is,
12 basically, wells. And then there's a -- and that number
13 may be overstated, it's hard to say given the information.
14 And then there's a 28,000 ton-per-year decrease, compared
15 to that 31,000 in the 2028 base case.

16 And the other thing I want to mention with
17 respect to this is there is a discrepancy in VOC emissions
18 in the tables between Table 4-6, 4-7, and 4-9, that it
19 probably is not terribly important in this context, but
20 it's something that -- that will be resolved.

21 Okay. We've talked a lot about decline. And oil
22 and gas sources are really unique. Production declines
23 exponentially over time, and then when you start adding
24 in, as those decline, you drill new wells and you are
25 adding new production in, but those start declining, so it

1 becomes somewhat of a complex picture in terms of -- of --
2 of what actual production is. Production tends to grow
3 slowly if -- if the rate of drilling is accelerated. So
4 the reason oil and gas operations are continually drilling
5 is to replace reserves that have declined. And for
6 emission sources such as compressors, dehy's and tanks,
7 those will all show decline in emissions over time. And
8 how you look at those declines is really important, in
9 terms of dealing with regional air quality.

10 And the last point is a point I've continually
11 made, is the documentation, which is really important for
12 NMED and the Board to understand what's in this inventory.
13 This is a slide from the Ramboll report. It's modified, I
14 believe, slightly. It's -- but what you notice is the two
15 orange squares here, those are the two areas that are
16 nonattainment at the moment. The yellow highlights are
17 areas of monitoring that are above the 95 percent, so
18 you've got 68 ppb here; 67 equal to it; 67 equal to it;
19 67, 69.

20 But the issue is, when you implement the changes
21 in that base case, everything is below that 67 parts per
22 billion except the Desert View monitor, which is at that.

23 HEARING OFFICER ORTH: Mr. Blewitt? Mr. Blewitt,
24 I'm sorry again, to interrupt. Is there a way for you to
25 make that the full screen? That really is impossible for

1 us to read.

2 MR. BLEWITT: Sure. I'm going to do -- how about
3 that? How about that?

4 HEARING OFFICER ORTH: That's better. Thank you.

5 MR. BLEWITT: Okay. Sorry. So the issue is
6 that, you know, for the San Juan Basin, after we include
7 the base case here -- the 2028 base case, all of the
8 concentrations predicted at the monitors are well below
9 the standard. So the fact -- and we've seen a 5 to 6 -- 5
10 ppb decrease in concentrations, and yet, when we add the
11 oil and gas controls, we're seeing .3, .8 at Bloomfield,
12 1.5 at Navajo Lake, but we're only at 64.8 ppb at that
13 site. So the fact that you're reducing concentrations
14 here, the concentrations are well below the level of the
15 standard.

16 And if you -- if you look at Carlsbad -- and this
17 is older monitoring data, this is what Ramboll looked at,
18 but that's -- the base case takes you down to 6.7 or 66.7
19 reduced to 2.3, but -- but the additional oil and gas only
20 got .3. So -- so we're really not seeing -- as -- as
21 Mr. McNally said, we're seeing a very modest reduction,
22 some of which may be lost in the noise of the model. The
23 only large reductions are at Navajo Lake and Substation,
24 and there the concentrations are well below the standard.

25 And in working in compliance demonstration,

1 attainment demonstration, it tends to be a balancing act.
2 You kind of make things better at one place, but make
3 things -- may increase at another place. So I think it's
4 important to keep in mind the actual concentration for the
5 future-year base case, as well as the amount of reduction.

6 But this basically says, if you want to comply
7 with the 95 percent or you want to use that for a plan,
8 this 2028 base case really gets most of the monitors, with
9 the exception of Desert View, into compliance with your
10 level, so this tends to be your plan. This is kind of a
11 tertiary benefit of using oil and gas.

12 And looking at this at another way, what you see
13 on this slide is this graphically. So, at Navajo Lake,
14 you started out at 67; you, by implementing the base
15 case -- the future-year base case, you get down to 65 ppb,
16 and you're only decreasing to 63.3. And if you look over
17 on this slide, here's the decrease of 2.2 and Navajo Lake
18 is -- is -- the oil and gas is reducing 1.5, but you're
19 talking about concentrations of 65 ppb, 5 ppb below the
20 standard.

21 So if you're simply looking at reductions without
22 the context of what the -- the real total concentration is
23 that the population is exposed to, tends to be misleading.
24 This is the same presentation for Carlsbad City. Ramboll
25 did not analyze Carlsbad National Park, but what you see

1 is, you know, 67, and the base case where Carlsbad City is
2 only reducing it .3 ppb. And remember, these are for NOx
3 and VOC controls combined.

4 I think Mr. McNally presented a very useful
5 analysis of NOx versus VOC, and I think it's the first
6 approximation, what he showed was the really insignificant
7 results in terms of ozone, regarding VOC controls. And
8 when you -- you -- and Mr. Morris indicated that many of
9 the grid cells where you were seeing an increase in ozone,
10 were close to major NOx sources.

11 So I think the issue is, when you look at the
12 issue of VOC controls, it's important to look at where
13 the -- where the VOC increases are causing increases in
14 emissions and where -- where they're located and what is
15 the magnitude of those -- those ozone levels. And that
16 has not been presented. Again, that's sort of a technical
17 side issue.

18 Let me just conclude here: I really feel pretty
19 strongly that the 2028 future-year base case is really the
20 plan that you need to implement for staying within 95
21 percent of the NAAQS. I think you really -- I think it
22 would be very interesting to look at the issue of NOx
23 versus VOCs. I think that's -- that's something that is
24 really sort of deficient. And I agree with Mr. McNally,
25 that it would have been very nice to have those done

1 upfront. I think the documentation regarding the
2 emissions inventory is important for the Board, because
3 they're ultimately going to have to deal with this in a
4 regulatory constraint.

5 I think that's really all I have to say. I'll be
6 glad to take questions.

7 HEARING OFFICER ORTH: Thank you, Mr. Blewitt and
8 Mr. Rose. We are just a few minutes from our 1:00 public
9 comment session. So, Mr. Blewitt, I have, I believe, just
10 four commenters, I believe, and then we will turn to your
11 questioning.

12 So let me -- let me get rid of the presentation
13 mode for you. Hold on. I'll give it back to you shortly,
14 Mr. Blewitt.

15 MR. BLEWITT: Okay.

16 HEARING OFFICER ORTH: All right. So we are at
17 the 1:00 public comment period for day two of the hearing.
18 Let me give you the names of the folks I have who reached
19 out on email to request this slot.

20 If you are on the platform and you would like to
21 make public comment and did not reach out by email, that's
22 perfectly fine. Simply reach out to us in the Chat here,
23 which is enabled for everyone. And if you have any
24 trouble reaching out on Chat, please call or text (505)
25 660-4305.

1 So here are the names of the folks and I'll call you
2 in this order: Kendra Pinto, J. T. Stewart, Cliff Stock,
3 Marcy Petrovsky, John Waters and Jennifer Grassham. So
4 let me look for Ms. Pinto first.

5 And public comment is limited to five minutes and
6 it is given by audio, not video. So let's see. I don't
7 see Ms. Pinto on here. It goes Kaitlin, Keefer, Ken, Kim,
8 so, no. In the event Ms. Pinto joins us, I'm happy to
9 unmute her. Let me try J. T. Stewart.

10 All right. It just takes a moment to -- no, I
11 don't see J. T. Stewart. I saw him earlier, I believe,
12 but not right now. Let me move to Cliff Stock.
13 Mr. Stock, is he on with us. No? Oh, you know what? I
14 see some new call-in users. Sorry. Here, I'm going to
15 unmute caller 10. Caller 10, will you please identify
16 yourself? Caller 10, I've unmuted you. Okay. Caller 10
17 may have stepped away. Let me unmute Caller 12. Caller
18 12, can you hear me?

19 MR. KNIGHT: Madam Hearing Officer, this is
20 Andrew Knight.

21 HEARING OFFICER ORTH: Oh, Andrew Knight?

22 MR. KNIGHT: Yes, I have dialed in because I'm
23 having connectivity issues.

24 HEARING OFFICER ORTH: Okay. So I know that
25 you're Caller 12. I'm going to -- I don't think I can

1 make you a panelist. I'm just going to mute you or
2 perhaps you would just mute yourself, Mr. Knight.

3 MR. KNIGHT: Will do.

4 HEARING OFFICER ORTH: All right. Thank you.
5 Let me see if I have any other call-in users. I don't.
6 All right. So I don't see Mr. Stock. Who was next?
7 Marcy Petrovsky. I'm sorry if I am mispronouncing your
8 name. No? Well, I'm striking out here.

9 And let's see. John Waters. I think I remember
10 Mr. Waters from the -- from the Water Quality Control
11 Commission. Mr. Waters, can you hear me?

12 MR. WATERS: I can hear you. Can you hear me?

13 HEARING OFFICER ORTH: Terrific. Yes, very
14 clearly. So I'm going to start your clock at five
15 minutes. Let me ask you first, though, to raise your
16 hand. Do you swear or affirm to tell the truth?

17 MR. WATERS: Yes, I do.

18 HEARING OFFICER ORTH: Thank you. Your five
19 minutes starts now.

20 JOHN WATERS,
21 having been first duly sworn or affirmed,
22 gave public comment as follows:

23 PUBLIC COMMENT OF JOHN WATERS

24 MR. WATERS: Excellent. Thank you.

25 Mr. Chairman, members of the Board, I want to thank you

1 for the opportunity to comment on this. I am John Waters,
2 I am the executive director for the Carlsbad Department of
3 Development. As Felicia mentioned, I am also a former
4 member of the Water Quality Control Commission. I was a
5 wastewater superintendent and environmental manager and
6 environmental regulator in my past life; probably the only
7 economic development director with advanced degrees in
8 environmental biology. It's a strange -- a strange path
9 we run on.

10 I'm going to please ask you to consider, while
11 considering this methane regulation, I want to ask you to
12 think about the amount of methane that's actually out
13 there -- human-caused methane that's out there, and the
14 magnitude of what's out there above and beyond the smaller
15 sources that you anticipate looking at.

16 And, of course, the San Juan Mine always sticks
17 up; at least in '19, its methane emission was metric
18 tons-wise of carbon dioxide, of methane, was, you know,
19 565,000. And that's -- that's way, way up there, but if
20 you look at the -- of the top 10 out of the top 15 methane
21 sources there are in the State of New Mexico, by far and
22 above, landfills are your biggest problem. And there's a
23 lot of those that are uncapped at all. And I do want you
24 to consider the magnitude of the amount of even the
25 smaller landfills that are out there, and even some of the

1 capped landfills, still emit a significant portion of
2 methane into the atmosphere.

3 And if you're looking for your best bang for your
4 buck as far as the state goes, to maybe regulate and look
5 at a little bit harder, I would say -- I would suggest
6 that you first of all take a very strong look at the
7 landfills across the State of New Mexico, and see how that
8 can be captured, because, by far, that is a much bigger
9 bang for your buck than going after and having to regulate
10 an industry with numerous, you know, 44,000 wells across
11 the State of New Mexico.

12 The amount of money, the amount of time necessary
13 to regulate that, given the fact that these wells don't
14 emit per well a significant portion of -- you know, of
15 methane into the atmosphere. I think your -- you know,
16 the Board would definitely get better bang for their buck,
17 better regulatory bang, a better ability to control
18 methane if they focused heavily on the landfills in the
19 State of New Mexico, because they do contribute a
20 significant amount.

21 Coal-fired power plants and other things, given
22 the coal industry, if that is being looked at really
23 heavily, obviously, there is a power plant up north that's
24 getting ready to shut down, but there is a significant
25 amount of methane that comes from those. If you, you

1 know, we've -- we've had people talk about refineries and
2 different things of that nature, they're far down on the
3 scale as far as point sources of emission.

4 So I would suggest that rather than focus
5 regulations on an industry that is so spread out, and
6 even, collectively -- even collectively, it still doesn't
7 rate up to what the entire New Mexico gas transmission
8 system rates across the state, as far as total metric tons
9 of emissions on an annual basis. You know, definitely
10 going after 15 or 20 landfills and even -- even helping
11 out with, from the state-side, with monetary resources to
12 cap those landfills and collect that gas, would be a far
13 better use of the state's, you know, both the regulatory
14 mind of the state, as well as the monetary resources that
15 the state has.

16 I think the oil and gas industry has a lot of
17 benefits -- people are going to talk about those -- on our
18 education and things to come. And they've done a lot of
19 voluntary work; we've seen it down here in the Carlsbad
20 area across the board, whether it's on the midstream
21 industry or upstream or even downstream, there's been a
22 lot of voluntary work. And I know that they've been
23 willing to continue to move forward.

24 There are new midstream plants moving in and the
25 number of flared wells are going to be dropping as soon as

1 the infrastructure is in here. I just think that at this
2 particular time in our -- if we're truly looking at trying
3 to reduce human impact on methane emissions from the State
4 of New Mexico, go after those 15 or 20 sources out there
5 and see if we can't do something to capture that methane
6 before going after something that is so spread out across
7 the State of New Mexico and so difficult to enforce. So
8 thank you again for your time. I do appreciate it. We're
9 very supportive of the industry down here, as you can
10 imagine. But I think -- I think if you're looking at
11 methane, you've got a bigger, bigger animal to hunt, so to
12 speak.

13 HEARING OFFICER: All right. Thank you very
14 much, Mr. Waters.

15 MR. WATERS: Thanks.

16 HEARING OFFICER ORTH: I believe I saw Jennifer
17 Grassham. Here we are. Ms. Grassham, I'm unmuting you.

18 MS. GRASSHAM: Can you hear me?

19 HEARING OFFICER ORTH: Yes, I can. This is
20 Felicia Orth, you are on the public comment session.
21 Public comment is taken by audio and is limited to five
22 minutes. All comment has to be given under oath. If you
23 would raise your right hand. Do you swear or affirm to
24 tell the truth?

25 MS. GRASSHAM: I do.

1 HEARING OFFICER ORTH: Thank you very much. I'll
2 start your five minutes now.

3 JENNIFER GRASSHAM,
4 having been first duly sworn or affirmed,
5 gave public comment as follows:

6 PUBLIC COMMENT OF JENNIFER GRASSHAM

7 MS. GRASSHAM: Good afternoon. My name is
8 Jennifer Grassham, and I am the President and CEO of the
9 Economic Development Corporation of Lea County. My story
10 is inextricably linked to the oil and gas industry. As an
11 almost lifelong resident of Hobbs, New Mexico, I'd have a
12 hard time actually telling you how the oil and gas
13 industry has not impacted me.

14 I'm the daughter of a schoolteacher and an
15 oilfield worker, and not only did the oil and gas industry
16 support my family directly through my father's employment,
17 but as a public schoolteacher, my mother's employment was
18 supported in no small part by the oil and gas industry.

19 As I'm sure you know, last year oil and gas
20 provided 1.4 billion for public schools and higher
21 education. And I am here today as a product of the Hobbs
22 Municipal Schools, as are my three children, two of whom
23 are currently in elementary school in Hobbs.

24 Oil and natural gas is an essential part of New
25 Mexico's economy, responsible for more than 134,000 New

1 Mexico jobs, and 18.8 billion in economic activity, but it
2 would be a mistake to think about the oil and gas industry
3 as this monolith. There's incredible diversity in the
4 industry; from large global producers, to small,
5 mom-and-pop family businesses. The stories of first
6 generation immigrants, my neighbors, come into this
7 country, buying one truck, then two trucks and then
8 eventually running 20 trucks with 30 employees. These
9 stories are everywhere in Lea County.

10 These entrepreneurs not only support local
11 families, but they provide civic leadership in our
12 communities, they sponsor local girls softball teams, they
13 volunteer in the soup kitchen. Really, these families in
14 the oil and gas industry make countless contributions to
15 the great quality of life in Lea County.

16 I'd encourage you to adopt more flexible
17 regulations that respond to the diversity present in oil
18 and gas. We've already heard that one size fits all for
19 having unintended consequences, such as shutting
20 significant production, and especially concerning, forcing
21 small businesses to close.

22 As New Mexicans, we celebrate diversity,
23 creativity in caring for our neighbors. The industry is
24 investing and developing advanced technologies to limit
25 emissions and reduce environmental footprint of

1 production. As New Mexicans, we don't settle for
2 either/or. We're wired for both/and.

3 We can meet policy objectives while continuing to
4 support economic growth and job creation. I completely
5 support efforts to protect our air and natural resources,
6 but we shouldn't balance this on the backs of New Mexico
7 working families. The course we are on today will simply
8 drive work and wealth to Texas.

9 Through more flexible regulations, New Mexico can
10 be in the driver's seat for developing creative solutions
11 to reducing emissions, not only in New Mexico, but around
12 the world.

13 Thank you for this opportunity today to provide
14 an on-the-ground perspective of how this proposed rule
15 will impact me, my family, my community in Lea County.
16 Thank you.

17 HEARING OFFICER ORTH: Thank you very much,
18 Ms. Grassham.

19 Let's see. I have someone reaching out through
20 Chat: Ann McCartney. Let me find Ann McCartney here.
21 Ms. McCartney, I am unmuting you. Can you hear me?

22 MS. MCCARTNEY: Yes. Can you hear me?

23 HEARING OFFICER ORTH: Yes. Very nice. You're
24 on the public comment session. Public comment is limited
25 to five minutes and must be taken under oath. If you

1 would raise your right hand. Do you swear or affirm to
2 tell the truth?

3 MS. McCARTNEY: I do.

4 HEARING OFFICER: Thank you. I'll start your
5 five minutes now.

6 ANN McCARTNEY,
7 having been first duly sworn or affirmed, gave public
8 comment as follows:

9 PUBLIC COMMENT OF ANN McCARTNEY

10 MS. McCARTNEY: Thank you. Thank you for this
11 opportunity to make public comment on these important
12 rules. My name is Ann McCartney. And I am co-chair of
13 New Mexico Inner Faith Power and Light, which is a
14 faith-based organization addressing the issues around
15 climate change.

16 I would like to first bring to the attention of
17 the Board that the recent IPCC report, which is the
18 International Panel on Climate Change, emphasized that the
19 first and most important thing we can do is to make rapid
20 reductions in methane emissions. Methane has over a
21 period of 20 years, in the atmosphere, 85 times more
22 global warming potential than CO2. Therefore, rapid
23 removal of methane leaks and waste would have a dramatic
24 effect, while also helping to limit other pollutants that
25 create warming and worsen air quality.

1 New Mexico is positioned to be a leading state in
2 reducing methane waste and leaks. It is my understanding
3 that the proposed rule is certainly a step in the right
4 direction. It's strong and it's important, first of all,
5 that the Board adopt the rule, but also to strengthen it
6 so that we are a leading state in reducing methane and the
7 VOCs or the VOCs emissions for our very precious state.

8 Those additional strengths or the requirements
9 that would strengthen the existing proposed rule would be
10 to have more protections for people who live close to the
11 development or the production from oil and gas wells, by
12 having more frequent inspections.

13 The second requirement that needs to be added is
14 inclusion of strong requirements for the completion and
15 development of those wells, so that the methane is not --
16 and the VOCs are not released at the time they're either
17 completed or redeveloped.

18 The third requirement that I would ask the Board
19 to consider including would be about the pneumatic
20 controllers; that pneumatic controllers need to be
21 inspected and the state needs to make sure that there's an
22 acceleration of a timeline to retrofit existing equipment
23 for zero bleed and zero emissions controllers.

24 My husband suffers from asthma. The continuing
25 result of the methane emissions and the VOCs emissions

1 from our Permian Basin development and what's occurred
2 already in the Northwest portion of the state, has
3 impacted the air quality for New Mexicans across the
4 state. And now, with the increase of global -- the
5 greenhouse gas emissions raising the temperature across
6 New Mexico and across the world, we are experiencing
7 increased fires and smoke, and the air quality has been
8 extremely poor, not only this year, but in previous years.

9 This impacts a lot of people in terms of their
10 ability to breathe. If you can't breathe, it's really
11 hard to stay alive. So I cannot more strongly urge this
12 Board to undertake adopting and strengthening the proposed
13 rules that came from New Mexico Environment Department. I
14 appreciate your time and consideration of these comments.

15 HEARING OFFICER ORTH: Thank you, Ms. McCartney.
16 We'll turn next to Sharon Wilson. I have a few people
17 reaching out by Chat here. Ms. Wilson, I am unmuting you.
18 Can you hear me?

19 MS. WILSON: I can hear you.

20 HEARING OFFICER ORTH: You're a little soft.

21 MS. WILSON: I can hear you. Can you hear me?

22 HEARING OFFICER ORTH: Okay. Just keep your
23 voice up if you would. We're making a transcript. Public
24 comment is taken under oath and is limited to five
25 minutes. If you would raise your right hand. Do you

1 swear or affirm to tell the truth?

2 MS. WILSON: I do.

3 HEARING OFFICER ORTH: Thank you. I'm going to
4 start your five minutes now.

5 SHARON WILSON,
6 having been first duly sworn or affirmed,
7 gave public comment as follows:

8 PUBLIC COMMENT OF SHARON WILSON

9 MS. WILSON: Thank you. My name is Sharon
10 Wilson. I'm senior field advocate and OGI thermographer
11 for Earthworks. Thank you for taking my testimony. I
12 worked for the oil and gas industry. The pay was great,
13 but I left because their ethics are not great. I bought
14 beautiful land in the country where my sons and animals
15 could run free, but the impacts from living near oil and
16 gas drove me away from my home and toward my life's work;
17 helping others who are suffering from those same impacts.

18 In 2014, I became a certified optical gas imaging
19 thermographer. I have the same certification and use the
20 same equipment industry and regulators use. I have
21 documented emission at many thousands of oil and gas sites
22 throughout the U.S. and other countries, and that includes
23 hundreds of sites in New Mexico. I have more experience
24 and time behind an OGI camera than many regulators or
25 industry thermographers. My video evidence is credible

1 evidence. It deserves that presumption.

2 Here's what I've learned from years of
3 documenting oil and gas emission sources in New Mexico.
4 The term leaks is frequently misused regarding methane
5 emissions. What I see most often are equipment
6 malfunctions and routine intentional releases. Some are
7 part of the system design and some are deliberate dumping
8 of methane gas. Operators, whether large or small, cannot
9 keep flares lit or properly operating. Vent -- unlit
10 venting flares and flares with incomplete combustion are
11 prevalent.

12 Operators do not maintain Enardo-type pressure
13 valves. Instead, they use them as a way to dump methane
14 gas into the air. At least 19 workers have died opening
15 tank hatches to sample and gauge liquid. The hatches are
16 left open or they become corroded and emit constantly. I
17 even see this practice at sites with vapor recovery. What
18 is the point of vapor recovery when tank hatches are
19 opened, allowing the gas to escape? Vapor recovery
20 systems malfunction often. I've documented them emitting
21 for days, weeks, months, without penalty.

22 Most are dependent on reliable electricity and
23 some on proper flare operations. Without those, there's
24 no vapor recovery. But we find vapor recovery
25 malfunctions for many other reasons. Blowdowns of

1 pipelines and compressor stations are routine and often
2 unreported.

3 Any rules must target all blowdowns and pipeline
4 pigging. Some of the worse emission events I've seen come
5 from completions and recompletions. People living and
6 working anywhere near oil and gas facilities need
7 protection, with stronger rules and more frequent
8 inspections. Methane rules are not enough. And rules are
9 only words on paper without vigilant investigations and
10 meaningful penalties.

11 Colorado has good rules, but those do not
12 translate to significant improvements in the field or
13 relief for families living in the oil and gas patch.
14 Don't permit new sites unless you have the capacity to
15 enforce your rules. Right now, you clearly do not have
16 that capacity.

17 The International Energy Agency and the
18 Intergovernmental Panel on Climate Change agree that what
19 is most needed is a halt to new oil and gas investments,
20 and a rapid and just transition away from fossil fuels to
21 100 percent renewable energy.

22 Thank you for your time.

23 HEARING OFFICER ORTH: Thank you, Ms. Wilson.

24 Okay. I don't have anyone else who reached out
25 by Chat to make comment. Let me see if I still have a

1 call-in user that we did not identify. I'll try one more
2 time with call-in user 10. Call-in user 10, can you hear
3 me, and will you identify yourself?

4 Okay. That's all we have, I think, for this
5 public comment session. Let's return to the technical
6 case. Let's see. At some point -- we do have a Board
7 member request of the Department to identify the entity
8 that would oversee landfill emissions.

9 But let's turn to Mr. Blewitt's questioning
10 before we return to any Department statements.
11 Mr. Blewitt, I'm going to give you presentation privileges
12 again. Just give me a second.

13 You can pull your -- pull your slides back up if
14 you'd like. You should -- you should have that privilege
15 now. So let's turn first to either Mr. Katz or --
16 Ms. Katz or Mr. Knight.

17 MS. KATZ: No questions from the Department.

18 HEARING OFFICER ORTH: Thank you. Ms. Fox?

19 MS. FOX: No questions, Madam Hearing Officer.

20 Thank you.

21 HEARING OFFICER ORTH: All right. Ms. Paranhos?

22 MS. PARANHOS: Thank you. I have no questions
23 for this witness.

24 HEARING OFFICER: All right. Professor Pacyniak?

25 PROFESSOR PACYNIK: No questions, Madam Hearing

1 Officer.

2 HEARING OFFICER: All right. Thank you.

3 Ms. Devore?

4 MS. DEVORE: No questions. Thank you.

5 HEARING OFFICER ORTH: All right. Mr. Nykiel?

6 MR. NYKIEL: No questions. Thank you.

7 HEARING OFFICER ORTH: Okay. Mr. de Saillan?

8 MR. DE SAILLAN: No questions. Thank you.

9 HEARING OFFICER ORTH: Thank you. Let's see.

10 Mr. Hiser?

11 MR. HISER: No questions. Thank you, Madam

12 Hearing Officer.

13 HEARING OFFICER ORTH: All right. Mr. Janoe?

14 I don't hear Mr. Janoe.

15 MR. JANOE: No questions, Madam Hearing Officer.

16 HEARING OFFICER ORTH: Okay. Thank you. Let's
17 see. Mr. Butzier?

18 MR. BUTZIER: No questions. Thank you.

19 HEARING OFFICER ORTH: All right. Ms. Gutierrez?

20 MS. GUTIERREZ: No questions, Madam Hearing

21 Officer.

22 HEARING OFFICER ORTH: Thank you.

23 Mr. Colclasure? I don't hear anything.

24 MS. SHPALL: This is Casey Shpall for the
25 Commercial Disposal Group. There are no questions.

1 HEARING OFFICER ORTH: Okay. Thank you,
2 Ms. Shpall. And Ms. Witherspoon?

3 MS. WITHERSPOON: No questions. Thank you.

4 HEARING OFFICER ORTH: Thank you. Going to turn
5 now to the Board members in the event they have questions.
6 While I'm doing that, if you are an attendee and have a
7 question of Mr. Blewitt, please reach out through the Chat
8 and we'll make that happen.

9 REBUTTAL EXAMINATION OF DOUG BLEWITT BY THE BOARD

10 HEARING OFFICER ORTH: So, Madam Chair, do you
11 have questions of Mr. Blewitt?

12 CHAIRPERSON SUINA: No questions at this time,
13 Madam officer -- Madam Hearing Officer.

14 HEARING OFFICER ORTH: Thank you. Vice-Chair
15 Trujillo-Davis?

16 VICE-CHAIR TRUJILLO-DAVIS: I do not have any
17 questions. Thank you.

18 HEARING OFFICER ORTH: Thank you. Member Cates?

19 BOARD MEMBER CATES: No questions here. Thank
20 you.

21 HEARING OFFICER ORTH: All right. Member Bitzer?

22 BOARD MEMBER BITZER: No questions.

23 HEARING OFFICER ORTH: Okay. Member Duval?
24 We can't hear you.

25 BOARD MEMBER DUVAL: Sorry, I was on mute. Yes,

1 I do have -- I do have some questions. And this is a
2 point of clarification. I'm still -- so what we're
3 looking at with all of the tables and figures, we're
4 looking at the output from the model data. And I'm still
5 a little confused as to what the input parameters are.
6 And I asked this to one of the previous -- previous
7 presenters, as far as what they were using as far as
8 weather input, and that was only for 2014. I think he did
9 a good job answering that.

10 I'm wondering what exactly are -- this is to
11 Mr. Blewitt; like, what, what -- what climate and weather
12 inputs do you put into this modeling, like, specifically
13 the Ramboll?

14 MR. BLEWITT: The model uses input meteorological
15 data that is obtained from the WRF forecasting model that
16 is run in a historical mode. So it uses observations from
17 various locations and then it computes wind fields over
18 the domain over the various grid sizes that Mr. Morris
19 talked about.

20 So in the 36-kilometer grid, you are looking at a
21 uniform wind over 36 kilometers in vertical layers, and
22 each of those vertical layers will have different wind
23 speeds. As you get down to 4 kilometers, you are using
24 smaller and smaller pieces. But what you're really
25 looking at is you're looking at historical data based on

1 observations and meteorological modeling. And ideally,
2 you should be modeling more years -- additional years of
3 meteorological data because, as you were told by
4 Mr. Morris, what you're really doing -- and Mr. McNally,
5 you're really referencing everything to a specific state
6 of meteorological conditions.

7 Now, the questions you're asking are very, very
8 good. One of the things you have to remember is this
9 modeling is incredibly computer resource intensive. From
10 my experience a number of years ago -- and I think it's
11 probably not as bad as what I'm going to say now -- but to
12 run 24 hours of data in the -- through the CAMx model, not
13 including the meteorological model, not including the
14 emission processing model is about realtime. So 24 hours
15 of computer time would be needed -- needed to run one day
16 of simulation. And what you do is you parse it out to
17 different processes.

18 So the issue of making many, many model runs
19 becomes a resource limit in terms of computer power. And
20 I think -- I mean, I think the question you're asking and
21 the way I would address this is, taking the most recent
22 data in terms of years of meteorological data, running
23 that through WRF for the current climate conditions and
24 comparing it to 2014 and see what you get. That at least
25 gives you two data points that you could -- you could

1 maybe extrapolate, but unfortunately, things here are not
2 linear.

3 BOARD MEMBER DUVAL: Yeah, and I fully -- I've
4 done quite a bit of modeling work, so I fully appreciate
5 that. I guess my -- I should phrase this a little more,
6 like, higher order. I guess I'm still a little confused
7 of what the input parameters are, as far as like, if
8 you're also looking at things like evapotranspiration,
9 interactions with greenhouse gas, soil parameters, UV
10 input, because that's clearly an important aspect of ozone
11 formation. So I guess I -- we can talk about the nuts and
12 bolts of it maybe offline at some other point, but...

13 HEARING OFFICER ORTH: Mr. Blewitt, I'm sorry to
14 interrupt, Member Duval. Mr. Blewitt, I'm seeing that
15 you're having some struggles with video. My suggestion
16 would be to turn off your video and remain unmuted for the
17 rest of the questions. Things are cutting in and out a
18 little bit, and I see a little yellow flag for you.

19 I'm sorry. Member Duval, please go ahead.

20 BOARD MEMBER DUVAL: No, that's just -- for
21 everyone else my principal question was, I just want to
22 know what the inputs are to the model because all we've
23 really seen is the outputs. We've seen the data and the
24 model's projected. They project that, but you know,
25 models are only as good as what you put into them.

1 That's -- so I was just trying to get a better handle on
2 that. That was really my only question. Sorry if it took
3 me a while to get there.

4 HEARING OFFICER ORTH: Thank you. Member Garcia?

5 BOARD MEMBER GARCIA: I have no questions. Thank
6 you.

7 HEARING OFFICER ORTH: Okay. Thank you.

8 Member Honker?

9 BOARD MEMBER HONKER: Well, is Mr. Blewitt still
10 on?

11 HEARING OFFICER ORTH: He is still on and he's
12 unmuted, but he was clearly having bandwidth issues.
13 Mr. Blewitt, can you hear us?

14 Oh, gosh. Okay. Now we've lost him altogether.
15 Excellent question, Member Honker. We lost him right
16 there. Let's give him a moment in the event he can rejoin
17 us.

18 BOARD MEMBER HONKER: I did have a question for
19 him, but I wanted to make sure he was -- he was available.

20 HEARING OFFICER ORTH: Yeah. And one
21 possibility, Mr. Rose, is for you to put him on speaker.
22 You might be trying to do that right now.

23 MR. ROSE: I was trying to text him to see what
24 the problem is.

25 HEARING OFFICER ORTH: Okay.

1 BOARD MEMBER DUVAL: And Madam Hearing Officer,
2 if I may?

3 HEARING OFFICER ORTH: Yes.

4 BOARD MEMBER DUVAL: I -- I need to go to take
5 students out to the desert to do field work right now, but
6 if I could put my question in the Chat that you could ask.
7 I really just have a pretty simple question about model
8 input. And also, if the model is freely available, that
9 way it could be evaluated. And this is perhaps a question
10 for the state, but if -- if there is the source code
11 available and, you know, Python or R or C-Plus, something
12 like that, that could be evaluated by the public in an
13 open source manner. I would -- I would be interested to
14 know if that's the case.

15 HEARING OFFICER ORTH: Thank you. If you put it
16 in the Chat, I'll be sure to pose it in your words.

17 BOARD MEMBER DUVAL: Absolutely. Thank you very
18 much.

19 HEARING OFFICER ORTH: Thank you.

20 MR. ROSE: Madam Hearing Officer, it appears that
21 Mr. Blewitt's computer froze, so I don't know if he's
22 going to be on here.

23 HEARING OFFICER ORTH: So he hasn't joined the
24 attendees yet, which I think is where --

25 MR. ROSE: It looks like he's trying to phone me.

1 I suppose I could answer.

2 HEARING OFFICER ORTH: Yeah. All right. Well,
3 we'll wait just a moment because it seems like we're very
4 close to being done with the witness and I'd like to
5 finish.

6 MR. ROSE: Okay. No problem. And most of it, I
7 think you can -- we can do later, but let me -- let me get
8 back on. Hold on.

9 Madam Hearing Officer, his -- he's going to have
10 to reboot but he is going to testify later as well, so...

11 HEARING OFFICER ORTH: Okay. So Member Honker,
12 would you make a note of your question, please? And I'm
13 going to make a note of Member Duval's question. And when
14 Mr. Blewitt is back with us, we will reopen this
15 particular discussion.

16 BOARD MEMBER HONKER: Sounds good.

17 HEARING OFFICER ORTH: Thank you. Ms. Katz?

18 MS. KATZ: Madam Hearing Officer, can somebody
19 remind me when Mister -- when Mr. Blewitt is testifying
20 again?

21 MR. ROSE: Just text me when you're ready.

22 MS. KATZ: Lou, you're not muted.

23 MR. ROSE: I know. I just -- he is going to
24 reboot and he'll be on shortly. So it was Mr. Blewitt on
25 the phone.

1 HEARING OFFICER ORTH: Would it help if we just
2 took a ten-minute break?

3 MR. ROSE: It may. I hate to delay it, but --
4 and I think most of the questions were done, but if you
5 want to take a five-to-ten minute break, hopefully he can
6 get back on. If not, I mean, he is testifying later, not
7 that that's optimal, but we can certainly make him
8 available to answer those questions.

9 MS. KATZ: Mr. Rose, when is he testifying later?

10 MR. ROSE: He's testifying in response to some of
11 the WildEarth Guardians proposals as to --

12 MS. KATZ: Okay.

13 MR. ROSE: And I think there may be one other
14 area where he's testifying as well, so... I don't have
15 the spreadsheet in front of me. You probably do, but at
16 least as to the WildEarth Guardians' proposal, he filed
17 rebuttal testimony in response, so...

18 MS. KATZ: Yes, we have -- yes, okay. Thank you
19 for reminding me of that.

20 MR. ROSE: So if I get a text from him that he's
21 back on, hopefully, I'll let you know, but I don't know if
22 it's an equipment problem or a bandwidth-related problem,
23 so...

24 HEARING OFFICER ORTH: Okay. Let's just take ten
25 minutes and we'll come back. I will monitor the attendee

1 list, Mr. Rose. We'll take ten minutes and come back at
2 1:45. And if Mr. Blewitt hasn't rejoined us by then,
3 we'll move on.

4 MR. ROSE: Thank you, Madam Hearing Officer.

5 (Recess taken from 1:37 p.m. to 1:45 p.m.)

6 HEARING OFFICER ORTH: Let's come back from the
7 break, please. All right. Mr. Rose, I did not see and do
8 not see at this moment, Mr. Blewitt among the attendees.

9 MR. ROSE: He's still trying to get on, Madam
10 Hearing Officer, so I suggest we now wait and if -- when
11 he's available, we can either put him back on or we can
12 save the questions for when he testifies again.

13 HEARING OFFICER ORTH: All right. Let's see.
14 And our next witness -- let me go to the spreadsheet.

15 MS. KATZ: Madam Hearing Officer, Mr. Morris has
16 surrebuttal still.

17 HEARING OFFICER ORTH: All right. Thank you.
18 Let's go to Mr. Morris.

19 MS. KATZ: And also I want to clarify that
20 Ms. Hollenberg is also testifying on this topic and so she
21 is up next, I believe.

22 HEARING OFFICER ORTH: All right. I'm happy to
23 take them in any order you prefer. Let's see. Do we have
24 Ms. Hollenberg with us? Maybe among the attendees? Tell
25 me her first name.

1 MS. KATZ: I believe so. Cindy.

2 HEARING OFFICER ORTH: Cindy. There, I see her.
3 I've made her a panelist. Does she have slides?

4 MS. KATZ: She does. Except I'm going to call
5 Mr. Morris -- or I mean, I guess I can put Ms. Hollenberg
6 on first and then Mr. Morris as surrebuttal. Either way.

7 HEARING OFFICER ORTH: Whatever you prefer.

8 MS. KATZ: I would rather do Mr. Morris's
9 surrebuttal because it's specific to the modeling.

10 HEARING OFFICER ORTH: All right. And would --

11 MR. HISER: Madam Hearing Officer and Ms. Katz, I
12 thought we were going backward in surrebuttal order,
13 because we do have some surrebuttal from Mr. McNally.

14 MS. KATZ: Oh, yes, you're correct, Mr. Hiser.
15 So, yes, let's -- sorry, it's hard to get used to this
16 patterning. So yes, it would then be Mr. McNally next.

17 MR. HISER: Madam Hearing Officer, do you see
18 Mr. McNally in the participant list?

19 HEARING OFFICER ORTH: Let's see. His first name
20 was Dennis?

21 MR. HISER: Dennis, yes.

22 HEARING OFFICER ORTH: I do not.

23 MR. McNALLY: I'm here.

24 MR. HISER: Oh, he says he's here.

25 HEARING OFFICER ORTH: Okay. Sorry, I think I

1 already made him a panelist.

2 MR. McNALLY: You did.

3 HEARING OFFICER ORTH: And I do see Mr. Blewitt
4 here. He just showed up among the attendees.

5 MR. HISER: Do you want to do Mr. Blewitt first?
6 That would make more sense, if he's got audio.

7 HEARING OFFICER ORTH: Well, let's see if this
8 works. Mr. Blewitt, can you hear me? I keep -- for some
9 reason -- oh, there, it finally took. Mr. Blewitt, can
10 you hear me? I imagine you can see him among the
11 panelists.

12 MR. BLEWITT: Okay. I'm here. I apologize.
13 Everything just stopped and froze up.

14 HEARING OFFICER ORTH: All right. So thank you,
15 Mr. Hiser, for your indulgence here.

16 Mr. Blewitt, I believe we have just two more
17 questions for you, they're going to ask.

18 MR. BLEWITT: Okay.

19 HEARING OFFICER ORTH: Member Honker has a
20 question for you and then I have a question that was put
21 into the Chat by Member Duval, who had to depart.

22 FURTHER EXAMINATION BY THE BOARD OF DOUG BLEWITT

23 HEARING OFFICER ORTH: So Member Honker, if you
24 would.

25 BOARD MEMBER HONKER: Yes. Thank you. Early in

1 your discussion, Mr. Blewitt, you made an issue that --
2 that the requirements would not be federally enforceable
3 as you understood them. I'm -- I don't understand your
4 concern with that. I'm thinking of, for instance, the
5 drinking water program, where it's not unusual for a state
6 to have more stringent requirements than the EPA does, and
7 that does not seem to be a problem in the drinking water
8 program.

9 So why -- why do you think this not
10 federally-enforceable issue would be -- would be
11 substantial in this -- in this rule?

12 MR. BLEWITT: If you're -- if you're developing a
13 control strategy, EPA -- to be included in the SIP, all
14 emissions standards must be federally enforceable. And
15 that's -- that's a requirement of the Clean Air Act. If
16 you're dealing with a more stringent regulation on a state
17 level, EPA cannot enforce that state regulation. So it
18 becomes a quandary for both the State of New Mexico and
19 the source itself, because now it has two different
20 emissions loads. I mean, what we're talking about is tons
21 per years of NOx from a compressor engine. And if under
22 your more stringent requirements, that would be one ton
23 per year, and yet, what's actually federally enforceable
24 is some other value based on, for example, new source
25 performance standards, now we have -- there's a

1 discontinuity for both the State of New Mexico, EPA, and
2 the source.

3 It's a practical matter, but I think the Board
4 and NMED need to think about how they're going to deal
5 with this from a policy regulatory impact. And I'm
6 looking at this from my time as being on the Colorado Air
7 Commission. So I'm looking at it from that perspective.

8 BOARD MEMBER HONKER: Well, I understand what
9 you're saying. I'm still -- I'm still not grasping the
10 practicality of the issue, but perhaps at the appropriate
11 time, NMED could -- could offer their thoughts on the
12 issue. Because having actually done air enforcement for
13 EPA at one point in my career, I'm -- I'm not seeing what
14 the issue would be here. But let's -- I'm fine tabling it
15 and -- and we'll see if NMED wants to weigh in on their
16 surrebuttal.

17 MR. BLEWITT: Ultimately, they're the group that
18 has to -- has to deal with this problem. I'm just
19 pointing it out as something that they need to think about
20 from a perspective of being enforceable.

21 BOARD MEMBER HONKER: Okay. Thank you.

22 HEARING OFFICER ORTH: All right. Thank you,
23 Member Honker.

24 So, Mr. Blewitt, the question from Member Duval
25 is: Are the model source codes or at least input

1 parameters available for public view?

2 MR. BLEWITT: That's -- that's a question that
3 Mr. Morris should be answering, but I will attempt to
4 based on my experience. The model -- the model source --

5 MS. KATZ: I'm sorry. Madam Hearing Officer,
6 that -- that question is not appropriately addressed to
7 Mr. Blewitt because this is a modeling that was done by
8 NMED. And so Mr. Morris can talk about it. I mean, I can
9 talk about what we provided, you know, publicly, if -- if
10 we want.

11 HEARING OFFICER ORTH: Okay. I'm sorry, I was
12 merely being a conduit there for that. Let me ask you,
13 though, Mr. Blewitt, since I posed it to you. Ms. Katz
14 has said that the question was more appropriately put to
15 Mr. Morris, but in order to let you finish your sentence,
16 would you -- would you agree that question is more
17 appropriately put to Mr. Morris?

18 MR. BLEWITT: Yes. I believe I said that at
19 my -- part of the beginning of my sentence.

20 HEARING OFFICER ORTH: All right. Thank you.
21 And thank you, Ms. Katz.

22 And now before we let you go, Mr. Blewitt, we
23 have a question from Vice-Chair Trujillo-Davis.

24 VICE-CHAIR TRUJILLO-DAVIS: Thank you, Madam
25 Hearing Officer. Yes, actually, I just want to lend

1 support to Member Honker's question. I think for the
2 purposes of this rule, we need a clarification on his
3 question. And whether that comes from maybe NMED or one
4 of the attorneys, I think it is really important to have
5 that answered completely and accurately.

6 MR. BLEWITT: I totally agree with you.

7 MS. KATZ: Madam Hearing Officer, I -- I would --
8 I could offer Mr. Baca -- would be the person to answer
9 that question, but I would have to put Mr. Baca back on
10 for that question.

11 HEARING OFFICER ORTH: All right. Mr. Blewitt,
12 thank you very much. And let me ask, Mr. Rose, was there
13 any other follow-up or can we excuse Mr. Blewitt?

14 MR. ROSE: You can excuse him, and as to the
15 discussion about federal enforceability, whether it's
16 through Mr. Baca or -- because we're looking at the --
17 what the legal implications are, it might be better
18 addressed by Department counsel rather than Mr. Baca, in
19 terms of what that means, in terms -- if it's not included
20 in the State Implementation Act.

21 But that concludes my -- my questions of this
22 witness. And I thought, Madam Hearing Officer, you posed
23 another question before we broke about enforceability
24 looking at landfill regulations. So I don't know if
25 that's -- if you wanted an answer to that as well, or

1 whether that was really just a question from another Board
2 member that should be addressed in some other context.

3 HEARING OFFICER ORTH: So it was a question from
4 a Board member. I'll pause for a moment in the event he
5 wants to pose it himself.

6 BOARD MEMBER BITZER: Yeah, we heard during
7 public testimony -- this is Barry. During public
8 testimony we heard that -- from the fellow down in -- in
9 Carlsbad, that landfills were this rather sizable source
10 of methane. And I was wondering if we couldn't address it
11 in the moment while he was still on, whether or not this
12 agency even deals with that or not, but I imagine he's
13 gone by now, but I'm still curious.

14 MR. ROSE: Madam Hearing Officer, I can address
15 it or perhaps the Department can, but this Board actually
16 regulates landfills under the Solid Waste Act, and,
17 potentially, you could regulate it under the act as well,
18 but this Board has enforcement by the Department.

19 HEARING OFFICER ORTH: Okay. Thank you for that.

20 And Ms. Katz, if at some point you would like to
21 address it or have a witness like to address that, I'll
22 leave that to you.

23 So I believe we're done with Mr. Blewitt for the
24 time being. Thank you very much, Mr. Blewitt, for
25 persisting and getting back to us.

1 MR. BLEWITT: Thank you.

2 HEARING OFFICER ORTH: Thank you. And are we
3 turning now to Ms. Hollenberg or whom, Ms. Katz?

4 MS. KATZ: We are turning to NMOGA's witness,
5 Mr. McNally for rebuttal -- surrebuttal.

6 HEARING OFFICER ORTH: That was it. Thank you
7 for straightening me out there.

8 Mr. McNally, let's see. Oh, there you are. And
9 do you need presentation privileges?

10 MR. McNALLY: I do not.

11 HEARING OFFICER ORTH: Okay. Well, you're still
12 under oath.

13 MR. HISER: Thank you, Madam Hearing Officer.

14 DENNIS McNALLY,
15 having been previously duly sworn, was examined
16 and testified as follows:

17 SURREBUTTAL EXAMINATION OF DENNIS McNALLY

18 BY MR. HISER:

19 Q. Mr. McNally, would you like to respond to any of
20 Mr. Morris's testimony and NMED Rebuttal Exhibit No. 11?

21 A. I would, please.

22 Q. In Section 2.1 of Mr. Morris's rebuttal, he
23 stated that "Both VOC and NOx concentrations in the
24 presence of sunlight are required to form ozone
25 concentrations; thus, it's logical for an ozone mitigation

1 strategy to include both VOC and NOX emission controls."

2 Can you explain to the Board what your concern
3 about that statement is?

4 A. So my concern is that, yes, I totally agree that
5 ozone is formed by the interaction of VOCs and NOx, but
6 there is no requirement that a rule has to control both
7 precursors. For instance, there is -- like, for instance,
8 if you have a power plant control, that's going to be more
9 a NOx-oriented control. There's rules in place in Houston
10 about highly reactive VOCs. That would be a rule that was
11 developed specifically to address the NOx or the VOC
12 portions of their emissions inventory.

13 Q. And then in Section 2.3 of Mr. Morris's rebuttal,
14 he said at the bottom of page eight -- he said, "There's
15 no question that modeling indicates that ozone formation
16 in New Mexico is more NOx sensitive than VOC sensitive and
17 it's likely true that a majority of the ozone benefits of
18 Part 50 shown in the modeling are due to the NOx emissions
19 reductions, but that does not mean that there will be no
20 ozone reduction benefits from the VOC reductions." End of
21 his quote.

22 What comments do you have on this observation
23 from Mr. Morris?

24 A. So I mean, I never said that there would be no
25 benefit from the VOCs. And, you know, if there are -- my

1 statement on this is, really, it's -- it has to do with
2 the degree of benefit on it. Each -- all -- each -- each
3 VOC contributes some ozone. The question in front of the
4 EIB is a matter of the significance, of whether the
5 changes in the air quality benefit from those emission
6 changes are worthwhile, putting the rule in place.

7 Q. And in Section 2.4, Mr. Morris discussed the
8 effects of not including NOx emissions increases due to
9 oil and gas VOC controls.

10 What thoughts do you have on that issue, about
11 the absence of NOx increases, or what can we draw from
12 that, that's helpful for the Board?

13 A. Well -- well, I agree with Mr. Morris that if
14 the -- I have no way of judging whether the number is
15 right, but if the -- if the increase in the NOx emissions
16 from the VOC controls is 67 tons per year, I believe, was
17 the number, I agree that that would be insignificant for
18 moving the needle on the -- on ozone, especially at the
19 tenth of a part per billion level that we're looking at.
20 Much like the impact of the VOC emissions over much of the
21 state, it's just an insignificant part of the ozone.

22 Q. So the substantive part of that is that
23 changes -- some change in the VOC emissions may not really
24 impact the ozone reductions we'll see under this rule? If
25 there was, say, an increase of a thousand tons or

1 whatever?

2 A. Yeah. Yeah, and the -- and the small amount of
3 extra NOx emissions from controlling the VOCs is probably
4 also not going to be a significant change in the ozone in
5 this state.

6 MR. HISER: I believe that's all that I had for
7 you, Mr. McNally. Thank you very much.

8 Madam Hearing Officer, I would make him available
9 if there were questions from any of the other parties.

10 HEARING OFFICER ORTH: Thank you. Ms. Katz, do
11 you have questions of Mr. McNally?

12 MS. KATZ: No questions, Madam Hearing Officer.

13 HEARING OFFICER ORTH: Thank you. Ms. Fox?

14 MS. FOX: No questions. Thank you very much.

15 HEARING OFFICER ORTH: Ms. Paranhos?

16 MS. PARANHOS: No questions. Thank you.

17 HEARING OFFICER ORTH: Professor Pacyniak?

18 PROFESSOR PACYNIK: No questions. Thank you.

19 HEARING OFFICER ORTH: Ms. Devore?

20 Mr. Nykiel?

21 MR. NYKIEL: No questions. Thank you.

22 HEARING OFFICER ORTH: Mr. De Saillan?

23 MR. DE SAILLAN: No questions. Thank you.

24 HEARING OFFICER ORTH: Okay. Mr. Rose?

25 MR. ROSE: No questions.

1 HEARING OFFICER ORTH: Mr. Janoe?

2 MR. JANOE: No questions.

3 HEARING OFFICER ORTH: Mr. Butzier?

4 MR. BUTZIER: No questions. Thanks.

5 HEARING OFFICER ORTH: Ms. Gutierrez?

6 MS. GUTIERREZ: No questions. Thank you.

7 HEARING OFFICER ORTH: Thank you. Let's see.

8 Mr. Colclasure?

9 MR. COLCLASURE: No questions. Thank you.

10 HEARING OFFICER ORTH: And Ms. Witherspoon?

11 MS. WITHERSPOON: No questions. Thank you.

12 HEARING OFFICER ORTH: Thank you. I'm going to
13 turn to the Board in the event they have questions. While
14 we're doing that, please, if you are not a panelist and
15 you have a question, reach out through the Chat.

16 Madam Chair, do you have questions of
17 Mr. McNally?

18 CHAIRPERSON SUINA: Thank you, Madam Hearing
19 Officer. I don't have any additional questions. Thank
20 you.

21 HEARING OFFICER ORTH: Thank you. Vice-Chair
22 Trujillo-Davis?

23 VICE-CHAIR TRUJILLO-DAVIS: Thank you. I do not
24 have any questions.

25 HEARING OFFICER ORTH: Okay. Thank you. Member

1 Cates?

2 BOARD MEMBER CATES: No questions here. Thank
3 you.

4 HEARING OFFICER ORTH: Okay. Member Bitzer?

5 BOARD MEMBER BITZER: No questions. Thank you.

6 HEARING OFFICER ORTH: Thank you. Member Garcia?

7 BOARD MEMBER GARCIA: No questions. Thank you.

8 HEARING OFFICER ORTH: Thank you. And Member

9 Honker?

10 BOARD MEMBER HONKER: I have no questions. Thank
11 you.

12 HEARING OFFICER ORTH: Wow. All right.

13 Mr. McNally, you're getting off easy this time. So thank
14 you very much for your testimony.

15 All right. Ms. Katz, now is it time for
16 Ms. Hollenberg?

17 MS. KATZ: No, Madam Hearing Officer. Now it's
18 time for Mr. Morris's rebuttal. I think that's what we
19 decided, yes.

20 HEARING OFFICER ORTH: Okay. And will he have
21 slides?

22 MS. KATZ: No, I don't believe so.

23 HEARING OFFICER ORTH: Okay. That's fine.
24 Please go ahead.

25 MS. KATZ: Mr. Morris, are you -- are you on?

1 HEARING OFFICER ORTH: He is a panelist.

2 Mr. Morris?

3 MS. KATZ: Let me see if I can get him. Hold on.

4 MR. MORRIS: There we go. I had to unmute
5 myself.

6 MS. KATZ: Oh, okay. Great.

7 HEARING OFFICER ORTH: Thank you, Mr. Morris.

8 RALPH MORRIS,
9 having been previously duly sworn, was examined and
10 testified as follows:

11 REBUTTAL DIRECT EXAMINATION OF RALPH MORRIS

12 BY MS. KATZ:

13 Q. Did you review NMOGA witness Mr. McNally's
14 rebuttal report?

15 A. Yes, I did.

16 Q. And in his rebuttal testimony, Mr. McNally stated
17 that it was "inappropriate and misleading" to include the
18 alternative 2028 ozone design value projection approach in
19 your testimony, that was based on observed base year ozone
20 design values from 2015 to 2019, rather than from 2012 to
21 2016, as recommended in EPA's guidance. Do you agree with
22 him on that point?

23 A. Well, I agree with Mr. McNally that the default
24 recommended projection approach in EPA's ozone modeling
25 guidance, because he used the base year design value

1 centered on the model base year, which was 2014, so I
2 would be using the base year design value for scaling to
3 the future year, from 2012 to 2016. So I agree with that.

4 But I disagree with him that it runs "counter" to
5 EPA's guidance. As in Section 6 of the EPA's 2018
6 modeling guidance, they talk about using alternative
7 projection techniques, and one of the things they
8 specifically mention is using an alternative base year
9 design value like I did, with 20 -- the design value from
10 2015 to 2019, provided that it is technically justifiable.

11 And as I showed in my testimony this morning, the
12 ozone design values in Southern New Mexico have been
13 increasing since 2012 to 2016, such that the -- they are
14 much higher today, for example, Carlsbad for the 2012 to
15 2016, the base year design value was 69 ppb, which is
16 below the NAAQS, yet the -- if I used the 2015 to 2019 for
17 the design value, is 73.7, so it's above the ozone NAAQS.

18 So it kind of doesn't make sense to project below
19 the NAAQS design value to get a fifth-year design that's
20 below the NAAQS, when the current, actual measured design
21 values are below the NAAQS. And I was also very careful
22 when presenting those results, both in the air quality
23 table support document from the New Mexico Ozone
24 Attainment Initiative and in my testimony, that this is an
25 uncertainty -- this is a sensitivity analysis. There are

1 probably more uncertainties because the design values are
2 not for that meteorological year.

3 And there's been growth and emissions in the oil
4 and gas areas between 2014 and 2019, and there's been
5 reductions in emissions from things like other mobile
6 sources, so they add more caveats to that section.

7 Q. Okay. Thank you.

8 And do you agree with Mr. McNally -- oh, sorry.
9 Yes. Do you agree with Mr. McNally that it was
10 inappropriate and potentially misleading and is counter to
11 EPA's modeling guidance to present the episode maximum
12 modeled 2028 of oil and gas maximum daily average 8-hour
13 ozone concentrations due to New Mexico oil and gas
14 emissions for the 2028 oil and gas control strategy, as
15 you presented in Figure 19 of your direct testimony?

16 A. I disagree with that statement. There are many
17 ways to look at the ozone modeling results. We try to
18 look at it in as many different ways as possible. I'll
19 say that both Mr. McNally and I have analyzed the daily
20 ozone impacts in other studies, as well as the ozone
21 maximum that I have in Figure 19 in my testimony, either
22 shows the actual results from the modeling results.

23 And also, it does not run counter to EPA
24 guidance. In fact, he mentioned in Section 6 of the
25 modeling guidance, that, "That some types of absolute

1 model results may be used," to kind of support the use of
2 the model and the relatives, so it doesn't really counter.
3 And, you know, I didn't do this just for oil and gas in
4 the -- of the -- in the air quality technical support
5 document. I did it for other source categories, so you
6 can put oil and gas impacts into concept -- into context.
7 Excuse me.

8 Q. Okay. Thank you.

9 Do you have an opinion from Mr. McNally's
10 statement that the color scale used in your depiction of
11 the 2028 VOC/NOx sensitivity ozone formation conditions in
12 Figures 20 through 22 in your direct testimony, are
13 potentially misleading?

14 A. No, I think it's very clearly labeled. The scale
15 is kind of focused more on the NOx sensitive ozone because
16 that's where the changes are. And the scale is very
17 specific. I even kind of highlighted it in my testimony
18 this morning, where the 50 percent NOx sensitive ozone is,
19 versus 75 or 80 percent.

20 And his concern that someone could be misled if
21 they didn't consider the scale, I think is -- could be
22 said about any -- any plot like that. If you don't look
23 at the scale, you can be misled, if you just assume that
24 the colors mean things that they don't.

25 Q. Okay. Does ozone modeling typically include

1 impacts from both NOx and VOC together?

2 A. Yes.

3 Q. And do regulations and control strategies for
4 ozone nonattainment areas typically require reductions of
5 both pollutants?

6 A. Yes, they do.

7 Q. And are the ozone reductions that we're seeing in
8 this modeling typical for ozone modeling evaluating a
9 single source sector control strategy?

10 A. Yes. A control strategy has many source sectors
11 with controls on them and this is just one. And getting a
12 1.5 reduction -- ppb reduction in ozone design values is a
13 pretty -- a pretty good -- pretty good amount.

14 Q. And are control strategies like this regulation
15 shown to actually reduce ozone concentrations?

16 A. Yes. There have been many over the years dating
17 back to my -- I started looking in the 1970s, to see large
18 reductions in ozone concentrations in many of the worse
19 nonattainment areas like Los Angeles.

20 Q. Okay. And can the reductions that are being
21 shown by the modeling make the difference between an
22 attainment and a nonattainment designation, or between a
23 higher or lower nonattainment classification?

24 A. Yes.

25 Q. Okay. Thank you.

1 So I'd like to turn to Mr. Blewitt's rebuttal
2 report. Did you review that report?

3 A. Yes, I did.

4 Q. So Mr. Blewitt states that both EPA and NMED have
5 defined an ozone concentration less than 1 ppb to be -- to
6 be insignificant, and if emissions from a single source or
7 similar group of sources have impacts that are less than
8 the significant level of 1 ppb, then it does not
9 contribute to ambient ozone concentrations. Do you agree
10 with that?

11 A. I think Mr. Blewitt is taking the 1 ppb
12 significant impact level out of context. It's used in the
13 PSD, or prevention of significant deterioration air
14 permitting program. So they get the new source, the
15 modified source that has to get a PSD permit. If you can
16 show that its maximum, ever, daily ozone impact is below 1
17 ppb, then you -- then it's assumed to not have a
18 significant contribution to the NAAQS and you don't have
19 to do a cumulative analysis where you can pair up the
20 contribution of all sources to the NAAQS. So that's for
21 PSD permitting.

22 What we're doing here is more like an ozone SIP
23 analysis, where we're -- you know, we need to figure out
24 how to get our -- our -- the ozone down to below the NAAQS
25 or below 95 percent of the NAAQS. And that's a

1 different -- that's a combination of all different -- you
2 know, usually it's a SIP, they each have a combination of
3 all different control measures. Any one of those measures
4 may not make a difference of more than 1 ppb.

5 Then the third item on that, is that the SIL --
6 the 1 ppb significant impact level for ozone is for the
7 daily 8-hour ozone concentration. And what Mr. Blewitt is
8 quoting is on 2028 design values. And even with that,
9 there's a -1.5 ppb reduction at Navajo Lake, which is
10 greater than 1 ppb.

11 Q. Okay. And so do you -- so you might have covered
12 this, but, so do you agree with Mr. Blewitt's statement
13 that the change between the 2028 future-year base case and
14 the 2028 future base case with oil and gas controls added
15 is generally less than 1 ppb and, therefore, oil and gas
16 does not contribute to any ozone exceedance?

17 A. I sort of disagree with that, in that, that's for
18 a -- the 1 ppb significant impact level is for the highest
19 daily 8-hour ozone concentration. And he's applying it to
20 a 2028 ozone design value projection, so that's
21 inappropriate.

22 And I gave some examples in my direct testimony
23 of maximum daily ozone impacts due to the oil and gas
24 control strategy that were well above 1 ppb, including,
25 you know, the actual maximum of 7.6 ppb for the nonpoint

1 oil and gas control zone, and 5.4 ppb for the point oil
2 and gas control strategy contributions.

3 Q. Okay. And Mr. Blewitt states that modeling
4 indicates oil and gas sources do not cause exceedances of
5 the current NAAQS or the 95 percent threshold, a source
6 contributes to an exceedance of the NAAQS if individual
7 impacts are above the significance level. EPA and NMED
8 have indicated that the ozone significance level is 1 ppb.
9 Can you address that?

10 A. Yes, that's a two-part question. First, I agree
11 with Mr. Blewitt that the oil and gas emissions alone do
12 not cause an exceedance of the ozone NAAQS. And I
13 already -- that's the first part.

14 The second part is that 1 ppb significant impact
15 level is -- is not -- well, first, it's not appropriate
16 for an ozone SIP control-type situation. It's for PSD
17 permitting. Second, it's for the daily 8-hour ozone
18 concentration, not design values. So, I mean, it's used
19 to screen new sources so you don't have to do a cumulative
20 analysis. It's part of the PSD permit.

21 Q. Okay. So Mr. Blewitt bases much of his testimony
22 and rebuttal testimony on information contained in the New
23 Mexico Ozone Attainment Initiative Photochemical Modeling
24 Study Air Quality Technical Support Document for the
25 AQTSD. Are you aware of that document?

1 A. Yes, I was the primary author of that document.

2 Q. And Mr. Blewitt states many times that the AQTSD
3 does not contain sufficient information to evaluate the
4 2014 and 2028 emissions inventories. For example, he says
5 it does not contain any documentation on the specifics of
6 the 2028 inventory. Critical information was lacking to
7 completely evaluate the emissions inventories used in the
8 ozone modeling. No specific details were provided on the
9 development of the 2028 base case future-year inventory.
10 Do you agree with these statements?

11 A. No, I addressed these issues in my rebuttal
12 report testimony. And except for the 2028 New Mexico oil
13 and gas emissions, all the other emissions were based on
14 the WRAP 2014 and 2028 on the books, the emissions
15 scenarios that are being used in the Western States
16 Regional Haze rules. And so you go to the WRAP website,
17 on the top right, there's Regional Haze and you click on
18 there and then there's all of these work groups.

19 You can go to the fire and smoke work group, to
20 the fire emissions, you can go to the oil and gas work
21 group to look at the oil and gas emissions. There's two
22 reports there. You know, there's all of these links in
23 there that go to the RTO work group. In there, there's
24 run specification sheets that list what emissions I used
25 for each -- each source sector. So these -- these

1 emission inventories were reviewed by each of the Western
2 states and updated, so they're probably the most -- some
3 of the most vetted and reviewed emissions inventories that
4 have been used in recent years.

5 Q. Thank you. And just for clarification, the WRAP
6 website you're referring to is the acronym W-R-A-P,
7 standing for the Western Regional Air Partnership,
8 correct?

9 A. That's correct.

10 Q. Okay. Do you have any comments on -- on --
11 sorry -- Mr. Blewitt's statement: The emission
12 inventories used to develop the 2014 base case and 2028
13 future base case were not available for review and were
14 not included in the TSD?

15 A. Well, first, the emission inventories are -- that
16 we use in the modeling are many, many, many -- are very
17 large and, you know, gigabytes and terabytes amount of
18 information. So we can't include that all in the TSD. We
19 do have their summaries and we shipped the -- well, the
20 NMOGA expert asked for the modeling emission inventories
21 and so we shipped the whole modeling files to them. And
22 they ended up being on the Intermountain West Data
23 Warehouse, which is a website that WRAP kind of operates
24 for distribution to the public. So they are available.
25 He just had to ask for them, to get it to them quickly.

1 Q. Thank you. And then they were posted on the
2 Intermountain West Database?

3 A. Intermountain West Data Warehouse, yes.

4 Q. Data Warehouse, thank you.

5 Mr. Blewitt states that the ozone modeling should
6 be revised to separate NOx and VOC source culpability for
7 oil and gas sources. Do you agree with that statement?

8 A. I also addressed this comment in my rebuttal
9 testimony, that for most of the time when you're doing SIP
10 control strategies, you look at the combined effects of
11 controls on VOC and NOx. And for some control measures,
12 it doesn't make sense to separate them because you can't.

13 I mentioned the, you know, reducing the operation
14 of hours of oil and gas operations will reduce both VOC
15 and NOx, so it wouldn't make sense to separate them. I
16 mean, it's something that you could certainly do, but, you
17 know, these models take a while to run, as Mr. Blewitt
18 testified, and you can't do everything.

19 Q. And Mr. Blewitt states that projections of the
20 oil and gas emissions in the ozone modeling did not
21 account for decline in production, so it overstates the
22 emissions from oil and gas sources; is that true?

23 A. No. As I mentioned this morning, when the
24 projections project a collection of oil wells in various
25 stages of production -- so you have older -- older wells

1 that are -- that have decline in them; you have new ones
2 that are operating at higher, and for that collection of
3 wells, we project that forward based on the change in
4 activity, so -- to the future year, and that future year
5 will also have this collection of wells of various ages
6 and various stages of decline.

7 Q. All right. Thank you, Mr. Morris.

8 MS. KATZ: I have no further questions for
9 Mr. Morris.

10 HEARING OFFICER ORTH: Thank you, Ms. Katz.

11 Ms. Fox, do you have questions of Mr. Morris?

12 MS. FOX: No, Madam Hearing Officer. Thank you.

13 HEARING OFFICER ORTH: Ms. Paranhos?

14 MS. PARANHOS: No questions.

15 HEARING OFFICER ORTH: Professor Pacyniak?

16 PROFESSOR PACYNIK: No question, Madam Hearing
17 Officer.

18 HEARING OFFICER ORTH: Ms. Devore?

19 MS. DEVORE: No questions. Thank you.

20 MADAM HEARING OFFICER: Thank you.

21 Mr. Nykiel?

22 MR. NYKIEL: No questions. Thank you.

23 HEARING OFFICER ORTH: Mr. de Saillan?

24 MR. DE SAILLAN: No questions. Thank you.

25 HEARING OFFICER ORTH: Thank you. Mr. Hiser?

1 MR. HISER: Madam Hearing Officer, yes, I'd like
2 to ask just a couple of questions of Mr. Morris.

3 REBUTTAL CROSS-EXAMINATION OF RALPH MORRIS

4 BY MR. HISER:

5 Q. So, Mr. Morris, in your testimony that you just
6 went through, you talked a little bit about the 2015
7 through 2019 design value work that you did. And I'd like
8 to tease that out, mostly so that the Board and all of the
9 parties in the case understand exactly what was done.

10 So, is my understanding correct that what you did
11 was calculate a new DVC for that period, and then you
12 multiplied that by the model results, but the model
13 results were still based upon the 2014 meteorology that
14 was part of the 2014 base case?

15 A. That's correct.

16 Q. So that, in effect, the biggest change and why
17 you said that there was some additional uncertainty, is
18 that when we use the 2014 both for the primary part of the
19 design value, and then we multiply the model by that in
20 the RRF, we're trying to hold everything pretty on square
21 except for the impact of the control strategy? That
22 wasn't very clear. I'm sorry.

23 A. Could you rephrase that?

24 Q. Yes. So when we did the 2014 to 2028 work, what
25 you were trying to do in that particular evaluation, was

1 say, holding the meteor -- meteorology the same, which is
2 the 2014 meteorology in both 2014 and '28, this appears to
3 be the effect of the control strategy on the expected
4 ambient concentrations?

5 A. That's correct, yes.

6 Q. And that when we look instead, to the 2015 to
7 2019 period for the design value concentrations, assuming
8 that you multiplied that as an RRF -- and maybe you did or
9 maybe you didn't -- that would introduce into that forward
10 look, not only the differences, but because the
11 meteorology is different, right -- between 2015 and 2019
12 than what it was in 2014? So the meteorology -- since the
13 model is based on the 2014 meteorology, changing to a 2015
14 to 2019 design value calculation, introduces another area
15 of uncertainty because it's not the same base that the
16 model itself was being run on for the meteorology?

17 A. Yes. I mentioned that there's more uncertainties
18 introduced when you do the sensitivity analysis to that
19 current year design value because of the fact that the
20 design value period of 2015 to 2019 doesn't overlap with
21 the 2014 meteorological year.

22 Q. Okay. Perfect. That's why I wanted to make sure
23 that I was understanding your testimony correctly about
24 what the differences were. And I appreciate you making
25 that clarification for us.

1 And then just one point of clarification: In
2 your discussion of Mr. McNally's testimony, did you
3 understand Mr. McNally to be saying that the final results
4 of the rule shouldn't include both the NOx and the VOC and
5 evaluation of the reductions, or was he testifying that
6 it's sometimes helpful to run them separately to help
7 choose the design of control measures?

8 A. I'd say the latter. He wasn't saying that you
9 don't do the VOC controls. You just need to evaluate them
10 separately, or you can.

11 Q. Okay. Thank you very much, Mr. Morris. As
12 always, it's a pleasure.

13 A. The pleasure is mine.

14 HEARING OFFICER ORTH: Thank you.

15 Mr. Rose, do you have questions of Mr. Morris?

16 MR. ROSE: No questions, Madam Hearing Officer.

17 HEARING OFFICER ORTH: Mr. Janoe?

18 MR. JANOE: No questions, Madam Hearing Officer.

19 HEARING OFFICER ORTH: Mr. Butzier?

20 MR. BUTZIER: No questions. Thanks.

21 HEARING OFFICER ORTH: Ms. Gutierrez?

22 MS. GUTIERREZ: No questions.

23 HEARING OFFICER ORTH: Mr. Colclasure?

24 MR. COLCLASURE: No questions.

25 HEARING OFFICER ORTH: And Ms. Witherspoon?

1 She may have stepped away.

2 I'm going to turn to the Board members in the
3 event they have questions. While I'm doing that, if you
4 are not a panelist and you have a question, please reach
5 out to me through the Chat.

6 REBUTTAL EXAMINATION BY THE BOARD OF RALPH MORRIS

7 HEARING OFFICER ORTH: Madam Chair, do you have a
8 question of Mr. Morris?

9 CHAIRPERSON SUINA: Thank you, Madam Hearing
10 Officer. I do have a question. Good afternoon,
11 Mr. Morris. I just wanted to go revisit a little bit of
12 what Mr. Hiser was talking about, the uncertainties. He
13 asked you a question about the uncertainties and how, you
14 know, for example, the meteor -- the meteorological data
15 and how that would create more uncertainties from one
16 assumption to the other. In -- in how you ran the models
17 or how you developed the models, would the -- how would
18 those uncertainties affect the outcome or the results of
19 the model?

20 I guess what I'm looking at was, would that make
21 them conservative, on the low end of its projections, or
22 just have a bigger width of uncertainty in terms of the
23 accuracy?

24 MR. MORRIS: So you're referring to the design
25 val -- the current year design value sensitivity analysis?

1 CHAIRPERSON SUINA: Exactly.

2 MR. MORRIS: Okay. So the 2015 to 2019 design --
3 observed design values are based on emission inventories
4 from that period; whereas, the 2012 to 2016, that's based
5 on the 2014 emissions. After the scaling factors, these
6 relative response factors, are based on the ratio of the
7 2028 and 2014 modeling results. Those don't change in
8 that analysis. So there are changes in emissions from --
9 let's say from 2014 to 2017, the center point of those two
10 five-year periods.

11 And in places where the ozone went up in that
12 period, like in oil and gas basins, then -- then you
13 might -- you might be underestimating the future-year
14 design values; whereas, in places where the ozone -- the
15 emissions went down, like, say, Albuquerque, that's
16 dominated by mobile sources, they've gone down, for that,
17 you're starting at a lower point so you might be
18 overestimating the future-year design values. I think I
19 got that right.

20 Anyway, it's just that the changes in the
21 emissions between 2014 and 2017, is what is making a
22 larger uncertainty because the design values of 2015 to
23 2019 are based on different sets of emissions than the
24 earlier years.

25 CHAIRPERSON SUINA: Okay. Thank you so much for

1 that. I appreciate it.

2 HEARING OFFICER ORTH: Thank you. Vice-Chair
3 Trujillo-Davis?

4 VICE-CHAIR TRUJILLO-DAVIS: Thank you. I believe
5 Member Suina asked the question I was going to ask. But
6 just to clarify, so, Mr. Morris, are you saying that the
7 uncertainty doesn't imply overestimation or
8 underestimation, it's just uncertainty because there's the
9 other factors that could influence that?

10 MR. MORRIS: Yeah, it's just another level of
11 uncertainty because the design values and emissions and
12 the meteorology are different in the two -- the two years.
13 Yeah, I mentioned the differences in oil and gas going up
14 between 2014 and 2017; whereas, on the mobile, they're
15 going down. So it's just the relative response factors
16 are a little bit out of sync with the design values. It's
17 just, there are lots of uncertainties in modeling. This
18 is just one more.

19 VICE-CHAIR TRUJILLO-DAVIS: Okay. That was my
20 only question. Thank you, Member Suina for asking the big
21 portion of that.

22 HEARING OFFICER ORTH: Thank you. Member Cates,
23 do you have questions of Mr. Morris?

24 BOARD MEMBER CATES: Yeah, just to follow on
25 there, with Member Suina and Trujillo. So we're talking

1 about -- so we know there's some uncertainty and we know
2 what it is. Can we put a value on it? Can we say this
3 model could be off by 80 percent or closer to 20 percent?

4 MR. MORRIS: To do a full-blown uncertainty
5 analysis would take a lot of -- you've got to do a bunch
6 of probation runs. And, you know, I mean, we did -- like
7 we did four meteorological sensitivity runs to come to the
8 one that -- the best performing one, that one that matched
9 the observed ozone best. And that's meteorology, that's
10 just one aspect. There's uncertainty in emissions,
11 there's certain boundary conditions and there's
12 uncertainty in the model numerics. So it's hard to -- I
13 can't really say, you know, what the cumulative effects
14 are of all of those uncertainties.

15 I will say that we did do the model performance
16 evaluation with the 2014 base case, and we matched the
17 observed ozone pretty well. You know, it's good or better
18 than most recent ozone modeling studies. That's not so
19 much uncertainty, but accuracy, but it's a -- it kind of
20 gives us confidence in the modeling results.

21 BOARD MEMBER CATES: Yeah. Okay. Got it. Thank
22 you for that expert testimony.

23 HEARING OFFICER ORTH: Thank you. Member Bitzer?

24 BOARD MEMBER BITZER: I have no questions. Thank
25 you.

1 HEARING OFFICER ORTH: Thank you. Member Garcia?

2 BOARD MEMBER GARCIA: Yes. Thank you, Madam

3 Hearing Officer. So can you hear me?

4 MR. MORRIS: Yes.

5 BOARD MEMBER GARCIA: So I understand that this
6 model is looking at -- of course we're talking about the
7 impact to Part 50, but I also see that the Department is
8 looking at a larger package, in other words, the Ozone
9 Attainment Initiative is a package including other efforts
10 there, perhaps rulemaking, changes to the Oil Conservation
11 Division rules, et cetera. Those things were probably not
12 taken into account in this model; is that right?

13 MR. MORRIS: I believe that was the rule from
14 March of this year, is that what you're talking about?
15 Yeah, we did this modeling -- the 2028 emissions
16 projections back in 2020, so -- and it was based on the
17 WRAP, on the book scenarios -- 2028 on the book scenarios.
18 We just had rules that were on the books as of probably
19 early 2020, so it did not include anything more recent
20 than that.

21 BOARD MEMBER GARCIA: So not including the OCD
22 rule and, obviously, not future rules of car emissions and
23 things like that, that the Department may propose in the
24 future?

25 MR. MORRIS: Not anything in addition to the, you

1 know, what's in the EPA's current mobile source rules, and
2 in this case, mobile 2014 B, which is our mobile emissions
3 model. Definitely the turnover is probably the largest
4 emission reductions between 2014 and 2028. There is about
5 a 70 percent reduction in NOx emissions. So it has that
6 turnover in there, but those are rules that are on the
7 books. And New Mexico is planning on adopting, like
8 California, lead standards. Those were not included in
9 it.

10 BOARD MEMBER GARCIA: Would you feel comfortable
11 in commenting on whether looking at some of the
12 initiatives that the Department is planning in their Ozone
13 Attainment Initiative package -- would you feel
14 comfortable commenting on whether it would also have an
15 impact in reducing ozone as well, without modeling it?

16 MR. MORRIS: I'm asked these kind of questions
17 all of the time. And I'm guessing what the model is going
18 to say, and you could kind of look at the emission -- the
19 magnitude of the emission reductions of each control
20 measure, or combined, and try to get a sense of what the
21 impacts will be, but it's hard to, you know, speculate
22 what it's going to be. And I don't know what other
23 controls they're considering.

24 BOARD MEMBER GARCIA: I understand. Thank you
25 very much, sir. That's all. Thank you.

1 HEARING OFFICER ORTH: All right. Thank you.

2 Member Honker?

3 MEMBER HONKER: No -- no questions. Thank you.

4 HEARING OFFICER ORTH: All right. Thank you.

5 Ms. Katz, will there be any follow-up?

6 MS. KATZ: No, Madam Hearing Officer. Thank you.

7 HEARING OFFICER ORTH: All right. Well, thank
8 you very much, Mr. Morris, for your testimony.

9 MR. MORRIS: Thank you.

10 HEARING OFFICER ORTH: Now are we going to
11 Ms. Hollenberg?

12 MS. KATZ: Yes. Thank you. The Department calls
13 Cindy Hollenberg.

14 HEARING OFFICER ORTH: And I already made her a
15 panelist so hopefully she can join us on the screen. Oh,
16 I see her. And will there be slides?

17 MS. HOLLENBERG: No.

18 HEARING OFFICER ORTH: Okay. Terrific. Thank
19 you. Ms. Hollenberg, I think I can hear you quite
20 clearly. If you would raise your right hand, please. Do
21 you swear or affirm to tell the truth?

22 MS. HOLLENBERG: I do.

23 HEARING OFFICER ORTH: Thank you very much.

24 CINDY HOLLENBERG,
25 having been first duly sworn or affirmed, was examined

1 and testified as follows:

2 DIRECT EXAMINATION OF CINDY HOLLENBERG

3 BY MS. KATZ:

4 Q. Ms. Hollenberg, could you please spell your name
5 for the court reporter? I'm sorry.

6 A. Hollenberg is H-O-L-L-E-N-B-E-R-G.

7 Q. And Ms. Hollenberg, where are you employed?

8 A. I'm employed by the Air Quality Bureau of the New
9 Mexico Environment Department.

10 Q. And --

11 HEARING OFFICER ORTH: And Ms. Katz, I'm sorry,
12 we need the exhibits.

13 MS. KATZ: Oh, sorry. I keep forgetting that.
14 Let's see. So Ms. Hollenberg's, her -- she only has
15 rebuttal testimony and her rebuttal testimony is at NMED
16 rebuttal Exhibit 14 is the written testimony. My
17 apologies.

18 Q. (BY MS. KATZ) And Ms. Hollenberg, what is your
19 current job title at the Department?

20 A. I'm the Enforcement Manager.

21 Q. And what are your job duties?

22 A. I manage the enforcement specialist staff.
23 Currently, we have three enforcement specialists; fully
24 staffed, we would have five. I help oversee the
25 development -- (unintelligible) and casework for

1 potentials that are submitted by compliance staff. We
2 also work with U.S. Environmental Protection Agency and
3 the Department of Justice on cases for which NMED is a
4 co-complainant.

5 Q. And you were skipping for a moment there. So can
6 you -- where you were saying you oversee the development,
7 can you state that again because I think some words got
8 lost.

9 A. Sure. I help oversee the development of
10 enforcement cases for potential violations that are
11 submitted to us by compliance staff.

12 Q. Thank you. And did I ask how long you have
13 worked for the Department?

14 A. Approximately eight years.

15 Q. Thank you. Can you please describe your
16 educational and professional qualifications?

17 A. I hold a Bachelor of Science in Biology Teaching
18 from Purdue University. I hold a Master of Arts in
19 International Peace Studies from the University of Notre
20 Dame and I have a Master of Public Administration in
21 Environmental science and Policy from Columbia University.
22 My previous work for the Bureau includes being a planning
23 specialist and also the inspections manager.

24 Q. And a copy of your resume has been provided as
25 NMED Exhibit 15, correct?

1 A. Yes, that's correct.

2 Q. And have you submitted written rebuttal testimony
3 in this proceeding?

4 A. Yes, I have.

5 Q. And your full written rebuttal testimony appears
6 as NMED Rebuttal Exhibit 14?

7 A. That is correct.

8 Q. And do you have any changes to your written
9 testimony?

10 A. Yes, I do. In addition to some minor
11 typographical error corrections, I have recalculated
12 resource needs for inspection, which changes page 3, line
13 13, and page 5, line 8. In addition, corrections were
14 made on page 4, line 13 and on page 10, line 2. I do wish
15 to submit a complete amended rebuttal testimony with these
16 errors corrected.

17 Q. And I will submit that. I don't think it has
18 been submitted yet, so I will submit that.

19 Do you adopt your amended written testimony here
20 today?

21 A. Yes, I do.

22 Q. All right. So I'm going to walk you through your
23 rebuttal testimony and have you address some issues raised
24 by NMOGA and IPANM regarding assumptions in the ozone
25 modeling.

1 MR. HISER: Madam Hearing Officer, before
2 Ms. Katz goes to that, I guess I don't see what exactly
3 this witness is rebutting. NMOGA made no representations
4 one way or the other about compliance percentages or
5 anything. So to the extent the Department is rebutting
6 itself, I'm not sure that's appropriate. Perhaps Ms. Katz
7 can point to what was said.

8 HEARING OFFICER ORTH: All right. Ms. Katz?

9 MS. KATZ: Madam Hearing Officer, Ms. Hollenberg
10 is offering testimony regarding the -- the model -- the
11 emissions assumptions in the model and so it's meant to --
12 about the further reductions that might obtain from --
13 from the model based on our enforcement.

14 HEARING OFFICER ORTH: Okay. And whose testimony
15 in particular is it responding to?

16 MS. KATZ: To issues raised by NMOGA and IPANM
17 regarding the reductions that might be achieved by the
18 model.

19 HEARING OFFICER ORTH: Okay. I have heard -- I'm
20 sorry. Mr. Hiser?

21 MR. HISER: There is nothing in the NMOGA
22 testimony that talks about the reductions that would be
23 achieved by this model that relate to the enforcement
24 posture that the Department is or isn't taking. We
25 accepted the model exactly as was provided by NMED and

1 didn't make any changes to those assumptions. So I'm not
2 sure what I see that is here to rebut.

3 MS. KATZ: Mr. Hiser, are you -- are you
4 objecting to this testimony? Because I guess I would
5 argue that that should have been raised before this moment
6 if that was the case.

7 MR. HISER: I'm saying that I don't see that it's
8 rebuttal testimony.

9 HEARING OFFICER ORTH: All right. So thank you,
10 Mr. Hiser, for that. I have heard testimony about the
11 modest impact, for example, based on modeling and so
12 perhaps in line with identifying, you know, ways in which
13 reductions could be had, other than exactly this rule, I
14 think it is consistent with that point.

15 But go ahead, Ms. Katz and Ms. Hollenberg.

16 MS. KATZ: Thank you.

17 Q. (BY MS. KATZ) Ms. Hollenberg, can you please
18 summarize the Bureau's capacity and resource constraints
19 with respect to compliance and enforcement?

20 A. Sure. Currently, staffing levels are at
21 approximately 50 -- 50 percent. We have three inspection
22 specialists, three report specialists and three
23 enforcement specialists. We also have three managers and
24 one supervisor, so that's a total of 13 compliance and
25 enforcement personnel.

1 Experienced compliance specialists may complete
2 15 to 20 inspections or 78 to 120 report reviews each
3 year. Experienced enforcement specialists are currently
4 managing about 20 cases. Bureau responsible -- the
5 Bureau's responsible for assuring compliance at all
6 regulated facilities within NMED AQB jurisdiction. That's
7 inspections, report reviews, and investigations related to
8 public complaints.

9 Q. And how -- how many regulated facilities exist in
10 the State of New Mexico for which the section attempts to
11 assure compliance?

12 A. We have -- we have 187 major sources, and major
13 sources are the largest of our sources; 66 percent of
14 those are oil and gas-related, and all of them require
15 inspections every two years. We also have 1,648 synthetic
16 minor sources. Synthetic minor sources put on controls to
17 keep them under those major source thresholds. Of those
18 1648 minor -- synthetic minor sources, 57 percent are oil
19 and gas-related.

20 Approximately 600 of those are what we call SM-80
21 and that is that they -- they emit at 80 tons per year or
22 more of a regulated pollutant. They require inspections
23 every five years. Those -- of those 600 synthetic minor
24 80 sources, 75 percent are oil and gas-related. Then we
25 have another 1349 minor sources; 68 percent are oil and

1 gas-related. Over 4000 smaller sources may have had what
2 we call a notice of intent registration; 91 percent of
3 those are oil and gas-related.

4 The Bureau gets on average, 475 Notice of Intent
5 applications each year. In my written testimony, I do
6 describe the various types of facilities in greater
7 detail.

8 Q. Is there -- is there no way that the Bureau could
9 possibly inspect each of these thousands of the smaller
10 sources each year?

11 A. That is correct. Nor does EPA require that we
12 inspect all synthetic minor sources or any of the minor
13 sources Notice of Intent sources, or those sources where
14 no permit is required. And although the Bureau isn't
15 required to inspect these smaller sources, we do have
16 responses to public complaints that may involve these
17 previously uninspected sources.

18 The information provided in the proposed rule
19 will be an important component for compliance verification
20 for the Bureau because gathering this information
21 ourselves is simply not feasible.

22 Q. What other compliance and enforcement activities
23 for oil and gas facilities does the Bureau conduct or
24 assist with?

25 A. So the Bureau works cooperatively with the U.S.

1 Environmental Protection Agency for several different
2 years. We conducted joint inspections with EPA in 2019
3 and 2020 for facilities that are not included on our
4 compliance monitoring strategy. The compliance monitoring
5 strategy is the yearly schedule of inspections proposed by
6 NMED and approved by EPA. When we did those inspections
7 we had -- we discovered systemic violations of federal
8 regulations, state rules and permit conditions at 60
9 percent of the companies that we investigated in 2019 and
10 approximately half of the companies that we investigated
11 in 2020.

12 The Bureau continues to collaborate with EPA and
13 the U.S. Department of Justice on cases related to the
14 2019 inspections. NMED also worked with EPA on flyover
15 surveillance for 2019 for the Permian Basin, and in 2020
16 for both the Permian and the San Juan Basins. We had 113
17 infrared videos of equipment leaks or improperly operating
18 flares and unlit flares in 2019. In 2020, that number
19 increased to 369 at 264 different companies.

20 Q. Does the Bureau also initiate inspections in
21 response to public complaints?

22 A. Yes. The Bureau also responds to public
23 complaints. So as an example, we got one set of
24 complaints involving a company that was choosing to flare
25 continuously, in violation of their permit conditions.

1 That prompted an on-site investigation of five oil and gas
2 facilities.

3 The findings from that investigation included
4 constructing facilities different from their general
5 permit -- general construction permit registrations and
6 also significant excess emissions. We're currently in the
7 process of developing an enforcement case.

8 Another series of complaints prompted another
9 on-site investigation of 15 different oil and gas
10 facilities. We did discover potential violations for two
11 companies there.

12 Q. Does the Bureau ever initiate investigations
13 based on videos published on the internet?

14 A. Yes. The Bureau also periodically receives these
15 notices of infrared videos published on YouTube. We
16 attempt to follow up with an intensive information request
17 to determine whether violations may have occurred. We've
18 received 205 unique submissions since 2016; 82 of those,
19 so far, have been in 2021. All of them are oil and
20 gas-related.

21 The Bureau does not have the resources to follow
22 up on all of these, although we have added some of these
23 facilities to our compliance monitoring strategy in the
24 past.

25 Q. Can you please describe enforcement cases

1 involving oil and gas facilities that the Bureau has
2 pursued in recent years?

3 A. Uh-huh. Since 2016, we've settled 64 cases, and
4 51 one of those are related to oil and gas facilities,
5 including three large administrative compliance orders
6 covering nearly 20 facilities over the last few weeks.

7 Additional cases in the final settlement -- are
8 in the final settlement stages for 12 oil and gas
9 facilities. Of approximately 40 active enforcement cases,
10 22 are for oil and gas-related facilities. Several of
11 those involve multiple facilities for a given company.

12 Q. Do many of these cases involve excess emissions?

13 A. Many cases do involve excess emissions. And it's
14 important to note that excess emissions are required to be
15 self-reported to the Bureau. These are exceedances of
16 permitted limits.

17 Ramboll modeling used only permitted limits, so
18 these exceedances have not been modeled. Also, the Notice
19 of Intent and unpermitted facilities are not required to
20 report excess emission. So the modeling does not include
21 any emissions from their upset conditions.

22 In our experience from inspecting Notice of
23 Intent facilities with EPA in 2019 and 2020, and from
24 EPA's flyover data, suggests that actual emissions are far
25 greater than what we see self-reported as excess

1 emissions. Since 2017, 99 to 100 percent of excess
2 emissions reported to the Bureau are from oil and
3 gas-related facilities.

4 I'd like to call your attention to Figure 1 on
5 page 9 of my written testimony. What's of interest here
6 is that over 1.3 million excess pounds of nitrogen oxide
7 or NOx, and over 10.5 million excess pounds of volatile
8 organic compounds, or VOCs, have occurred since 2017. In
9 2017 to 2020, NOx excess emissions increased 407 percent
10 and VOC excess emissions increased 1022 percent. To put
11 that in context, the over 4.5 million pounds of excess VOC
12 emissions in 2020 alone, is equivalent to 22 additional
13 Title V for major sources. And none of this was modeled
14 because Ramboll assumes that sources are in compliance
15 with existing permit limits.

16 Q. So what conclusions can you draw from all of this
17 information that you have provided?

18 A. Well, one conclusion is that oil and gas
19 facilities are the majority of the Bureau's permitted and
20 Notice of Intent-registered facilities. Oil and gas
21 facilities also represent the significant challenge to the
22 Bureau regarding reported excess emissions.

23 Reliance on self-reporting is integral to the
24 Bureau's compliance and enforcement strategy. It's not
25 ideal, but it's common for air regulatory agencies, in

1 addition, to conducting our on-site inspections.

2 Q. How is the proposed rule that the Board is
3 considering in this proceeding expected to improve
4 compliance efforts, both for the Bureau and for the
5 industry?

6 A. Well, it's pretty clear that the Bureau does not
7 have adequate staff to inspect every facility in New
8 Mexico. So we will continue to rely on self-reporting as
9 part of our compliance efforts in the foreseeable future.
10 So this proposed rule will help us focus our compliance
11 and enforcement efforts where we may see the most benefit.
12 Without the requirements of the proposed rule, the Air
13 Quality Bureau would expect that oil and gas excess
14 emissions will not abate.

15 The requirements, we hope, will help -- will also
16 assist oil and gas-related facilities in identifying
17 problems at their facilities and taking care of them
18 without a regulatory agency's involvement, through such
19 things as the annual compliance certification and
20 third-party audit requirements.

21 Q. And what are the -- your conclusions regarding
22 the expected benefits of this rule with respect to the
23 modeling and the ozone concentrations?

24 A. So the Bureau believes that because Ramboll's
25 modeling did not include excess emissions, nor facilities

1 without permits, the emissions reductions and ozone
2 benefits from the proposed rule are very likely
3 underestimated.

4 Q. Thank you, Ms. Hollenberg, that's all I have.

5 HEARING OFFICER ORTH: Thank you, Ms. Katz.

6 We'll turn now to questions. Ms. Fox, do you have
7 questions of Ms. Hollenberg?

8 MS. FOX: No. Thank you, Madam Hearing Officer.

9 HEARING OFFICER ORTH: Ms. Paranhos?

10 MS. PARANHOS: No questions for this witness.

11 Thank you.

12 HEARING OFFICER ORTH: Thank you. Professor
13 Pacyniak?

14 PROFESSOR PACYNIK: No questions, Madam Hearing
15 Officer.

16 HEARING OFFICER ORTH: Thank you. Ms. Devore?

17 MS. DEVORE: I just have one quick question.

18 CROSS-EXAMINATION OF CINDY HOLLENBERG

19 BY MS. DEVORE:

20 Q. So I was just curious if -- how many of the,
21 like, facilities out of compliance are -- if you have any
22 idea, how close those are to Carlsbad National Park? Do
23 you recall that?

24 A. Probably. (Unintelligible). Is that your
25 question?

1 HEARING OFFICER ORTH: Hold on. Hold on,
2 Ms. Hollenberg. You were breaking up there. Would you
3 repeat what you said from the beginning?

4 A. I guess I'd like clarification on the question.

5 Q. (BY MS. DEVORE) I'm sorry. I didn't catch that.

6 A. Can you clarify your question?

7 Q. If -- do you have any concept of how close these
8 facilities are to Carlsbad Caverns National Park, the one
9 that -- the ones that you were talking about that were out
10 of compliance? I'm trying to remember which county that
11 is.

12 A. I actually can't really answer that question.
13 You know, they're kind of spread out around Carlsbad, the
14 city, and throughout the Lea and Eddy Counties, Chaves
15 County for the Permian Basin, but I don't really have
16 information about how many facilities are close to the
17 actual park.

18 Q. I mean, do you have a general concept of how many
19 are in the Permian Basin? Would that be a -- that's a
20 little bit better of a question. To get context for like
21 where in the state are these compliance issues, you know.

22 A. Are you speaking of -- I mean, we have compliance
23 issues pretty much everywhere. But are you speaking of
24 the flyover project or the 2019 and 2020 joint
25 inspections? I'm trying to get where you're --

1 Q. Yeah. Either really. I mean, if you just --
2 just context for, yeah, it helps to know if the violations
3 are all over the state. Like if you're seeing consistent
4 violations all over the state, then I think that answers
5 my question.

6 A. We do see violations from all over the state.
7 There's -- there's no doubt about that. The 2019
8 inspections and flyovers were all focused on the Permian
9 Basin, but then when we did the 2020 flyovers and our 2020
10 inspections of facilities that don't have large permits,
11 major source permits or SM-80 permits, we found also some
12 compliance issues in the San Juan Basin.

13 Q. Thank you.

14 HEARING OFFICER ORTH: All right. Let's see
15 here. Mr. Nykiel?

16 MR. NYKIEL: Yes, Madam Hearing Officer, just
17 briefly.

18 CROSS-EXAMINATION OF CINDY HOLLENBERG

19 BY MR. NYKIEL:

20 Q. Ms. Hollenberg, would you say that the
21 information that was self-reported that you described in
22 your rebuttal testimony is helpful information for the
23 Department to have?

24 A. It's very important for us to have.

25 Q. And absent that self-reporting, the benefit of

1 that information wouldn't accrue to the Department?

2 A. We would have a much harder time holding --
3 holding violators accountable for the violations that do
4 occur. You know, with the resources that we have, we
5 would not be able to tell always when excess emissions
6 occur.

7 MR. NYKIEL: Thank you very much. No further
8 questions.

9 HEARING OFFICER ORTH: Thank you.

10 Mr. de Saillan?

11 MR. DE SAILLAN: I have no questions. Thank you.
12 But I appreciate this testimony.

13 HEARING OFFICER ORTH: Thank you. Mr. Hiser?

14 MR. HISER: I do have just a couple of real quick
15 questions.

16 CROSS-EXAMINATION OF CINDY HOLLENBERG

17 BY MR. HISER:

18 Q. Do you know whether or not facilities operate at
19 100 percent of their allowable capacity at all times, or
20 do they operate at less than their allowable capacity much
21 of the time?

22 A. I don't have that information, I'm sorry.

23 Q. Okay. You testified that these emissions values
24 are not showing up. Is it your testimony that these
25 emissions do not show up in the monitored values in the

1 Department's monitoring network?

2 A. I believe that they contribute to -- certainly
3 the physical emissions contribute to the monitored values,
4 yes. What does not show up is what was put into the
5 model, as far as what -- what counts as on the books.

6 Q. And did you hear the testimony from Mr. Morris,
7 your own witness, that the RRF is used to address some of
8 these issues?

9 A. Yes, I heard his testimony this morning.

10 Q. And so in effect, would not some of this issue
11 already be addressed in the model then?

12 A. I can't answer that, I'm not a modeler.

13 Q. Okay. Thank you.

14 HEARING OFFICER ORTH: Thank you. Mr. Rose?

15 MR. ROSE: I'm getting there.

16 HEARING OFFICER ORTH: I didn't hear you.

17 MR. ROSE: Oh, I said I'm getting there, so...

18 HEARING OFFICER ORTH: Okay.

19 CROSS-EXAMINATION OF CINDY HOLLENBERG

20 BY MR. ROSE:

21 Q. Let's see. I guess I need to click here to get
22 back on. There we go. Ms. Hollenberg, in terms of the
23 emissions inventory that Ramboll modeled, it's my
24 understanding that that was provided by the Department.
25 Do you know whether the Department considered including

1 any of the excess emissions reported in the modeling
2 analysis?

3 A. I have no basis to answer that question. I was
4 not involved in that.

5 Q. So -- so that Ramboll could have modeled
6 emissions, including excess emissions if the Department
7 had requested, correct?

8 MS. KATZ: Objection, outside of the scope of
9 Ms. Hollenberg's testimony.

10 MR. ROSE: She is testifying in terms of whether
11 or not the modeling analysis, perhaps underestimates
12 concentrations due to oil and gas facilities. What I'm
13 suggesting is that the choice of the model and the model
14 inputs was the Department's. So she has a criticism --

15 MS. KATZ: She just testified that she didn't
16 have any involvement in that choice.

17 HEARING OFFICER ORTH: Right. So there is no
18 foundation --

19 Q. (BY MR. ROSE) But it's still the Department's
20 choice, is it not?

21 HEARING OFFICER ORTH: I'm sorry, Mr. Rose. I
22 think you lack foundation for -- for that question.

23 MR. ROSE: Madam Hearing Officer, I believe that
24 the foundation is that she -- she's testifying that the
25 model potentially underestimates an issue, based on that

1 fact that Ramboll modeled only permitted emissions. And
2 what I'm saying is that the -- the criticism of the model,
3 in essence is based on the Department's own choice to
4 have --

5 MS. KATZ: Objection, that's already been stated.

6 HEARING OFFICER ORTH: Ms. Katz, I'm sorry. It's
7 awkward on this platform because there's kind of a
8 heartbeat of a delay every time.

9 Mr. Rose, I was going to invite you to finish
10 your sentence, but I definitely understand your point.
11 And because Ms. Hollenberg said that she was not involved
12 in the decision as to what inputs were going into the
13 model, I think there's really no more testimony on that
14 point that you can get from her. Do you have other
15 questions?

16 MR. ROSE: No, that was my question.

17 HEARING OFFICER ORTH: All right. Thank you.
18 Let's see. Mr. Janoe?

19 MR. JANOE: No questions.

20 HEARING OFFICER ORTH: All right. Mr. Butzier?

21 MR. BUTZIER: No questions, Madam Chair.

22 HEARING OFFICER ORTH: All right. Ms. Gutierrez?

23 MS. GUTIERREZ: No questions. Thank you.

24 HEARING OFFICER ORTH: Thank you.

25 Mr. Colclasure?

1 MS. SHPALL: This is Casey Shpall, no questions.

2 MR. COLCLASURE: No questions.

3 MS. SHPALL: I wasn't sure if Chris was still
4 there.

5 HEARING OFFICER ORTH: Okay. Thank you,
6 Ms. Shpall. And let's see. Ms. Witherspoon? May have
7 stepped away.

8 All right. I'm going to turn now to potential
9 questions from the Board. While I'm doing that, in the
10 event that there is an attendee who has a question, please
11 put it in the Chat. And if you ever have any struggles
12 with the Chat, please text (505) 660-4305.

13 EXAMINATION BY THE BOARD OF CINDY HOLLENBERG

14 HEARING OFFICER ORTH: Madam Chair, do you have
15 any questions of Ms. Hollenberg?

16 CHAIRPERSON SUINA: Yes. Thank you, Madam
17 Hearing Officer. So I guess -- I guess as I read through
18 your -- the written testimony as well as in hearing your
19 verbal testimony today, I just want to be clear again. I
20 know you've hit this point, but in my mind, so the Ramboll
21 model assumes that the facilities are in compliance, from
22 your understanding; is that correct?

23 MS. HOLLENBERG: That's -- that's correct.

24 CHAIRPERSON SUINA: Okay. And as you shared with
25 us in your written testimony in Figure 1, it looks like

1 there's a number of pounds of excess emissions by
2 pollutants due to oil and gas facilities --

3 MS. HOLLENBERG: Uh-huh.

4 CHAIRPERSON SUINA: -- that were reported to the
5 Bureau; is that correct?

6 MS. HOLLENBERG: That's -- that's correct.

7 CHAIRPERSON SUINA: Can you remind me how they
8 were reported? I'm trying to look here.

9 MS. HOLLENBERG: We have -- we have a reporting
10 system. It's -- we call it the AQBCR. It's Air Quality
11 Bureau Compliance Reporting, and there is a system that is
12 well-known by -- by the facilities, for them to report
13 their excess emissions, among other things.

14 CHAIRPERSON SUINA: Okay. So this is all
15 self-reported?

16 MS. HOLLENBERG: That's correct.

17 CHAIRPERSON SUINA: Okay. And then I know you
18 testified to additional complaints?

19 MS. HOLLENBERG: Uh-huh.

20 CHAIRPERSON SUINA: An how are -- is there any
21 quantification of some of those maybe excess emissions
22 from those complaints that might not be self-reported?

23 MS. HOLLENBERG: Yes. It depends on what we find
24 when we go to investigate a facility. If we go to
25 investigate a facility, we may ask for more records, we

1 may -- you know, we often, of course, look at the
2 equipment that's on site. We talk about the process for,
3 you know, how they -- the facility operates. But a lot of
4 information comes in after that initial investigation, so
5 in asking for records, we ask for something very specific.

6 And then we have had occasion to say, okay,
7 you've had this happening and you've just admitted to this
8 happening, why are we not seeing any excess emissions
9 reports? And so, then, they may go and submit those
10 excess emission reports, and there will be additional
11 potential violations for them not submitting those excess
12 emissions reports, without us telling them that they
13 needed to. But the main point about excess emissions is
14 that we do rely on that self-reporting.

15 CHAIRPERSON SUINA: Thank you for that response.
16 So I think one of the other legal counsel asked this
17 similar question, but I just want to make sure I'm clear.
18 So, then, right now, I know you probably don't have the
19 details, but where we have excess self-reporting data or
20 information, has there ever been an analysis done by the
21 Bureau as to if those excess emissions can be tied to
22 monitoring stations that are ongoing, that are continuing
23 to be monitored?

24 And maybe -- maybe another way to say it is, are
25 -- has there been a look at if these excess emissions are

1 nearby monitoring stations that might -- where that data
2 might also be captured by the impacts of -- these excess
3 emissions might be captured by those monitoring stations?

4 MS. HOLLENBERG: I think that the monitoring
5 stations capture all emissions, whether they are excess
6 emissions or allowable emissions. We have excess
7 emissions pretty much everywhere in the state. As I said,
8 99 to 100 percent of them come from oil and gas, so we're
9 looking specifically at the San Juan Basin and at the
10 Permian Basin.

11 And so, it's not necessarily about a facility
12 that has excess emissions being near to a monitor. It's
13 contributing to a large mix of pollutants in the air that
14 eventually does get captured by -- by monitors somewhere,
15 even if it's not captured within this state. It may be
16 contributing to Texas, it may be in -- the San Juan Basin
17 may be contributing to Colorado.

18 You know, it's -- pollutants, of course, don't --
19 don't respect state borders. They also don't -- they also
20 don't choose which direction they're going to blow. A lot
21 of that, of course depends on meteorology.

22 CHAIRPERSON SUINA: Thank you for that,
23 Ms. Hollenberg. I do have another question. So to the
24 self-reporting versus what is being proposed now in the
25 proposed rules, would the -- how do you see, in terms of

1 the enforcement task that you're responsible for -- how do
2 you see that the new proposed rules will help, I guess,
3 specifically, one, in cost and then also resources for
4 your staff?

5 MS. HOLLENBERG: Well, one of the things I'd like
6 to say is that in compliance and enforcement, we really,
7 really value compliance. And -- and part of that is to
8 look at equity, because another value that we have is
9 equity. And so you always have inequities when you have
10 some facilities or companies that are complying, they are
11 doing everything that they are supposed to be doing, and
12 you have some other facilities that are not complying and
13 they're simply not investing in protecting air quality.

14 So the focus of our compliance and enforcement
15 program is really to kind of level the playing field so
16 that -- so that we can help make sure that -- that there
17 isn't that kind of an inequity. So what this will help us
18 do is gather the information that would be impossible for
19 us to gather on our own. And the way that that will work,
20 of course, remains to be seen, but without that
21 information, just like if there were no excess emissions
22 reporting required, we would have nothing to go on.

23 This at least gives us something to go on, so
24 that when we do our required inspections, when we do our
25 required reports reviews, we have more information that

1 helps point us in the direction of where we need to really
2 focus our efforts so that we can get to that level --
3 level playing field as much as possible.

4 CHAIRPERSON SUINA: Thank you for that. I think
5 that's all I have for right now. Thank you,
6 Ms. Hollenberg and thank you Madam Chair -- I mean Madam
7 Hearing Officer.

8 HEARING OFFICER ORTH: Thank you, Madam Chair.
9 Vice-Chair Trujillo-Davis, do you have any questions?

10 VICE-CHAIR TRUJILLO-DAVIS: Yes, I do. Thank
11 you, Madam Hearing Officer. I just want to kind of
12 continue where Member Suina left off there. So my
13 question is -- I just want to make sure that I'm clear on
14 this. But the cornerstone of NMED's enforcement right now
15 is self-reporting and public reporting. And the hope is,
16 is that they will be able to take their -- their
17 enforcement group that is an employee of NMED and try to
18 kind of catch the rest of the operators that are maybe
19 not -- not self-reporting or not kind of following those
20 guidelines. Is that -- am I correct in that -- in
21 understanding it that way?

22 MS. HOLLENBERG: I -- I would -- I would be
23 cautious about saying that the self-reporting is the
24 cornerstone of our compliance and enforcement effort. The
25 cornerstone, of course, is our inspections and our

1 required reports reviews. Given the resource constraints
2 that we have, the self-reporting I would say is integral.
3 It is not necessarily the cornerstone. So I just want to
4 say that at the beginning.

5 So, really, what this would offer is an
6 opportunity to gather more information than we could
7 possibly gather on our own. So I'm not sure what more
8 information you would like about that. You know, I think
9 that if we look at annual compliance certification
10 requirements, that's information that we can use and look,
11 and yes, it is again some self-reporting, and
12 self-reporting isn't ideal, but it's a whole lot better
13 than nothing.

14 The -- the other goal there, though, is to have
15 them look at their facilities more closely and perhaps
16 catch some -- some compliance issues before they reach
17 that level. So, you know, if you're going out and
18 inspecting your own facilities, then -- then maybe you can
19 catch something much earlier and be able to fix it before
20 it becomes something like an excess emission.

21 VICE-CHAIR TRUJILLO-DAVIS: Thank you,
22 Ms. Hollenberg. I apologize, I meant to start that
23 question off with telling you that I realize you have a
24 mountain of a task with having to do inspections across
25 the state, and that I'm sure it's probably a thankless

1 task on most days. But I just wanted to make sure I
2 understood what -- at least the path forward for NMED as
3 far as inspections and enforcement goes, because one of my
4 concerns -- and it's not just with your particular group,
5 I think we see it consistently throughout the state when
6 it comes to enforcement. But, you know, that a clear plan
7 forward, it seems that we would -- somebody told me once
8 recently, a dream without a plan is just a wish. And kind
9 of in that same context, like, okay, we're going to work
10 it out as we move forward, but we don't -- do we have a
11 plan to make that happen. So -- and I understand it's
12 probably a bigger question than you want to answer, so I'm
13 just laying out my concern to NMED over that particular
14 point.

15 And then my other question here is when somebody
16 submits a permit, do they build excess emissions into
17 their PTE or potential to emit?

18 MS. HOLLENBERG: There's -- there's a potential
19 to emit and there is an allowable limit, and one thing
20 that -- that -- and I'm not a permitting specialist, but I
21 do know that the permitting staff work with the facilities
22 to put conditions in permits that will keep -- that will
23 keep facilities at their allowable limits.

24 Anything that is excess has gone beyond those
25 allowable limits, so it just depends on what it is. If

1 somebody is, for example, flaring for months on end, and
2 they are only supposed to be using that flare for
3 emergency conditions, then they are not operating
4 according to the conditions of their permit. So that's
5 just an example. So, really, it's important to understand
6 that the excess emissions are over and above what's
7 allowed in their permits.

8 VICE-CHAIR TRUJILLO-DAVIS: Okay. So just to
9 clarify; excess emissions are over that allowable limit?

10 MS. HOLLENBERG: Uh-huh, that's correct.

11 VICE-CHAIR TRUJILLO-DAVIS: Okay. And does that
12 change from facility to facility? So would a production
13 site have different permitting rules for excess emissions,
14 as opposed to a midstream site, like a compressor station?

15 MS. HOLLENBERG: I'm not certain I know what you
16 mean by -- by permitting requirements for excess
17 emissions, because we don't permit for excess emissions.

18 VICE-CHAIR TRUJILLO-DAVIS: I'm just asking if
19 the permitting construction for excess emissions is the
20 same across every facility? We've -- we've seen a lot of
21 testimony so far and we've had, I think, within the
22 opening statements, people from different portions of the
23 industry give testimony for how they feel the rule impacts
24 them. So I'm asking if the permitting is the same across
25 the board for everybody, or if it's dependent on your

1 place in that line, from upstream to midstream to
2 downstream?

3 MS. HOLLENBERG: I again am not a permitting
4 expert, but my experience with permits is that each one,
5 within certain confines, are tailored to the facility.
6 Even within the general construction permits, the
7 conditions are the same, but it all depends on what you
8 have at your facility. And so conditions for -- for
9 example, if you have a condition for a heater-treater, if
10 your facility doesn't have a heater-treater, of course
11 you're not going to have conditions for heater-treaters,
12 or if you have a general construction permit, they -- they
13 are not going to be subject to that particular condition
14 because it's simply not applicable. I'm not sure I'm
15 satisfying your -- your question here, but...

16 MS. KATZ: Member Trujillo-Davis, we could see if
17 we could find somebody from the permitting section that
18 might be able to answer those questions better for you
19 since Ms. Hollenberg is with the enforcement section.

20 VICE-CHAIR TRUJILLO-DAVIS: Thank you, Ms. Katz,
21 I appreciate that. And really what I was trying to
22 understand was the statement that Ms. Hollenberg made
23 about the impact to -- let me get this right here -- the
24 estimations to the modeling, whether they were
25 underestimated because excess emissions were not accounted

1 for.

2 And so I was trying to understand that process a
3 little better, because, to me, if I was going to fill out
4 a permit, I would want to give myself some room. And also
5 just in my experience, I have seen different reporting for
6 compressor stations and midstream operations, versus
7 production facilities. And then, I believe -- and I
8 apologize for not remembering who it was, but I believe it
9 was Kinder Morgan that gave us a short, little talk about
10 where they fell in this rule. So I was trying to pull all
11 of that together to understand the -- the impacts to
12 whether this is overestimating or underestimating, and
13 if -- and how Ramboll used those numbers.

14 MS. KATZ: So I think it might be better to ask
15 somebody from our permitting section about how the
16 potential to emit is calculated for different sources, and
17 what those thresholds then are that are included in those
18 permits, and whether they include -- whether they include
19 excess emissions.

20 I believe Ms. Hollenberg said that they -- that
21 that's -- what's being reported as excess emissions is
22 beyond that.

23 MS. HOLLENBERG: Right.

24 MS. KATZ: But we could see if there might be
25 somebody who could speak more directly to that.

1 VICE-CHAIR TRUJILLO-DAVIS: Well, thank you very
2 much. And thank you for indulging my questions.

3 HEARING OFFICER ORTH: Thank you. Let's see.
4 Member Cates, do you have questions?

5 BOARD MEMBER CATES: Yeah. Mine is more general.
6 So to be clear, the state currently relies to some
7 significant degree on self-reporting; is that -- is that
8 correct?

9 MS. HOLLENBERG: That is correct for -- for
10 excess emissions specifically.

11 BOARD MEMBER CATES: Right. And you didn't say
12 this in your testimony, but I assume over time that
13 there's -- there are good actors and that there are bad
14 actors. There -- there exists a certain significant
15 amount of mistrust with this current system, there are
16 questions of credibility and integrity in the
17 self-reporting in many instances.

18 And then, so to my question, which is an easy one
19 I guess -- I hope, is that the rule that we're considering
20 here would -- would be a step in a direction toward
21 creating more integrity throughout the self-reporting
22 systems; is that fair to say?

23 MS. HOLLENBERG: I think -- I think that we're
24 looking at in a way two separate things, because we won't
25 be looking at simply excess emissions. The reporting from

1 this rule will be about, you know, inspections that they
2 have done at their facilities and that type of a thing.
3 And so, I think they go hand in hand. I'm not sure it
4 speaks necessarily to the integrity of the excess
5 emissions reporting. We -- we have to trust as much as
6 possible that -- that what is being reported is correct.

7 We have -- we have nothing else to base anything
8 on.

9 BOARD MEMBER CATES: Right. Okay. Got it.
10 Thank you. That's all I really had. Your testimony was
11 fascinating. Thank you.

12 HEARING OFFICER ORTH: Thank you. Member Bitzer?

13 BOARD MEMBER BITZER: Yeah, a quick maybe simple
14 question. Earlier today during public testimony, we heard
15 from a woman who went out and bought her own surveillance
16 equipment and got trained and certified to the same level
17 that the professionals have, to go out and look for leaks
18 or unbridled venting and so forth. And I'm wondering if
19 that kind of data that somebody like that would produce
20 helps you at all in -- in doing your job. Is there
21 citizen data -- I know they can "drop dime, writ large,"
22 and say there's a problem here. But does the data that
23 somebody like that collects get you further down the pike
24 in terms of doing your job? That's all I have.

25 MS. HOLLENBERG: In -- in some respects, yes.

1 Sometimes we get videos of facilities that do not have a
2 permit, and so there -- there are no permit violations
3 that we can look to and -- and so we may not have a case.
4 There are some facilities that are not subject to federal
5 regulations and so, again, you know, we only have the
6 authority to enforce on violations for someone that has
7 actually violated a permit condition, a state rule, or a
8 federal rule.

9 And absent that, we can't really do anything.
10 And so, we have to sort out, and that's why we -- we
11 started doing a fairly extensive information request of
12 those facilities when we would get those reports. It's
13 very similar to what we do with the EPA flyover data,
14 because that helps us gather the information and
15 determine, okay, do they have a permit? If they don't
16 have a permit, should they have a permit? Are they
17 subject to federal rules that we need to take a closer
18 look at and get even more information to determine whether
19 an actual violation has occurred?

20 So, again, you know, sometimes it's helpful and
21 sometimes -- sometimes it just doesn't get us anywhere.
22 That's all I'll say about that.

23 HEARING OFFICER ORTH: Let's see. Member Garcia?

24 BOARD MEMBER GARCIA: Thank you. I do have a
25 question. Can you hear me?

1 HEARING OFFICER ORTH: Now we can.

2 BOARD MEMBER GARCIA: Okay. So I just have a
3 quick question. Thank you for your testimony,
4 Ms. Hollenberg. You mentioned that the Department knows
5 that there's probably more emissions than are
6 self-reported -- exceedances that are self-reported. With
7 all the years of experience the Department has with excess
8 emission reports and violations, et cetera, does the
9 Department make an estimate each year of possibly how much
10 exceedances are not reported? In other words, are you --
11 with self-reporting, are you only capturing perhaps 50
12 percent of the actual exceedances, 25 percent of the
13 actual exceedances? Does the Department make a
14 guesstimate like that?

15 MS. HOLLENBERG: I have not been in any
16 discussions of that sort, so I can't answer that.

17 BOARD MEMBER GARCIA: Okay. Thank you.

18 HEARING OFFICER ORTH: Thank you. Member Honker?

19 MEMBER HONKER: Yes, I've got a few questions,
20 Ms. Hollenberg. I'd like to go back to Figure 1 on page
21 9. And my first question is, what are the percentages
22 under the -- under the numbers?

23 MS. HOLLENBERG: The percentages are of the total
24 excess emissions reported during that year, how many of
25 them are from oil and gas facilities.

1 BOARD MEMBER HONKER: Okay. So are the numbers
2 the pounds from the oil and gas facilities, or is that the
3 total?

4 MS. HOLLENBERG: That's -- that's the pounds only
5 from the oil and gas facilities.

6 BOARD MEMBER HONKER: Okay. Okay. The next
7 thing -- well, one thing I really noticed is that in 2020,
8 the numbers are significantly higher than they were for
9 the previous years?

10 MS. HOLLENBERG: Uh-huh.

11 BOARD MEMBER HONKER: And since we heard a lot
12 about oil and gas activities decreasing in 2020, it's
13 surprising that -- to see those numbers. Do you have any
14 insight as to why those numbers were so much higher in
15 2020?

16 MS. HOLLENBERG: I really wish I did. I do not,
17 actually, because I ask myself the same question.

18 BOARD MEMBER HONKER: Okay. And then, so -- so
19 the numbers in Figure 1 were self-reported by permitted
20 facilities, right?

21 MS. HOLLENBERG: Correct.

22 BOARD MEMBER HONKER: And I believe in your
23 testimony, you said your staff had become aware of other
24 excess emissions from permitted facilities that have not
25 been reported?

1 MS. HOLLENBERG: What I believe I said or -- or
2 hope to communicate is that -- that in other activities we
3 found other violations that could have resulted in
4 unreported excess emissions, but, you know, really, what
5 we were looking at is what can we verify that has actually
6 been violated.

7 We may have been led to ask for more records. We
8 may have -- one of my -- one of our big investigations
9 certainly did get to some excess emissions that until we
10 said something to them, they had not even thought about
11 reporting excess emissions. So, you know, really, our
12 investigations take us on a path of trying to find, have
13 there been violations, and if so, what are those
14 violations. And then we take a look at, you know, what is
15 the impact on that when we move toward enforcement, if we
16 move toward enforcement.

17 BOARD MEMBER HONKER: Okay. So -- so there's a
18 possibility there's additional excess emissions from
19 permitted facilities that aren't showing up in the tables?

20 MS. HOLLENBERG: We think that's possible.
21 Again, we can only enforce on something that we have
22 verifiable evidence for.

23 BOARD MEMBER HONKER: Okay. Understood. Then
24 the non -- the permitted -- the facilities that are below
25 permitting thresholds, I believe you said there were

1 probably excess emissions from those facilities who are
2 not required to report them, but there may be cases where
3 there's excess emissions above the levels that -- the
4 thresholds that would require a permit; is that correct?

5 MS. HOLLENBERG: That's quite possible. And that
6 comes from our experience, especially in our joint
7 inspections of 2019, for which EPA is currently working on
8 a few cases, where we are co-complainants. We found -- we
9 found some systemic issues at their facilities. So we --
10 we believe that we didn't just find the few companies
11 that -- that have some issues there, that probably some
12 others exist in other places.

13 But, again, you know, we have to find them. And
14 so, what we believe is that many more facilities probably
15 exist that have some type of violations, whether it's
16 excess emissions, whether it's having equipment on site
17 that they did not report to us. You know, lots of
18 different possibilities.

19 BOARD MEMBER HONKER: Okay. So going back to, I
20 guess Member Garcia's question, you already know the total
21 number of pounds of each of these pollutants due to
22 violations or excess emissions, you do have this table,
23 but the real number is probably bigger than that, and you
24 can't even guesstimate how much bigger that might be?

25 MS. HOLLENBERG: We think -- we think that's very

1 likely. And, yes, we -- we would not begin to try to
2 quantify that.

3 BOARD MEMBER HONKER: Okay. All right. Thank
4 you. No further questions.

5 HEARING OFFICER ORTH: Thank you, Member Honker.

6 Madam Chair, did you have some additional
7 questions?

8 CHAIRPERSON SUINA: Yes, Madam Hearing Officer.
9 Thank you so much. I appreciate the opportunity to ask a
10 few more questions. Thank you again, Ms. Hollenberg.

11 You had mentioned that your compliance group at
12 the Bureau is, I think, at 50 percent; is that what you
13 said?

14 MS. HOLLENBERG: Approximately.

15 CHAIRPERSON SUINA: Approximately, in terms of
16 staffing. And then, so I'm just trying to get my head
17 around, so you're at 50 percent. Is that a -- is that a
18 state that has happened just in the last year, or has that
19 been year over year, like since 2017, going back to 2017?
20 Has it -- has it been consistently under -- underresourced
21 in terms of staff?

22 MS. HOLLENBERG: We often have openings. You
23 know, it's -- it's kind of a rotating basis. You know,
24 staff get promoted, staff move on to different careers.
25 Staff move back East. You know, we have a lot of

1 different reasons that we have vacancies on -- on a
2 rotating basis. I would say that -- that we do -- we have
3 had a significant number of vacancies since at least 2019.
4 In 2019, at that point I was inspections manager and we
5 were fully staffed at seven inspectors, and that didn't
6 last very long. So, yes, there are resource constraints
7 on an ongoing basis.

8 CHAIRPERSON SUINA: Thank you for that,
9 Ms. Hollenberg. And -- and so with that information, so
10 in the -- and because of the constraints on the staff
11 levels, you had mentioned -- I think Vice-Chair
12 Trujillo-Davis mentioned this as well. So, therefore,
13 because of the constraints, the Department does rely on
14 the self-reporting mechanism to at least capture some of
15 the data like you have in Figure 1; is that correct?

16 MS. HOLLENBERG: That is correct. And we would
17 rely on that type of self-reporting whether we were fully
18 staffed or not, because that is simply information that --
19 that we might not get to until, you know, our inspection
20 is due, which as I said, is every two years for major
21 facilities, and for the synthetic minor, 80 percent would
22 be every five years. So it's an important part -- it's an
23 important part of our compliance efforts to -- to have
24 that information available to us.

25 CHAIRPERSON SUINA: And thank you for that

1 response as well. So would the excess emissions that are,
2 self-reported, is there a process that the Bureau has to
3 follow up on these excess emissions, in terms of
4 confirming the value of the excess emissions?

5 MS. HOLLENBERG: I'm not sure what you mean by
6 the value of the excess emissions.

7 CHAIRPERSON SUINA: Or I guess, looking at the
8 data itself, or is it just -- I know there's the database,
9 the AQBCR, but I guess my follow-on question to that is,
10 is there a follow-up by the Bureau? Is it an anomaly? Is
11 it -- is it -- is the detection instrument okay? All of
12 that data and measuring qualitative process, is that -- is
13 that done by the Bureau or is it just merely looking at
14 the excess emission data?

15 MS. HOLLENBERG: We look at the excess emissions
16 data as reported to us by the facilities. We have --
17 there's information in those excess emission reports
18 that's required, so they have to tell us where the
19 emission point is. They have to tell us what the cause of
20 the excess emission was. They have to tell us what was
21 done to remedy the situation, because in all of the cases,
22 there's some type of upset condition. There, something is
23 going on that is putting them over their permit limits,
24 and so they have to tell us what they've done to remedy it
25 and also what caused it.

1 CHAIRPERSON SUINA: Thank you for that.

2 So in that process, do you see repeat excess
3 emissions entries into the database or report -- reports
4 of repeat excess emissions from a singular facility or
5 source?

6 MS. HOLLENBERG: Yes.

7 CHAIRPERSON SUINA: And then, is there a
8 mechanism, then, to -- for your Bureau to follow up on
9 that? Is that part of those cases, that you're following
10 up on?

11 MS. HOLLENBERG: We do. Sure. So we follow up
12 with inspections, with reports reviews. You know, our
13 compliance staff does look at those excess emissions and
14 our penalties are based on the amount of excess emissions
15 that we see. So, you know, they will notify the facility
16 that there is a potential violation and then they refer
17 that to the enforcement unit. And the enforcement unit is
18 the one that follows up and develops the legal case.

19 CHAIRPERSON SUINA: Great. Thank you. So,
20 again, back to the rule, so will the proposed rule help
21 your staff's task level with the additional reporting
22 requirements being proposed?

23 MS. HOLLENBERG: I -- I think that it will give
24 our compliance staff a little bit more to do when they are
25 doing the inspections and the reports reviews. That said,

1 it gives them additional information that we didn't have
2 before. And that, I think, is the important part of that.
3 You know, if there's one more step in an inspection,
4 there's one more step in an inspection. And -- and this
5 will give them more information to -- to make sure that --
6 that facilities are complying with the requirements of
7 their permits.

8 CHAIRPERSON SUINA: And thank you for that,
9 Ms. Hollenberg. I think I noted a phrase you said in
10 that, the Bureau can only enforce something on what you
11 have information of or what you have evidence of?

12 MS. HOLLENBERG: Uh-huh.

13 CHAIRPERSON SUINA: And so that's why I asked
14 that question. And, again -- or with this new proposed
15 rule, do you also perceive or believe based upon the
16 resource constraints you already have, that you will need
17 additional resources in order to address the proposal --
18 the proposed, you know, tasks that will come about with
19 the passing or with the -- excuse me -- with the potential
20 amendment to the rules?

21 MS. HOLLENBERG: You know, this is -- this is --
22 you're asking for my perception. And my perception is
23 that -- that we could do a better job if we had one more
24 inspector; we could do an even better job if we had two
25 more inspectors; we could do an even better job if we had

1 three, if we had five, if we had ten, if we had twenty.

2 And, you know, you look at the resource
3 constraints of government in general, and we find, you
4 know, this is -- this is not my decision. It's decided
5 way above my head how those resources that we do have are
6 going to be spent. So could we use 20 inspectors?
7 Absolutely. Can we pay for them? That's -- that's a
8 question for somebody else.

9 CHAIRPERSON SUINA: And thank you for your
10 response, Ms. Hollenberg. And I apologize if I put you in
11 an awkward position in answering that, but I appreciate
12 your answer.

13 And thank you, Madam Hearing Officer. Those are
14 all the questions I have for now.

15 HEARING OFFICER ORTH: Thank you. Vice-Chair
16 Trujillo-Davis, do you have another question?

17 VICE-CHAIR TRUJILLO-DAVIS: Yes, I do. Thank
18 you, Madam Hearing Officer.

19 And thank you again, Ms. Suina. I really like
20 that "S" comes before "T" in questioning here, so thank
21 you. I'm going to follow up on some of Member Suina's
22 questions. I really only have one question,
23 Mrs. Hollenberg, is you were talking about small
24 facilities and how there's lot of those small facilities
25 and they don't get inspected as often, I think. But for

1 the facilities that absolutely do require inspections, say
2 every two years or every five years, how many of those
3 facilities are out of compliance on the NMED side, in
4 saying that NMED hasn't had an opportunity, due to
5 staffing issues, to inspect those facilities, and now
6 they're over that two-year mark or that five-year mark?

7 MS. HOLLENBERG: Can you restate that question?

8 VICE-CHAIR TRUJILLO-DAVIS: How many facilities
9 that require inspections from the NMED on the two-year
10 mark or five-year mark have not been inspected by NMED
11 because they have -- because you've had staffing issues,
12 being short on staff?

13 MS. HOLLENBERG: Over the last couple of years, I
14 would say that it is close to 50 percent.

15 VICE-CHAIR TRUJILLO-DAVIS: Okay. Thank you for
16 that. That gives a good picture of some of the
17 difficulties you deal with and your group deals with on a
18 day-to-day basis. Thank you.

19 HEARING OFFICER ORTH: Thank you. Anything else
20 by way of questions?

21 Ms. Katz, will there be any follow-up?

22 MS. KATZ: Thank you, Madam Hearing Officer.
23 Yes, I just have a few questions I want to ask
24 Ms. Hollenberg to try to help clarify some of the Board's
25 questions.

1 REDIRECT EXAMINATION OF CINDY HOLLENBERG

2 BY MS. KATZ:

3 Q. So the rule that the Department is proposing
4 to -- for the Board, do they -- they include far more
5 monitoring requirements, far more extensive monitoring and
6 recordkeeping requirements, like -- is that -- is that
7 correct, Ms. Hollenberg?

8 A. That is correct, yes.

9 Q. So, for instance, the rule -- these rules would
10 require weekly and monthly audiovisual and olfactory
11 inspections by the owners or operators; is that correct?

12 A. That's correct.

13 Q. So there will be more oversight by those
14 operators?

15 A. That is the goal.

16 Q. And they will have to record those inspections
17 and the results of those inspections?

18 A. Recordkeeping goes along with monitoring, that's
19 correct.

20 Q. And the Department, under the rules, can request
21 those records? Those records have to be available and the
22 Department can request them at any time; is that correct?

23 A. Yes. The Department -- the Department does have
24 the authority to request any records from any facility
25 that is possibly emitting an air contaminant.

1 Q. And these rules will apply far more broadly, not
2 just to permitted facilities?

3 A. That's my understanding, yes.

4 Q. And they will -- so if things like the PTE
5 calculations, the potential to emit calculations, will
6 have to be certified by a professional engineer or an
7 in-house engineer and the -- and the company will need to
8 keep records of that certification?

9 A. That -- that is correct as well.

10 Q. And they will -- and the companies will have to
11 submit annual certifications of compliance to the
12 Department; is that correct?

13 A. Yes.

14 Q. So those will help the Department to -- and the
15 industry, to ensure compliance and the integrity of the
16 reporting; is that correct?

17 A. Yes. Yes.

18 MS. KATZ: All right. Thank you.

19 HEARING OFFICER ORTH: All right. Thank you.

20 Any reason not to excuse Ms. Hollenberg?

21 MR. HISER: Madam Hearing Officer, I would like
22 to ask an additional question of her if we may.

23 HEARING OFFICER ORTH: Mr. Hiser?

24 RECROSS-EXAMINATION OF CINDY HOLLENBERG

25 BY MR. HISER:

1 Q. And this goes to the small modeling part of her
2 testimony. Ms. Hollenberg, in figure -- I think it's 1 of
3 your testimony, you presented a table showing pounds of
4 excess emissions by leaking due to oil and gas facilities.
5 Do you have that table available to you?

6 A. I am looking at it right now.

7 Q. Okay. And I apologize for making you do math on
8 the stand, but in 2020, it shows, for example, 652,000
9 pounds. To make it easier, let's drop the 912. What
10 would that be in tons?

11 A. Well, all you'd have to do is divide by 2000 so
12 we're looking at 3000 and --

13 Q. Go ahead. Six hundred, or how many tons?

14 A. Well, 642,000 divided by 2000, so we're looking
15 at 300.

16 Q. Yeah, 300 and change, right? 300 to 325, in that
17 area. Were you here for Mr. Ralph Morris's testimony
18 earlier on modeling?

19 A. This morning and this afternoon, yes.

20 Q. Did you hear him testify that 10 times 67 tons
21 would still be insignificant, in terms of the effect?

22 A. I cannot say that I recall that statement, but...

23 Q. If that statement is true, would that be larger
24 than the number presented here for 2020 for at least NOx?

25 A. Yes.

1 MR. HISER: Thank you.

2 HEARING OFFICER ORTH: All right. And
3 Mr. Colclasure has a follow-up question. Mr. Colclasure?

4 MR. COLCLASURE: Yes. Thank you, Madam Hearing
5 Officer.

6 RECROSS-EXAMINATION OF CINDY HOLLENBERG

7 BY MR. COLCLASURE:

8 Q. Ms. Hollenberg, my name is Chris Colclasure; I'm
9 an attorney with Beatty and Wozniak, representing 3 Bear
10 Energy, which is a part of the Commercial Water Disposal
11 Group participating in this hearing.

12 You testified about the Department's reliance on
13 excess emission reports for its enforcement program. And
14 my question is whether you would agree that most
15 environmental programs rely heavily on self-reporting for
16 their enforcement programs?

17 A. I have no basis to answer that question. I've
18 only been involved with the New Mexico Environment
19 Department.

20 Q. Are you aware of additional reports that the
21 Department receives beyond excess emission reports that
22 can be used to show compliance?

23 A. Yes. We have federal reports that -- that many
24 companies must submit to both EPA and to the New Mexico
25 Environment Department. Our Title V facilities have to

1 submit semiannual reports and they also have to submit
2 annual compliance certifications.

3 Q. So -- thank you. Are you aware of other states
4 that also rely on self-reporting for their air quality
5 enforcement programs?

6 A. Like I said before, I have no basis to answer
7 that question since I've only worked for the New Mexico
8 Environment Department Air Quality Bureau.

9 Q. Would you agree that no matter how many
10 inspectors you have, there would still be a need for
11 reliance on self-reporting?

12 A. I would -- I would believe that that is true,
13 uh-huh.

14 MR. COLCLASURE: No further questions.

15 HEARING OFFICER ORTH: All right. Thank you.
16 Mr. Nykiel also has follow-up.

17 Theresa, are you doing okay? I know it's been
18 more than two hours.

19 (Court reporting nodding head.)

20 HEARING OFFICER ORTH: Go ahead, Mr. Nykiel.

21 RECROSS-EXAMINATION OF CINDY HOLLENBERG

22 BY MR. NYKIEL:

23 Q. Yeah, just briefly. Hello, Ms. Hollenberg. This
24 is Matt Nykiel on behalf of WildEarth Guardians.

25 You stated that the Department, under the

1 proposed rules, can request information that operators
2 collect through their monitoring and recordkeeping; is
3 that right?

4 A. That's correct.

5 Q. And then under the proposed rules, that
6 information that the Department can request is not
7 self-reported; is that right?

8 A. Not once we have requested it. Once we have
9 requested it, that is information that must be provided to
10 us.

11 Q. But -- but if it is not requested by the
12 Department, it's not otherwise self-reported?

13 A. That's -- if it's not requested by the
14 Department -- okay, please restate that question.

15 Q. I apologize. If the Department doesn't otherwise
16 request the information -- that information that the
17 operators collect, the operators don't otherwise
18 self-report that to the Department?

19 A. It's my understanding that it simply needs to be
20 made available to us upon request.

21 Q. Okay. And then you also stated that the
22 enforcement section has been -- has had resource
23 constraints on an ongoing basis?

24 A. Both compliance and enforcement.

25 MR. NYKIEL: Okay. Thank you very much. No

1 further questions.

2 MS. HOLLENBERG: Okay.

3 HEARING OFFICER: Thank you, Mr. Nykiel.

4 Ms. Katz, anything further at all?

5 MS. KATZ: No. No, thank you, Ms. Hearing
6 Officer.

7 HEARING OFFICER ORTH: All right. Great. Thank
8 you. Thank you very much, Ms. Hollenberg. Thank you for
9 sticking in there with us.

10 MS. HOLLENBERG: No problem. Thank you.

11 HEARING OFFICER ORTH: We need a break. Let's
12 come back at 4:15.

13 (Recess taken from 4:00 p.m. to 4:15 p.m.)

14 HEARING OFFICER: Ms. Katz, would you direct us
15 on the screen?

16 So I'm prepared to respond. And do we have
17 Thompson next on this topic or am I -- or did I follow the
18 line across incorrectly?

19 MS. KATZ: No. Madam Hearing Officer, I believe
20 Ms. Thompson is not available today and needs to testify
21 tomorrow.

22 HEARING OFFICER ORTH: All right. So where are
23 we going from here?

24 MS. KATZ: I would suggest that we move to Topic
25 8. And I see Mr. De Saillan on the screen, so it seems

1 like he's ready to present his witness on that topic.

2 HEARING OFFICER ORTH: All right. Thank you so
3 much. Hello, Mr. De Saillan.

4 MR. DE SAILLAN: Thank you, Madam Hearing Officer
5 and thank you, Ms. Katz. The New Mexico Environmental Law
6 Center would like to call Ms. Theresa Pasqual.

7 HEARING OFFICER ORTH: Let me find her, if I
8 haven't already made her a panelist. I must have already
9 made her a panelist.

10 MR. DE SAILLAN: She already is, Madam Hearing
11 Officer. She is a panelist.

12 HEARING OFFICER ORTH: Terrific. Will she need
13 to present slides?

14 MR. DE SAILLAN: She will not be presenting
15 slides, no, Madam Hearing Officer.

16 HEARING OFFICER ORTH: All right.

17 MR. DE SAILLAN: And for the Board following
18 along, we'll be referring to NMELC Exhibits 1 and 2.

19 HEARING OFFICER ORTH: Thank you very much for
20 that. Welcome, Ms. Pasqual. Would you raise your right
21 hand? Do you swear or affirm to tell the truth?

22 MS. PASQUAL: I do.

23 HEARING OFFICER ORTH: Thank you very much.

24 THERESA PASQUAL,
25 having been first duly sworn or affirmed, was examined

1 and testified as follows:

2 DIRECT EXAMINATION OF THERESA PASQUAL

3 (Topic 8)

4 BY MR. DE SAILLAN:

5 Q. Could you state your name for the record, please?

6 A. Yes. My name is Theresa Pasqual.

7 Q. Thank you. And could you start by giving a
8 little bit of your background and your experience?

9 A. Yes. Good day, Madam Chair, members of the Board
10 and Madam Hearing Officer. My background and expertise
11 comes from my experience as Director of Acoma's Historic
12 Preservation Office. And over the course of my
13 professional career, working with 23 tribal communities in
14 the State of New Mexico to understand long-term impacts
15 from extractive industries on our cultural and physical
16 well-being.

17 I'm also the Board President of Conservation
18 Voters New Mexico and I'm working toward the completion of
19 my Bachelor of Science degree in Anthropology from the
20 University of New Mexico.

21 Q. And Ms. Pasqual, your Bachelor degree, is that a
22 correction that you would like to make to your written
23 testimony?

24 A. Yes, it is.

25 Q. Okay. Your written testimony, I believe,

1 indicates that you already have the Bachelor degree, but
2 you're not quite there yet; is that correct?

3 A. Correct.

4 Q. Okay. And Ms. Pasqual, is your resume the
5 document that is marked as NMELC Exhibit 2?

6 A. Yes, it is.

7 Q. And is it accurate and up to date, other than --
8 excuse me. Is it accurate and up to date?

9 A. Yes, it is.

10 Q. Okay. Now, Ms. Pasqual, have you prepared a
11 statement or testimony for today's hearing?

12 A. Yes, I have.

13 Q. And could you go ahead and give that
14 presentation, please?

15 A. Thank you. Acoma is very familiar with the long
16 history of extraction in New Mexico. In the 1950s, Acoma
17 was immersed into a period of uranium mining and the
18 effects it had to surface and groundwater. As mine sites
19 were closed and mill sites decommissioned, communities
20 were left to deal with open shafts uranium tailings and
21 contaminated soil that blew uncontrollably every time the
22 wind blew.

23 Next, came a period of coal mining to the north
24 of Acoma, along with the transport and burning of coal to
25 power generating plants. Both the extraction and

1 processing of coal-generated toxins contaminated land, air
2 and water.

3 Now, we are experiencing the effects of oil and
4 gas production in close proximity to indigenous
5 communities. These communities have carried the burden of
6 extraction and its impacts to health and well-being for
7 decades. The impacts are exacerbated by the fact that
8 many tribal communities lack adequate access to basic
9 healthcare and clean drinking water.

10 Tribal communities are often left out of the
11 regulatory and decision making processes that would give
12 them the opportunity to engage during the planning stage.
13 I am testifying today on behalf of the New Mexico
14 Environmental Law Center to give this Board a tribal
15 perspective. We generally support the Environment
16 Department's proposed rule regulating ozone precursor
17 pollutants from oil and gas production facilities under
18 the New Mexico Air Quality Control Act.

19 Oil and natural gas production facilities emit
20 several harmful air pollutants into the atmosphere. These
21 harmful air pollutants include volatile organic compounds,
22 or VOCs, including benzene, which is a known human
23 carcinogen. These pollutants also include nitrogen oxides
24 or NOx. VOCs and NOx react with oxygen and sunlight to
25 form ground-level ozone. All of these pollutants, VOCs,

1 NOx and ozone are known to cause respiratory and
2 cardiovascular diseases, including asthma, which is
3 particularly prevalent in children.

4 Oil and gas production also emits methane, a
5 potent greenhouse gas. Air pollution from oil and natural
6 gas production disproportionately affects Native American
7 and Hispanic communities in New Mexico. According to data
8 compiled by the Environment Department, three counties in
9 the San Juan Basin in Northern New Mexico are currently
10 experiencing or contributing to ambient ozone
11 concentrate -- concentrations exceeding 95 percent of the
12 National Ambient Air Quality Standard: Rio Arriba County,
13 Sandoval County and San Juan County. A large proportion
14 of the people living in these counties are Native American
15 or Hispanic.

16 According to the 2010 census, the population of
17 Rio Arriba County was 40,246 people. Of this population,
18 16 percent was Native American and 71.3 percent was
19 Hispanic. The population of Rio Arriba County was 131,561
20 people. Of this population, 12.9 percent was Native
21 American and 35.1 percent was Hispanic. The population of
22 San Juan County was 130,044 people. Of this population,
23 36.6 percent was Native American and 19.1 percent was
24 Hispanic.

25 We support the Environment Department's proposal

1 to regulate and thus reduce emissions of VOCs and NOx from
2 oil and natural gas production facilities in New Mexico.
3 We are pleased that the Environment Department has removed
4 the exemption for low-volume stripper wells and the
5 exemption for wells at facilities that have the potential
6 to emit less than 15 tons per year of VOCs. While these
7 exemptions were in the draft proposal that the Environment
8 Department released in July of last year, the exemptions
9 have been removed from the proposal submitted to the
10 Environmental Improvement Board. We strongly support the
11 Environment Department's decision to remove these
12 exemptions. Thank you.

13 Q. Thank you, Ms. Pasqual. I don't have any other
14 questions. And at this point I would like to move for the
15 admission of NMELC Exhibits 1 and 2.

16 HEARING OFFICER ORTH: I don't believe I remember
17 seeing objections to those, Mr. de Saillan.

18 MR. DE SAILLAN: I don't remember seeing an
19 objection to them either, Madam Hearing Officer.

20 HEARING OFFICER ORTH: I'll just pause for a
21 moment in case anyone wants to speak up.

22 NMELC Exhibits 1 and 2 are admitted.

23 (NMELC Exhibits 1 and 2 received into evidence at
24 this time.)

25 MR. DE SAILLAN: The witness is now available for

1 cross-examination, Madam Hearing Officer.

2 HEARING OFFICER ORTH: Thank you. Ms. Katz, do
3 you have questions of Ms. Pasqual?

4 MS. KATZ: No, Madam Hearing Officer. Thank you.

5 HEARING OFFICER ORTH: Thank you. Ms. Fox?

6 MS. FOX: No. Thank you for your testimony,
7 Ms. Pasqual.

8 HEARING OFFICER ORTH: I believe Ms. Paranhos has
9 left us. Professor Pacyniak?

10 PROFESSOR PACYNIK: No questions, Madam Hearing
11 Officer.

12 HEARING OFFICER ORTH: All right. I believe
13 Ms. Devore had to leave us.

14 Mr. Nykiel?

15 MR. NYKIEL: No questions. Thank you.

16 HEARING OFFICER ORTH: Thank you. Mr. Hiser?
17 He may have stepped away. Mr. Rose?

18 MR. ROSE: No questions, Madam Hearing Officer.

19 MR. HISER: I have no questions, Madam Hearing
20 Officer. I couldn't get my mute button.

21 HEARING OFFICER ORTH: Mine sticks sometimes,
22 too. Thank you, Mr. Hiser.

23 Mr. Janoe?

24 MR. JANOE: No questions.

25 HEARING OFFICER ORTH: All right. Mr. Butzier?

1 MR. BUTZIER: No questions. Thank you.

2 HEARING OFFICER ORTH: Thank you. Ms. Gutierrez?

3 MS. GUTIERREZ: No questions, Madam Hearing
4 Officer.

5 HEARING OFFICER ORTH: All right. Ms. Shpall?

6 MR. COLCLASURE: This is Chris Colclasure. No
7 questions from the water group.

8 HEARING OFFICER ORTH: All right. Thank you.

9 MS. SHPALL: Nothing from Ms. Shpall.

10 HEARING OFFICER ORTH: And Ms. Witherspoon?

11 MS. WITHERSPOON: No questions. Thank you.

12 HEARING OFFICER ORTH: All right. Thank you.

13 I'm going to turn to the Board members. In the event you
14 are an attendee rather than a panelist, please reach out
15 through the Chat if you have a question.

16 EXAMINATION BY THE BOARD OF THERESA PASQUAL

17 HEARING OFFICER ORTH: Madam Chair, do you have
18 any questions?

19 CHAIRPERSON SUINA: Thank you, Madam Hearing
20 Officer. Yes, I do have a couple of questions for
21 Ms. Pasqual. Thank you. Ms. Pasqual, I was wondering if
22 you could provide us additional information regarding the
23 number of pueblos and tribes in each of the counties. Do
24 you have that information available?

25 I'm sorry. I apologize. In Rio Arriba, Sandoval

1 and San Juan are the ones that you were focused on in your
2 testimony.

3 MS. PASQUAL: Yes. Madam Chair, I don't have the
4 exact number of tribes in those counties -- in those
5 particular counties, although we know that Navarro makes
6 up the majority of area in San Juan County. Sandoval
7 County also has several different pueblos in its
8 jurisdiction. Those pueblos of Jemez and Zia, Santa Ana,
9 are a few of those pueblos that are there. Sandia is also
10 one of them that is also in that jurisdiction.

11 I'm not familiar with which ones are in Rio
12 Arriba County specific, but we also know, Madam Chair,
13 that there are a number of pueblos and tribes who maintain
14 ancestral lands that they still have physical connection
15 to even though the reservation proper is outside of those
16 particular county jurisdictions.

17 CHAIRPERSON SUINA: Thank you for that response,
18 Ms. Pasqual. To follow up on your last statement there,
19 are some of those ancestral lands outside of both tribal
20 reservations boundaries as well as federal land and on
21 state or private lands? Is that correct?

22 MS. PASQUAL: Yes. Madam Chair, ancestral lands,
23 of course, in present day really are under the management
24 of a whole host of entities. They could be state land,
25 federal land or private land, or on other tribal land. So

1 present day pueblos and tribes are having to navigate
2 those different jurisdictional boundaries.

3 I will use example of my home pueblo, which is
4 the pueblo of Acoma, where we maintain connections and
5 active engagement with our ancestral lands that are beyond
6 Acoma's current day boundary. Those may be places that
7 are around Chaco -- the greater Chaco and landscape
8 outside of the park proper, places that take us further
9 north of Chaco, all the way up into Colorado, areas into
10 Arizona, and places into Utah.

11 And so when we are talking about impacts from oil
12 and gas development, we are also talking about those
13 communities that may have present day ties to ancestral
14 lands beyond the proper or present day boundaries of any
15 given pueblo or tribe.

16 CHAIRPERSON SUINA: Thank you for that,
17 Ms. Pasqual. And is the ancestral -- or are the ancestral
18 boundaries even beyond the counties of Rio Arriba,
19 Sandoval and San Juan, of many of the indigenous
20 communities in New Mexico?

21 MS. PASQUAL: Yes, Madam Chair. There are
22 ancestral lands beyond the three counties that I indicated
23 in my -- in my statement. We know, for example, for the
24 Pueblo of Acoma that we do have ancestral lands that go
25 further south of our community down toward the City of

1 Silver City. We have ancestral lands that take us all the
2 way out toward the Sandia Mountains -- present day Sandia
3 Mountains and as far west toward the San Francisco peak.
4 So we are talking about a large swath of land and other
5 counties within the state that have -- that have current
6 and present day ties to pueblos and tribes, which also
7 makes -- which also makes managing -- managing the effects
8 from all of the different industries much more difficult
9 for tribes and pueblos to -- to keep tabs on.

10 So when we are talking about land management or
11 having the ability to -- the ability to -- to react to
12 some of these impacts on these resources or on our
13 relationships with these places, it does pose a huge
14 significant burden to the community.

15 CHAIRPERSON SUINA: Thank you again for that,
16 Ms. Pasqual. I also wanted to ask you, so, I know, you
17 know, sometimes there are culturally sensitive pieces of
18 the ties to the land, but could you explain more what you
19 were alluding to in your response right now, of why -- how
20 these rules would impact or be helpful to the ancestral
21 lands that the indigenous people of New Mexico are tied
22 to?

23 MS. PASQUAL: Yes, Madam Chair. The reason why
24 this proposed rule would be important for communities --
25 pueblos and tribal communities like mine is because we

1 know that we have cultural practitioners who -- although
2 they reside here in other home community, go out to these
3 ancestral lands to engage with the landscape, to perhaps
4 be in those areas where resources are gathered, where some
5 of these significant cultural sites may exist. So,
6 although there may not be a community situated right next
7 to oil and gas development, those emissions do impact not
8 only the environment in which our cultural practitioners
9 and our community members engage with those resources, but
10 because they are spending significant time in those areas,
11 also are impacted by their exposure from those emissions.

12 Many of our cultural practitioners, as well as
13 community members, also note based on their land-based
14 experience, the quality of -- of how the environment is
15 doing. We oftentimes refer to that as traditional
16 ecological knowledge, which you may hear referred to
17 sometimes as TEK. And it's this land-based knowledge by
18 our cultural practitioners, our cultural experts, really,
19 that tells us about the health of the land and of the
20 resources that exist in these areas.

21 Many of our cultural experts will also be able to
22 tell the health of plant life, which I know there are
23 other technical experts who can give us scientific --
24 western scientific information that supports that kind of
25 traditional scientific information provided by our own

1 experts about the health of those resources, both in
2 wildlife, our cultural resources, and our natural
3 resources. So that's why this rule is significant, and
4 why it is much needed for us.

5 CHAIRPERSON SUINA: Thank you again for your
6 responses. I just have a few more questions. So, in
7 terms of the tribal jurisdictional areas, do some of those
8 jurisdictional areas have also -- or tribes or pueblos
9 have treatment as a state, in terms of air quality? Do
10 you know, do you have knowledge of that?

11 MS. PASQUAL: No, Madam Chair, I don't. To
12 answer your question. There are, of course, depending on
13 what the agency -- who the agency is, they may have a
14 relational -- meaning a government-to-government
15 obligation to engage with tribes, but that -- that really
16 depends on the agency, Madam Chair.

17 CHAIRPERSON SUINA: Thank you so much,
18 Ms. Pasqual.

19 Madam Hearing Officer, that's all I have for
20 right now.

21 HEARING OFFICER ORTH: Thank you very much.
22 Vice-Chair, Trujillo-Davis, do you have questions?

23 VICE-CHAIR TRUJILLO-DAVIS: Yes, and I just want
24 to thank Ms. Pasqual for taking the time to testify today
25 and I appreciate the information.

1 My question was purely administrative. I -- I
2 don't seem to have in my notes what organization you're
3 representing.

4 MS. PASQUAL: Yes. I am representing the New
5 Mexico Environmental Law Center.

6 VICE-CHAIR TRUJILLO-DAVIS: Oh, okay. All right.
7 Thank you, ma'am. I appreciate it.

8 HEARING OFFICER ORTH: Thank you. Member Cates,
9 do you have any questions?

10 BOARD MEMBER CATES: No questions, but I would
11 like to thank Ms. Pasqual for being here, and just talk
12 for a minute about the fact that so much of what we
13 discuss around environmental issues in New Mexico seems to
14 exclude or preclude voices of color: Hispanic, tribal
15 voices. It's -- you know, it's a phenomenon that -- it's
16 a phenomenon that borders on the bizarre at times. And
17 it's as if all too often Caucasians are driving the
18 discussion without input or without participation, without
19 any thought for tribal and Hispanic populations. And I
20 just want to get that rant off my chest, and encourage
21 this Board to continue to broaden its inclusion of all
22 voices in this state.

23 So, thanks, Ms. Pasqual, for being here.

24 HEARING OFFICER ORTH: Thank you. Member Bitzer?

25 BOARD MEMBER BITZER: Yeah. Ms. Pasqual, I'm not

1 sure if you're aware of our -- of our charter, if you
2 will, but we're supposed to balance the needs from an
3 environmental perspective with those and impacts on the
4 community, with those economic interests. The state gets
5 a lot of revenue from the oil and gas sector, a low 10
6 figure sum every year.

7 Do you know if the tribal governments share any
8 of that revenue directly?

9 MS. PASQUAL: No, I don't. I don't have
10 information to provide to that.

11 BOARD MEMBER BITZER: That's all I have.

12 HEARING OFFICER ORTH: Thank you. Member Garcia?

13 BOARD MEMBER GARCIA: I do. I just have one
14 question. Thank you for -- can you hear me? Thank you
15 for your testimony, Ms. Pasqual. I understand the state
16 spent two years working on the development of this rule
17 and I know there was a stakeholder process. Aside from
18 Acoma Pueblo, do you know if there were other tribal
19 stakeholders involved in the rulemaking stakeholder
20 process?

21 MS. PASQUAL: No, I do not.

22 BOARD MEMBER GARCIA: But Acoma was involved?
23 Did you have a seat at the table?

24 MS. PASQUAL: To my knowledge, Acoma's
25 involvement in this process has been with ongoing

1 consultations as part of its discussions with the
2 Environment Department. There are a whole host of
3 departments within the Pueblo of Acoma that could possibly
4 take on that -- that conversation. My office currently,
5 the Historic Preservation Office is only one office.
6 There is other offices that could potentially have been
7 involved with those discussions, including the Environment
8 Department, the Department of Natural Resources or our
9 Water Rights Board. It really isn't a department, but it
10 is a board.

11 And all of us work jointly as a team, but also
12 work independent of each other. And so, while I can't
13 attest to their involvement, my testimony and my -- my
14 presence here is also part of -- part of my work for
15 Acoma's Historic Preservation Office.

16 BOARD MEMBER GARCIA: Thank you very much,
17 Ms. Pasqual. That's all.

18 HEARING OFFICER ORTH: Thank you. Member Honker?

19 BOARD MEMBER HONKER: Thank you, Ms. Pasqual, for
20 your testimony. I don't have any questions.

21 HEARING OFFICER ORTH: Thank you. And I don't
22 see anything in the Chat.

23 Mr. De Saillan, will there be any follow-up?

24 MR. DE SAILLAN: Yes, Madam Hearing Officer. I
25 just have a little bit.

1 REDIRECT EXAMINATION OF THERESA PASQUAL

2 BY MR. DE SAILLAN:

3 Q. I want to ask Ms. Pasqual -- I'd like to ask you
4 about the Chair's question. I want to follow up on that a
5 little bit. She asked you how this rule would affect
6 tribal communities. And so I want to ask you, first of
7 all, is it your understanding that this rule will result
8 in enhanced monitoring of oil and gas facilities
9 particularly through leak detention and repair
10 requirements?

11 A. Yes, it is.

12 Q. And do you see that as being beneficial to Native
13 communities that are located in the vicinity of oil and
14 gas production?

15 A. Yes, I do.

16 MR. DE SAILLAN: Thank you. That's all the
17 questions I have.

18 HEARING OFFICER ORTH: Okay. Thank you. Thank
19 you very much, Ms. Pasqual, for your testimony. And thank
20 you, Mr. de Saillan. Will there be other testimony,
21 Mr. de Saillan?

22 MR. DE SAILLAN: That is all we have, Madam
23 Hearing Officer. Thank you.

24 HEARING OFFICER ORTH: Thank you.

25 Do we move at this point to CCP and NAVA,

1 Ms. Katz?

2 MS. KATZ: Yes, Madam Hearing Officer. That
3 would be Topics Number 9 and then Number 10.

4 HEARING OFFICER ORTH: All right. Thank you. I
5 see Mr. Jaynes.

6 MR. JAYNES: Good afternoon, Madam Hearing
7 Officer. Do you want me to go ahead?

8 HEARING OFFICER ORTH: Yes, please.

9 MR. JAYNES: All right. Our first nontechnical
10 witness is James Povijua. He should be in the
11 participants room?

12 HEARING OFFICER ORTH: Oh, I see him on screen.
13 I made him a panelist.

14 MR. JAYNES: Yes, and thank you.

15 HEARING OFFICER ORTH: Welcome. Would you raise
16 your right hand, please. Do you swear or affirm to tell
17 the truth?

18 MR. POVIJUA: Yes, I do.

19 HEARING OFFICER ORTH: Thank you.

20 MR. JAYNES: And Madam Hearing Officer, I would
21 also like to address the Center for Civic Policy and NAVA
22 Education Projects' exhibits. We would like to move to
23 admit Center for Civic -- or the Exhibits 1 through 5 and
24 8 at this time. We are continuing to work on our response
25 to NMOGA's motion to strike Section 6 of CCP's rebuttal

1 testimony. So we will wait on them, to admit 6 and 7 at
2 this time. We are planning to file our response within
3 the next day or so to that objection.

4 HEARING OFFICER ORTH: All right. Thank you. As
5 I understand that there are not objections to the exhibits
6 you've just moved. I'll pause though, in case I
7 misunderstood that.

8 MR. JAYNES: I do believe there was an objection
9 raised to Exhibits 3 and 4.

10 MR. ROSE: That's correct, Madam Hearing Officer.

11 HEARING OFFICER ORTH: Oh, Mr. Rose. Okay.

12 MR. ROSE: Yes.

13 HEARING OFFICER ORTH: So sorry, that was -- that
14 was the other page.

15 Mr. Rose, would you speak your objection, please?

16 MR. ROSE: Yes. To the extent that those
17 exhibits relate to or induce testimony related to methane
18 emissions and the impacts of methane, we believe that that
19 testimony would be irrelevant and outside the scope of the
20 hearing, which is limited to ozone precursors; methane,
21 not being one of them.

22 HEARING OFFICER ORTH: Thank you.

23 Mr. Jaynes, do you have a response? Oh, wait, I
24 see David Baake.

25 MR. BAAKE: Yes. Madam Hearing Officer, this --

1 I just wanted to flag that this objection was also
2 levied -- the same exact objection to Clean Air Advocates
3 and EDF exhibits as well. So before ruling on issues that
4 might potentially implicate our exhibits as well, I think
5 all of us would like to be heard.

6 MR. ROSE: And Madam Hearing Officer, I raised
7 that early on in terms of when to deal with this. So
8 we're dealing with it, I guess -- we could deal with it
9 independently of the admission of these exhibits, or now,
10 or whenever you think it's appropriate. But -- but he's
11 correct, we've raised the same exhibits -- or the same
12 objections to some of EDF's exhibits as we did for Clean
13 Air Advocates Exhibits and others, so...

14 MR. BAAKE: Madam Hearing Officer, I might
15 suggest that perhaps we try to deal with this first thing
16 tomorrow. I think Ms. Paranhos is not on the line right
17 now, if I'm not mistaken.

18 HEARING OFFICER ORTH: That's right.

19 MR. BAAKE: I wouldn't want her to lose her
20 opportunity to weigh in on this either, so if that's
21 agreeable to Mr. Rose.

22 MR. ROSE: We can -- we can raise it at any time.
23 Whatever the Hearing Officer thinks is the most
24 appropriate timeline to deal with is fine.

25 HEARING OFFICER ORTH: All right. So, I don't

1 think this is the best time and I would like to do it
2 tomorrow. I'm not sure that I want to do it first thing,
3 though, because it's important that we hear from the
4 economics folks, and one of them is in a very different
5 time zone. So what I'd like to do is take this exhibit
6 discussion up when, A., thank you, Mr. Baake, we have
7 Ms. Paranhos, and B., we're not running into a potential
8 conflict with a faraway witness.

9 But thank you for raising it, and I think what
10 I'd like to do is hear the testimony of Mr. Povijua and
11 set aside the exhibit discussion.

12 And I did forget to ask Mr. Povijua to spell his
13 name.

14 MR. POVIJUA: Absolutely. My last name is
15 spelled P-as-in-Paul, O, V-as-in-Victor, I-J-U-A.

16 HEARING OFFICER ORTH: Thank you.

17 Go ahead, Mr. Jaynes. I'd like to hear from your
18 witness and we'll have public comment after that.

19 WARREN JAMES POVIJUA HONABERGER,
20 having been first duly sworn or affirmed, was examined
21 and testified as follows:

22 DIRECT EXAMINATION OF WARREN JAMES POVIJUA HONABERGER

23 BY MR. JAYNES:

24 A. Thank you, Madam Hearing Officer. So my full
25 name is -- (unintelligible) James Honaberger; I will spell

1 Honaberger as well, which is H-O-N-as-in-Nathan, A,
2 B-as-in-burger, E-R, G-as-in-George, E-R, but I go by
3 James Povijua, which includes my mother's maiden name
4 (unintelligible) and shows that I am a member of Ohkay
5 Owingeh Pueblo. I am here today in my professional
6 capacity for the organization that I work for.

7 Q. Thank you, Mr. Povijua. And what is your
8 occupation?

9 HEARING OFFICER ORTH: He was -- I'm sorry to
10 interrupt. He was breaking up a little bit and so he's
11 going to have to slow down and speak up. And if Theresa
12 starts waving or I start waving, he's going to have to
13 repeat.

14 MR. POVIJUA: I understand. I can review that.
15 My full name is Warren James Honaberger, I will spell my
16 last name, which is H-O N as in Nathan, A, B-as-in-burger,
17 E-, G-as-in-George, E-R, but I go by James Povijua, which
18 includes my mother's maiden name and shows I'm a member of
19 Ohkay Owingeh Pueblo. As I said, I am here in my
20 professional capacity for the organization I work for.

21 Q. Okay. Thank you, Mr. Povijua. And what is your
22 occupation?

23 A. I am the policy director for the Center for Civic
24 Policy.

25 Q. Can you please tell us where you're from and any

1 other relevant background?

2 A. I am from Alcalde, New Mexico and as I
3 mentioned -- (unintelligible.)

4 COURT REPORTER: I'm sorry. Wait, wait, wait.
5 I'm sorry. I did not hear your question Mr. Jaynes, the
6 first question. And Mr. Povijua, I don't know why, but
7 you're -- you're skipping and so I'm having a terrible
8 time hearing you.

9 MR. JAYNES: I see. I am the policy director for
10 the Center for Civic Policy.

11 MR. JAYNES: All right. And do you want us to go
12 on to the next question, that one as well?

13 COURT REPORTER: (Nodding head.)

14 Q. (BY MR. JAYNES) So Mr. Povijua, can you please
15 tell us where you are from and any other relevant
16 background?

17 A. Yes. I am from -- (unintelligible) -- Alcalde,
18 New Mexico, and as I mentioned I am a member of Ohkay --
19 no? Are you able to hear me?

20 COURT REPORTER: I can hear you, but you are
21 breaking up. Is anybody else having this same issue?

22 HEARING OFFICER ORTH: Yes.

23 COURT REPORTER: Okay. You are. So where in New
24 Mexico? I didn't get the name of the town.

25 A. Got it. Ohkay, which is O-H-K-A-Y. And Owingeh

1 is O-W-I-N-G-E-H Pueblo, which is located in Rio Arriba
2 County and overlays the San Juan Basin. Ohkay Owingeh
3 Pueblo is in the lower part of Rio Arriba County.

4 HEARING OFFICER ORTH: So, Mr. Povijua, I'm
5 wondering if -- although it's lovely to see you on the
6 screen, if perhaps the sound would improve if your video
7 were off. It's helped with other people in the past.

8 MR. POVIJUA: Sure. Let's try that.

9 HEARING OFFICER ORTH: Oh, that already sounds
10 better.

11 MR. POVIJUA: Excellent.

12 HEARING OFFICER ORTH: Go ahead, Mr. Jaynes.

13 Q. (BY MR. JAYNES) Absolutely. Thank you,
14 Mr. Povijua. And was a copy of your resume submitted as
15 Center for Civic Policy and NAVA Education Project's
16 Exhibit 2?

17 A. Yes.

18 Q. Perfect. Is Exhibit 2 a true and accurate
19 version of your resume?

20 A. Yes.

21 Q. Is Center for Civic Policy and NACA Education
22 Project's Exhibit 3 an accurate version of your testimony?

23 A. Yes.

24 Q. And do you adopt Exhibit 3 as your testimony?

25 A. Yes.

1 Q. And is Center for Civic Policy and NAVA Education
2 Project Exhibit 8 an accurate -- an accurate version of
3 your rebuttal testimony?

4 A. Yes, it is.

5 Q. And do you adopt Exhibit 8 as your rebuttal
6 testimony?

7 A. Yes.

8 Q. Great. Mr. Povijua, can you please describe
9 Center for Civic Policy's work?

10 A. Yes. The Center for Civic Policy is a nonprofit,
11 nonpartisan organization that works with every day New
12 Mexicans in collaboration with local and national
13 partners. We ensure broad and inclusive civic engagements
14 among underrepresented communities. Our efforts span
15 across various policy areas, which include inclusive
16 democracy, immigrant rights, early childhood education,
17 workers' right, reproductive justice, healthcare, economic
18 justice, conservation, the environment and climate equity
19 placement.

20 Q. Thank you. And how does your work with Center
21 for Civic Policy relate to the oil and gas industry here
22 in New Mexico?

23 A. So I work directly with organizations that
24 organize low-wage oil and gas workers from low to moderate
25 communities in New Mexico. I and my colleagues facilitate

1 The Power for New Mexico Coalition which works toward
2 growing community power and amplifying community voices to
3 inform New Mexico's transition to a regenerative economy
4 in which all communities thrive. The Power for New Mexico
5 Coalition was formed in 2018 out of the concern that
6 communities disproportionately impacted by the impacts of
7 the extractive industries would be left behind in the
8 state's long-term economic development.

9 I and my colleagues have also been highly engaged
10 with the University of New Mexico's natural resources and
11 environmental law clinic's representation of the Center
12 for Civic Policy during the NMED, New Mexico Environment
13 Department and the New Mexico Energy Minerals and Natural
14 Resources Methane Advisory Panel Process, and then
15 developing comments on earlier versions of the ozone
16 precursor rule and the New Mexico Oil Conservation
17 Commission's natural gas waste rule.

18 Q. Thank you, Mr. Povijua.

19 And do you have any personal experience with
20 populations affected by oil and gas pollution?

21 A. As I've mentioned several times, I am a member of
22 the Ohkay Owingeh Pueblo, and I am here in my professional
23 capacity. And I work with other Native American tribes
24 and communities of color near oil and gas producing
25 fields, which has allowed me to observe Native people

1 often experiencing health problems, including problems
2 such as asthma or cancer, that I understand can be caused
3 by oil and gas pollution.

4 I have also personally observed members of Native
5 populations living near oil and gas producing lands
6 experiencing difficulty accessing healthcare. I will also
7 note that I am from Rio Arriba County. The other tribes
8 that are within the boundaries of the Rio Arriba County
9 include the Navajo Nation, the Jicarilla Apache Nation,
10 the Santa Clara Pueblo, in addition to the Ohkay Owingeh
11 Pueblo.

12 Q. Thank you.

13 And are there specific facts and circumstances
14 that you would recommend the EIB particularly consider in
15 this rulemaking, given the Center for Civic Policy's
16 mission and experience working to support underserved
17 communities?

18 A. Yes. The Center for Civic Policy strongly
19 encourages the EIB to ensure that the rule adequately
20 reduces ozone precursors, nitric oxides and volatile
21 organic compounds, VOCs, with an adequate margin of safety
22 in those counties that are in danger of exceeding federal
23 National Ambient Air Quality Standards. Additionally,
24 Center for Civic Policy strongly urges the EIB to also
25 consider whether the strategies adopted to reduce ozone

1 precursor will also prevent direct health harms from the
2 VOCs, especially VOCs that are toxic to humans.

3 We also recommend and urge the EIB to consider
4 how the pollution controls employed by this rule to reduce
5 ozone precursors can also be used to reduce greenhouse gas
6 emissions, such as methane and, therefore, mitigate the
7 impacts of climate change. CCP urges the EIB to consider
8 how these regulations -- (unintelligible.)

9 HEARING OFFICER ORTH: Hold on.

10 MR. JAYNES: Hold on, Mr. Povijua.

11 HEARING OFFICER ORTH: I'm sorry. We have to ask
12 you to back up about two sentences, I think.

13 MR. POVIJUA: I apologize. I will also try to
14 slow down.

15 A. I'll start with the last recommendation that we
16 have. CCP urges the EIB to consider how the pollution
17 controls employed by this rule to reduce ozone precursors
18 can also be used to reduce greenhouse gas emissions, such
19 as methane, and therefore mitigate the impacts of climate
20 change.

21 Center for Civic Policy urges the EIB to consider
22 how these regulations, and the pollution control measures
23 they require, can produce the co-benefits of increased
24 revenues received from oil and gas production that can be
25 used for the public benefit.

1 Q. Thank you.

2 And do you have any specific recommendation for
3 the EIB with regards to the proposed regulation?

4 A. Yes, we do. Center for Civic Policy and NAVAEP
5 recommend that the EIB adopt the proposed amendments set
6 forth in Exhibit 5 -- (unintelligible) -- oh, okay.

7 COURT REPORTER: Okay. One second. Just start
8 off, you said, "Yes, we do." And then, Center for Civic
9 Policy and NAVA recommend that the EIB urge -- anyway,
10 that's all I heard, sorry.

11 MR. POVIJUA: Not at all. It's been a long day,
12 I'm sure. And I will definitely try to slow down.

13 A. As I said, the Center for Civic Policy and
14 NAVAEP, NAVA Education Projects, recommend the EIB adopt
15 the proposed amendments set forth in Exhibit 5 to our
16 rebuttal testimony, which CCP and NAVAEP support, together
17 with the Clean Air Act Advocates and the Environmental
18 Defense Fund.

19 These changes to NMED's proposal would do the
20 following: Increase the frequency of leak detection
21 repair in sections that wellhead sites are located within
22 1000 feet of homes, schools and businesses in order to
23 better protect the health of frontline communities,
24 increase the timetable to retrofit pneumatic controllers,
25 to increase emission reductions from those devices, which

1 are significant, would also require emissions from
2 completions and recompletions, to increase emission
3 reductions from those devices -- excuse me. Let me start
4 over -- require emissions from completions and
5 recompletions of wells to be captured instead of vented or
6 flared.

7 It would also require automatic vessel
8 measurement systems on new storage vessels, to minimize
9 venting emissions from those devices.

10 Q. Thank you, Mr. Povijua.

11 Why do you believe it is important for the EIB to
12 consider the proposed amendments?

13 A. So our proposed amendments are important in order
14 to fully protect the public and health -- excuse me --
15 public health and the environment from one of the largest
16 sources of oil and gas pollution, including reducing ozone
17 formation as well as reduce direct emissions of VOCs and
18 greenhouse gases.

19 Among other benefits, the proposed amendments
20 will provide additional safeguards to ensure that people
21 who are living or working or children who are studying or
22 playing in close proximity to oil and gas wells, get the
23 full benefits of the pollution control strategies used to
24 find and fix pollution leaks.

25 This is because the proximity proposal would not

1 only result in the reduction of emission of ozone
2 precursor, but also would have the co-benefit of helping
3 to present serious health harms that can result from
4 direct exposure to toxic pollutants. This proximity --
5 (unintelligible) -- excuse me -- proposal is also an
6 important policy to ensure that minorities and low-income
7 residents are not disparately impacted by these air
8 pollutants.

9 I understand that other witnesses, including EDF
10 witnesses, such as Tammy Thompson and Hillary Hull, who
11 will testify that volatile organic compounds emitted from
12 well sites are toxic chemicals that can harm people living
13 in close proximity to their release. The many people in
14 the eight counties subject to this regulations are people
15 of color, including Native Americans.

16 This proximity proposal will, therefore, help
17 ensure that these communities get the full benefits from
18 technologies that stop leaks of VOC pollution by this
19 rulemaking.

20 Q. Thank you, Mr. Povijua.

21 MR. JAYNES: Madam Hearing Officer, this
22 concludes Mr. Povijua's testimony and he stands for
23 cross-examination.

24 HEARING OFFICER ORTH: All right. Thank you very
25 much. It is a few minutes after 5 and we're supposed to

1 have a 5:00 public comment session. Would Mr. Povijua be
2 able to hang in there for a little bit while I take about
3 four public commenters?

4 MR. POVIJUA: Yes, Madam Hearing Officer.

5 HEARING OFFICER ORTH: You can do that?

6 MR. POVIJUA: Yes.

7 HEARING OFFICER ORTH: Thank you very much. All
8 right. We have reached the 5 p.m. public comment session
9 on day two of the hearing in EIB 21-27. Public comment is
10 accepted with audio, not video, and is limited to five
11 minutes.

12 Anyone on the platform can say that they would
13 like to offer public comment, although, you only offer it
14 once. If you sent an email to Pam Jones, I am about to
15 read your name. And if you did not, please just reach out
16 in the Chat. Chat is enabled for everyone. And if you,
17 for some reason, struggle with the Chat function, please
18 call or text Pam at (505) 660-4305.

19 These are -- this is the order in which I'll be
20 calling on the public commenters that I know about right
21 now: Theresa Doyle, Debbie Stevens, Matthew Allen,
22 Vanessa Fields. Theresa Doyle, what I do is I unmute you
23 when I find you among the attendees. All right. I do not
24 see Theresa Doyle among the attendees. Let me look for
25 Debbie Stevens. By the way, if anyone signed up for a

1 particular time slot and ended up having a conflict, all
2 you need do is to reach out again and I'd be happy to take
3 you; although, now I see I have new call-in users. Let me
4 check on the call-in users in the event Ms. Doyle is among
5 them.

6 Who is call-in user number 23, please? Hello.
7 Can you hear me call-in user 23? No. Okay. Who is
8 call-in user 25? Can you hear me? I'm not getting
9 anything from call-in user 25. All right. Sorry. I am
10 looking for now Debbie Stevens. It takes just a moment to
11 scroll through the names. No, I don't have Debbie
12 Stevens. Matthew Allen. Let me look for Matthew Allen.
13 No, I don't see Matthew Allen.

14 Vanessa Fields. I did see Vanessa Fields a
15 little bit ago. Vanessa Fields. Ms. Fields, can you hear
16 me?

17 MS. FIELDS: Yes, ma'am.

18 HEARING OFFICER ORTH: Good. I can hear you.
19 Testimony and comment is taken under oath, if you would
20 raise your right hand. Do you swear or affirm that what
21 you're about to say will be the truth?

22 MS. FIELDS: Yes, Madam.

23 HEARING OFFICER ORTH: Thank you very much. I
24 will start your five minutes now.

25 VANESSA FIELDS,

1 having been first duly sworn or affirmed,

2 gave public comment as follows:

3 PUBLIC COMMENT OF VANESSA FIELDS

4 MS. FIELDS: Good afternoon, everybody. My name
5 is Vanessa Fields; I'm a regulatory manager for an
6 independent consulting firm in the San Juan Basin, as well
7 as I have environmental experience on the operator, and as
8 a regulatory oversight authority in the State of New
9 Mexico.

10 My opposition to the methane rule is that, I'm
11 currently serving multiple small operators in the San Juan
12 Basin. Clearly, in the last -- between 2011 and 2016,
13 according to the EPA, the San Juan Basin has fallen by 47
14 percent in reductions of VOCs. And within that encompass
15 of District 3, consists of Sandoval, San Juan, Rio Arriba
16 and McKinley Counties.

17 Currently in the San Juan Basin District 3, which
18 would be, there is 286 operators. Out of the 286
19 operators there are 252 small operators that would operate
20 stripper wells in our basin. The methane rule currently
21 would be detrimental to the livelihood of these operators.
22 And running some statistics, that we have done some
23 independent studies, most of these stripper wells that
24 contain average of -- that make about six barrels of oil a
25 day and 30 MCF, the total VOCs each year is less than 1

1 percent, demonstrating that they are not contributing to
2 the methane in the San Juan Basin.

3 Furthermore, I would like to say that with the
4 economics in the San Juan Basin, with being a regulator
5 and in the industry side, when this type of oversight is
6 seen, it would be detrimental to the small operators and
7 force them out of business, which then would create a huge
8 plug-in liability for the San Juan Basin.

9 With that said, I am not quite sure -- the
10 operators here in the San Juan Basin and across the state
11 are already following 0000 regulations that are far above
12 the standards of what the methane rule would require and,
13 therefore, the strenuous requirements of the methane rule
14 would be detrimental to these operators.

15 HEARING OFFICER ORTH: Is that the end of your
16 statement, Ms. Fields?

17 MS. FIELDS: Yes, ma'am.

18 HEARING OFFICER ORTH: Thank you very much.

19 MS. FIELDS: Thank you. I appreciate your time.

20 HEARING OFFICER ORTH: Thank you. All right.

21 We'll go to Ms. Pinto. I saw her up here. Okay.

22 Ms. Pinto, can you hear me?

23 MS. PINTO: Yes, I can.

24 HEARING OFFICER ORTH: You're going to have to
25 speak up, you're very soft.

1 MS. PINTO: I'm here, yes.

2 HEARING OFFICER ORTH: Okay. Good. If you would
3 please raise your right hand. Do you swear or affirm to
4 tell the truth?

5 MS. PINTO: Yes.

6 HEARING OFFICER ORTH: All right. I will start
7 your five minutes right now.

8 KENDRA PINTO,
9 having been first duly sworn or affirmed,
10 gave public comment as follows:

11 PUBLIC COMMENT OF KENDRA PINTO

12 MS. PINTO: Yeah. My name is Kendra Pinto and I
13 live on the eastern agency of the Navajo Nation within Rio
14 Arriba county near a small town called Counselor. I
15 support rules that will increase inspections on finding
16 and fixing leaks, while decreasing the threat to the air
17 from oil and gas sites located close to residential areas
18 and schools.

19 Right now, I am surrounded by oil rigs placed
20 near the Lybrook Badlands, which repeatedly lit flares
21 that are especially visible at night, leading to increased
22 light pollu -- pollution. Excuse me. The concerns for the
23 environment and air quality surrounding me and my family
24 needs to and should be considered while the rule is due
25 for an overhaul.

1 Every day I find myself wondering what the air
2 will smell like. Will I have to change the direction of
3 my hike due to a gaseous odor? Questions such as these
4 are common for folks like myself who enjoy the outdoors.
5 For a few years now, I've been tagging along with
6 Earthworks, as they use a forward-looking infrared camera
7 in the Lybrook oilfield. Finding leaking and venting
8 emissions with this specialized camera has been horrific,
9 to say the least.

10 Recently, I was out in Northern New Mexico with a
11 fellow certified thermographer and we found sources of
12 leaking methane emissions from several oil and gas
13 wellsites that have a Bureau of Land Management lease.
14 The odors we encountered that day were pretty strong and
15 caused some headaches, a given when around that type of
16 industrial equipment.

17 If the sites and odors are of concern, I will
18 then file a complaint with NMED. Living among the San
19 Juan Basin poses more problems than the economic value it
20 creates. Creating environmental waste and then failing to
21 minimize and/or stop leaking and venting methane emissions
22 is irresponsible.

23 I've done air sampling in and around my
24 community. I can share firsthand that the VOCs in this
25 question are questionable and should not continue, nor

1 should it have ever been allowed. With every site
2 drilled, flared and produced, I am quite literally
3 breathing in toxic air on a daily basis. It's been up to
4 folks like myself on the ground, to monitor our own air
5 quality and report it directly to the community members.
6 Daily exposure to higher levels of VOCs, such as hydrogen
7 sulfide, should alarm any agency responsible for the
8 safety and well-being of individuals who are living with
9 that threat. Frequent inspections is one way to address
10 this problem.

11 The notion that the industry cannot pay for its
12 own repairs is unbelievable, when millions of gallons of
13 resources are currently being extracted near and under my
14 home at this very moment. Whatever decisions come from
15 this hearing, I will be directly affected by it.

16 Thank you for this time and I look forward to a
17 rule that will protect the air, water and environment that
18 I heavily rely on, like so many others. Thank you.

19 HEARING OFFICER ORTH: Thank you, Ms. Pinto.

20 I have no one else reaching out through Chat so we can
21 return to the technical case.

22 Mr. Povijua, if you would rejoin us, please.

23 MR. POVIJUA: Yes, I'm here.

24 HEARING OFFICER ORTH: All right. And
25 Mr. Jaynes?

1 MR. JAYNES: I'm here as well.

2 HEARING OFFICER ORTH: All right. Thank you. So
3 it's time for questions. Let me start with Ms. Katz.

4 MS. KATZ: I have no questions, Madam Hearing
5 Officer.

6 HEARING OFFICER ORTH: All right. Thank you.
7 Ms. Fox?

8 MS. FOX: No questions, Madam Hearing Officer.
9 Thank you.

10 HEARING OFFICER ORTH: All right. Let's see
11 here. Mr. Nykiel?

12 MR. NYKIEL: No questions. Thank you.

13 HEARING OFFICER ORTH: Thank you. Mr. de
14 Saillan?

15 MR. DE SAILLAN: I have no questions, Madam
16 Hearing Officer, thank you. But I do want to thank
17 Mr. Povijua for his testimony and it's really great to see
18 law students participating in this, so thank you.

19 HEARING OFFICER ORTH: Mr. Hiser?

20 MR. HISER: No questions. Thank you.

21 HEARING OFFICER ORTH: Thank you. Mr. Rose?

22 MR. ROSE: No questions.

23 HEARING OFFICER ORTH: Mr. Janoe?

24 MR. JANOE: No questions, Madam Hearing Officer.

25 HEARING OFFICER ORTH: All right. Thank you.

1 Mr. Butzier?

2 MR. BUTZIER: I have no questions, Madam Hearing
3 Officer.

4 HEARING OFFICER ORTH: All right. Ms. Gutierrez?

5 MS. GUTIERREZ: No questions. Thank you.

6 HEARING OFFICER ORTH: All right. Thank you.

7 Mr. Colclasure?

8 MR. COLCLASURE: No questions, Madam Hearing
9 Officer.

10 HEARING OFFICER ORTH: All right. And
11 Ms. Witherspoon?

12 MS. WITHERSPOON: No questions.

13 HEARING OFFICER ORTH: All right. Thank you.

14 I'm going to turn to the Board members now in the event
15 they have questions. While I'm doing that, if you are an
16 attendee rather than a panelist and have a question,
17 please reach out on Chat.

18 EXAMINATION BY THE BOARD OF WARREN JAMES POVIJUA

19 HEARING OFFICER ORTH: Madam Chair, do you have a
20 question of Mr. Povijua?

21 CHAIRPERSON SUINA: Yes, Madam Hearing Officer,
22 thank you for that. And thank you, Mr. Povijua, for your
23 testimony. I just have a question -- a real quick
24 question. So in your work on policy and engagement in
25 underrepresented communities, do you know if the tribal

1 communities have been engaged in this rulemaking process?

2 MR. POVIJUA: Madam Chair, thank you for the
3 question. Unfortunately, I can't speak to that. I'm not
4 aware what the tribes are doing.

5 CHAIRPERSON SUINA: Thank you for that. And
6 furthermore, I know tribes have a unique status, but as
7 well as some of the tribal community members through your
8 organization, have they been engaged either through your
9 organization or NAVA?

10 MR. POVIJUA: Yes, Madam Chair, they have. And
11 speaking to tribal engagement, what I can say is that each
12 one of the sovereign nations within the State of New
13 Mexico and those within the counties affected -- that
14 would be affected by these rules, have robust governments
15 and do have the capability of engaging in these rules.

16 CHAIRPERSON SUINA: And thank you for that.
17 Those are all the questions I have for right now

18 HEARING OFFICER ORTH: Thank you. Vice-Chair
19 Trujillo-Davis.

20 VICE-CHAIR TRUJILLO-DAVIS: I don't have any
21 questions. I'd just like to thank Mr. Povijua for his
22 testimony and for being with us today

23 HEARING OFFICER ORTH: Thank you. Member Cates?

24 BOARD MEMBER CATES: Yeah. Same here, I thank
25 you, sir, for the clarity, the forcefulness and

1 directness. I appreciate it. It helps broaden our
2 perspectives. Thank you.

3 HEARING OFFICER ORTH: Thank you. Member Bitzer?

4 BOARD MEMBER BITZER: No questions. Thank you.

5 MADAM HEARING OFFICER: Thank you. Member
6 Garcia?

7 BOARD MEMBER GARCIA: No questions. Thank you.

8 HEARING OFFICER ORTH: Thank you. And Member
9 Honker?

10 BOARD MEMBER HONKER: No questions. Thank you.

11 HEARING OFFICER ORTH: All right. And is there
12 any follow-up? Oh, Miss -- Madam Chair, are you
13 indicating?

14 CHAIRPERSON SUINA: Yeah. Yeah. Sorry, I wasn't
15 fast enough on my Chat, Madam Hearing Officer. I just had
16 one more question for Mr. Povijua. Thank you. In terms
17 of the proximity proposal of 1000 feet, that you spoke
18 about, is -- do you feel that there is also data to
19 support this amendment -- proposed amendment?

20 MR. POVIJUA: Madam Chair, thank you for the
21 question. I would in this case not be able to answer that
22 question at the moment, but I would defer to my legal
23 representative.

24 MR. JAYNES: Madam Hearing Officer, we would
25 point to our prefiled testimony, and my references come

1 from that.

2 HEARING OFFICER ORTH: All right. Thank you.

3 CHAIRPERSON SUINA: Thank you.

4 HEARING OFFICER ORTH: And you will also have a
5 chance after we've completed the record to make whatever
6 arguments you would like to make, based on the law and the
7 evidence at that time. So thank you for that.

8 Madam Chair, do you have other questions of
9 Mr. Povijua?

10 CHAIRPERSON SUINA: Not at this time, Madam
11 Hearing Officer. Thank you so much.

12 HEARING OFFICER ORTH: Thank you. And
13 Mr. Jaynes, is there any follow-up?

14 MR. JAYNES: No. Thank you, Madam Hearing
15 Officer and members.

16 HEARING OFFICER ORTH: Thank you so much. Thank
17 you, Mr. Povijua, for your testimony.

18 Let me ask at this point, I did make -- let's
19 see -- Joseph Hernandez a panelist. Is that who we're
20 going to hear from next?

21 PROFESSOR PACYNIK: Madam Hearing Officer,
22 co-counsel is prepared to put on Mr. Hernandez; however,
23 unfortunately, he had to leave expecting the hearing to
24 conclude shortly after 5. Is it possible to put on
25 Mr. Hernandez tomorrow?

1 HEARING OFFICER ORTH: So it's certainly possible
2 to put on Mr. Hernandez tomorrow if we don't have him this
3 evening. I like to push it just a little closer to 6,
4 typically because we don't take a dinner break. But the
5 caveat there is that we really need to begin with the
6 economic stuff first thing in the morning because of the
7 London-calling witness and -- but I'd be happy to hear
8 from Mr. Hernandez after -- after we've handled that.

9 PROFESSOR PACYNIAC: Understood. And I
10 apologize, I do believe Mr. Hernandez has some conflicts
11 tomorrow and -- but we understand that it's the economic
12 modeling was supposed to go first. And I'm sorry my
13 co-counsel had to leave and we didn't quite understand
14 that the hearing might go closer to 6. And tomorrow, I'm
15 sorry, I'm just looking at this.

16 MS. KATZ: It does say that Mr. Hernandez -- it
17 says that Mr. Hernandez is not available tomorrow after
18 noon.

19 HEARING OFFICER ORTH: Okay. So I'm certain we
20 can work this out somehow. And I'm not sure what
21 Mr. Hernandez's availability would be, for example, the
22 next day.

23 PROFESSOR PACYNIAC: He's broadly available
24 after -- those -- those were the main two periods of
25 unavailability, September 22nd after noon. I believe he's

1 available broadly on Thursday and Friday.

2 HEARING OFFICER ORTH: Terrific. I'm happy to
3 hear from him at another time.

4 PROFESSOR PACYNIK: Thank you for accommodating
5 us.

6 HEARING OFFICER ORTH: Yes, of course. Thank you
7 Professor Pacyniak and Mr. Jaynes.

8 Ms. Katz, is there anything else we can do this
9 afternoon?

10 MS. KATZ: We could -- let's see. I guess we
11 could try to get to -- I don't know if Mr. Smitherman is
12 available. I'm just looking at topics. So, Ms. Kuehn has
13 topics 11 through 20 combined into one presentation
14 because those are all -- I mean, aside from the scope and
15 the statutority authority, there's nothing -- these other
16 ones are just very incredibly brief. But I don't know, as
17 far as if scope -- how long scope and statutory authority
18 are going to take if NMOGA wants -- you know, if we have
19 significant discussion around those.

20 Some of it's been addressed through other
21 testimony. So I guess maybe we could ask Mr. Hiser.

22 MADAM HEARING OFFICER: All right. I do see
23 Mr. Hiser.

24 MR. HISER: I'm very much --

25 HEARING OFFICER ORTH: I'm sorry.

1 MR. HISER: Madam Hearing Officer, we were not
2 planning to really put on anything on statutory authority.
3 We do have a little bit on scope which we could follow
4 whatever Ms. Kuehn said.

5 HEARING OFFICER ORTH: Okay. And I do see
6 Mr. Smitherman among the attendees and so I would be
7 pretty sure he can -- he can listen while Ms. Kuehn would
8 be testifying, if we could just get a little bit more in
9 today.

10 MR. HISER: Let me try to make sure that he is
11 paying attention as opposed to talking to my co-counsel.

12 HEARING OFFICER ORTH: All right.

13 MR. HISER: So I have spoken with Mr. Smitherman,
14 he will get on, but I think we are responding to Ms. Kuehn
15 on this issue.

16 HEARING OFFICER ORTH: That's right. I made
17 Ms. Kuehn a panelist.

18 Will you join us, please, Ms. Kuehn.

19 MS. KATZ: I actually just messaged her and I
20 don't -- she may -- let me --

21 MS. BISBEY-KUEHN: Yes, I'm on. Thank you. It
22 just took a little for the video to start.

23 HEARING OFFICER: All right. Ms. Kuehn, you are
24 still under oath. I am just trying to eke out a little
25 bit more today, with an eye to assuring that we finish by

1 next Friday. That's all.

2 Ms. Katz, go ahead.

3 MS. KATZ: Thank you, Madam Hearing Officer. And
4 I am just trying to pull up -- so this testimony is going
5 to be related to NMED Exhibit 32 and there's a table of
6 contents because it's a very long exhibit -- it's very
7 long testimony. And these issues are going to be on pages
8 11 through -- through 6. Yes, I think. I believe that's
9 correct.

10 ELIZABETH BISBEY-KUEHN,
11 having been previously duly sworn, was examined and
12 testified as follows:

13 REBUTTAL DIRECT EXAMINATION OF ELIZABETH BISBEY-KUEHN
14 BY MS. KATZ:

15 Q. Okay. Ms. Kuehn, you've testified previously
16 regarding your educational and professional
17 qualifications, correct?

18 A. Correct.

19 Q. Have you submitted prefiled direct and rebuttal
20 testimony regarding the provisions of the rule in this
21 proceeding?

22 A. Yes.

23 Q. And your full written, direct testimony appears
24 as NMED Exhibit 32?

25 A. Yes.

1 Q. Do you have any changes to your written direct
2 testimony?

3 A. I don't.

4 Q. I believe we do have some changes. Sorry. I
5 believe we had repeated the definition section in that
6 testimony; is that correct?

7 A. That's correct. And I thought we were going to
8 address that when we went through the definitions.

9 Q. Oh, okay. Sorry. We're just addressing it now
10 because I'm introducing that exhibit. Perhaps we can give
11 the specific page numbers on that when we get to the
12 definition section.

13 A. Yes.

14 Q. Your -- and your full written rebuttal testimony
15 appears as NMED Rebuttal Exhibit 1?

16 A. Yes.

17 Q. And do you have any changes to your written
18 rebuttal testimony?

19 A. I don't.

20 Q. And do you adopt your written direct and rebuttal
21 testimony here today?

22 A. Yes.

23 Q. Ms. Kuehn, what is addressed in section -- oh, do
24 you want to pull up your -- do we have a PowerPoint for
25 this? Sorry.

1 A. That's okay. Yeah, if I could have permission to
2 share.

3 Q. Okay.

4 A. Thank you.

5 Q. Can you please discuss what is addressed in
6 Section 20.2.50.1 of the proposed rule, which I believe is
7 the next slide?

8 A. Yeah. I'm sorry, I'm having trouble advancing
9 the slide.

10 Q. I think you might want to -- I think you're
11 opening it in Teams and I think you might want to open it
12 in PowerPoint.

13 A. I apologize. This is going to take a minute
14 because I wasn't prepared to present this testimony.

15 Section 20.2.50.1 establishes the issuing agency,
16 and the Board is the issuing agency pursuant to the Air
17 Quality Control Act. This section is required by the
18 administrator -- by the administrative law division of the
19 state records center and identifies the issuing agency of
20 the proposed regulation. NMED received no comments on
21 this.

22 Q. Okay. Thank you. Can you explain the revisions
23 that the Department made to the scope section at
24 20.2.50.2, based on comments from the other parties? Or
25 first describe the scope section. Sorry.

1 A. That's okay. Yeah. So Section 20.2.50.2
2 describes the areas of the state that are subject to or
3 may become subject to Part 50. And authority for Part 50
4 is within the Air Quality Control Act, as we all have
5 spoken about, which requires the Board to adopt a plan,
6 including regulations to address ozone concentrations in
7 areas of the state that cause or contribute to ambient
8 ozone concentrations that exceed 95 percent of the
9 standard.

10 Q. Okay. And can you explain the revisions the
11 Department made to that section based on comments from the
12 other parties?

13 A. Yes. I can. So we received numerous comments
14 from parties regarding the scope as filed in our May 2021
15 version of the rule -- or the July 21 version of the rule.
16 And those comments included clarifying the process by
17 which new areas should be incorporated into the rule;
18 adding a process by which areas of the state should fall
19 below 95 percent of the ozone standard; how they are
20 removed from the rule's jurisdiction; requests to delete
21 the reference to the 95 percent of the ozone NAAQs,
22 request to delete the requirement that applicability is
23 revocable unless the source obtains an air quality permit
24 to limit their emissions; requesting to add actual
25 counties to the scope; deleting the terms cause or

1 contribute. And as a result, we've made significant edits
2 that we believe addresses all of the parties concerns and
3 comments.

4 The current proposal outlines the counties -- or
5 specifically identifies the counties that are subject to
6 Part 50. It includes a process and timeline for the
7 Department to petition the EIB to incorporate those new
8 areas. It clarifies that when a source becomes subject,
9 that the source will remain subject unless it obtains an
10 air permit with federally enforceable emission limits, to
11 lower their emissions to below the threshold, in the rule,
12 or below specific applicability sections of the rule.

13 Q. And do you -- do you have a -- did you have a
14 redline on that?

15 A. I -- I do. And I'm sorry that the slide is so
16 busy, but it describes the new requirement as outlined in
17 our draft proposal. So it specifically addresses the
18 requests to add a process by which new areas can be
19 incorporated under the rule. That's identified in A 1 and
20 establishes that the notice of proposed rulemaking shall
21 be published no less than 180 days before the sources in
22 the affected areas will become subject. And that the
23 proposed rulemaking shall forward -- shall follow the
24 Board's rulemaking procedures at 20.1.1.301 NMAC. And
25 requires the Department to list areas of -- those areas of

1 the state that the Department proposes to incorporate into
2 this part, and the date upon which those sources and the
3 areas will become subject.

4 And the proposal will also include proposed
5 implementation dates, which is important, as we're
6 bringing new sources under the -- under Part 50. We need
7 to identify what those implementation dates would be. So
8 we are in general agreement with those -- with those
9 requests.

10 We also added a requirement that the rulemaking
11 pursuant to this section shall be limited to consideration
12 of only those proposed changes. And we also added a
13 requirement if a source becomes subject to the Part
14 upon -- based upon its potential to emit, all requirements
15 of the Part that apply to the source are effective unless
16 the source obtains a permit to limit its emissions to
17 below those applicability thresholds either in the Part or
18 in the specific subsections of applicability.

19 Q. Okay. Thank you. So do you want to move to
20 Section 20.2.50.3?

21 A. Sure. Yeah, this section specifically identifies
22 the statute that provides the authority for Part 50. As I
23 mentioned, it's under -- found in the enabling statute in
24 the Air Quality Control Act. And we received no comments
25 on that section.

1 Q. Okay. And -- excuse me. Can you describe
2 sections 20.2.50.4 through 6 and the revisions to those
3 sections?

4 A. Sure. So these cover duration effective date and
5 objective. We did make changes to the rule to address
6 those -- the comments that we received; specifically in
7 the effective date. We updated the date to 2022. We
8 added the term "compression" within the objective section.
9 We did not agree to clarify the term natural gas
10 transmission in the objective section, but we don't object
11 to its inclusion.

12 Q. Okay. Do you want to -- can you move to the next
13 slide? There you go. Okay. So this shows our changes to
14 those sections, correct?

15 A. Yes. This slide shows the changes that I just
16 described.

17 Q. Okay. And then, can you discuss Sections
18 20.2.50.8 through 12, as the required sections?

19 A. Yes. These are all required sections under the
20 New Mexico State's Records Act. And so we did not receive
21 any specific comments on this section.

22 Q. Okay. Thank you.

23 A. Sure. Thank you.

24 MS. KATZ: That's all the questions we have on
25 that topic.

1 HEARING OFFICER ORTH: Okay. Let me ask if there
2 will be questions from the others. Ms. Fox?

3 MS. FOX: None, Madam Hearing Officer. Thank
4 you.

5 HEARING OFFICER ORTH: Thank you. Let's see.
6 Mr. Jaynes or Professor Pacyniak?

7 MR. JAYNES: We have no questions, Madam Hearing
8 Officer.

9 HEARING OFFICER ORTH: Thank you. Mr. Nykiel?

10 MR. NYKIEL: No questions. Thank you.

11 HEARING OFFICER ORTH: All right. Mr. De
12 Saillan?

13 MR. DE SAILLAN: No questions. Thank you.

14 HEARING OFFICER ORTH: Thank you. Mr. Hiser?

15 MR. HISER: I do have a question, Madam Hearing
16 Officer.

17 REBUTTAL CROSS-EXAMINATION OF ELIZABETH BISBEY-KUEHN
18 BY MR. HISER:

19 Q. Ms. Kuehn, I was wondering if you could put back
20 up the -- I can't remember exactly the number, but I think
21 it's 20.2.50.8. It was the comment that you received
22 about natural gas transmission that you said you didn't
23 have an objection to. And maybe -- there we go. I think
24 it was in the objective maybe. Let's see. Where is it?
25 Yeah, objective.

1 Was the purpose of that comment, as you
2 understand it, to try to clarify the -- on the oil side as
3 opposed to the natural gas side, that the scope of this
4 was not meant to include oil that was in the pipeline?
5 The transmission pipeline. Let me be clear.

6 A. I'm not understanding the question. I'm sorry.

7 Q. Oh. I was asking if you -- if you understood
8 what the purpose of the addition of natural gas from a
9 transmission would be?

10 A. Yes, I agree.

11 Q. That was my only question. I guess I should ask
12 a second one. I'm sorry, Madam Hearing Officer.

13 Do you agree that you're not trying to cover oil
14 transmission pipelines in the coverage of this rule at the
15 present time?

16 A. We are not trying to include oil transmission
17 pipelines under the coverage of the rule.

18 MR. HISER: Okay. Thank you. Appreciate it.

19 HEARING OFFICER ORTH: Thank you. Mr. Rose?

20 MR. ROSE: No questions, Madam Hearing Officer.

21 HEARING OFFICER ORTH: All right. Mr. Janoe?

22 MR. JANOE: No questions.

23 HEARING OFFICER ORTH: Thank you. Mr. Butzier?

24 MR. BUTZIER: No questions. And thank you, Madam
25 Hearing Officer, for continuing to make progress this

1 evening.

2 HEARING OFFICER ORTH: Ms. Gutierrez?

3 MS. GUTIERREZ: No questions, Madam Hearing
4 Officer.

5 HEARING OFFICER ORTH: Thank you.
6 Mr. Colclasure?

7 MR. COLCLASURE: No questions. Thank you.

8 HEARING OFFICER ORTH: And I don't know if we
9 have Ms. Witherspoon.

10 All right. We're going to turn to the Board
11 members in the event they have questions. While I'm doing
12 that, if you are an attendee with a question, please reach
13 out through the Chat or by reaching out to Pam Jones at
14 (505) 660-4305.

15 Madam Chair, do you have questions of Ms. Kuehn
16 on this topic?

17 CHAIRPERSON SUINA: Madam Hearing Officer, I
18 don't have any questions at this time. Thank you.

19 HEARING OFFICER ORTH: Thank you. Vice-Chair
20 Trujillo-Davis?

21 VICE-CHAIR TRUJILLO-DAVIS: I do not have any
22 questions at this time. Thank you.

23 HEARING OFFICER ORTH: Thank you. Member Cates?

24 BOARD MEMBER CATES: No questions. Appreciate
25 the testimony.

1 HEARING OFFICER ORTH: Thank you. Member Bitzer?

2 BOARD MEMBER BITZER: No questions. Thank you.

3 HEARING OFFICER ORTH: Thank you. Member Garcia?

4 BOARD MEMBER GARCIA: No questions. Thank you.

5 HEARING OFFICER ORTH: Thank you. And Member

6 Honker?

7 BOARD MEMBER HONKER: I have no questions.

8 HEARING OFFICER ORTH: Thank you. I don't

9 imagine the question from Mr. Hiser prompted any redirect,
10 Ms. Katz, but if I'm wrong, let me know.

11 MS. KATZ: No redirect. Thanks.

12 HEARING OFFICER ORTH: All right. Thank you very
13 much, Ms. Kuehn. I feel better about making a little bit
14 more use of the day. And I don't imagine we have anything
15 we could do, you know, in ten minutes, so -- unless you
16 have an idea.

17 MS. KATZ: Well, I believe Mr. Smitherman was on
18 this -- was going to testify on this topic.

19 HEARING OFFICER ORTH: On this topic. Okay.
20 Good. So do we have Mr. Smitherman with us, Mr. Hiser?

21 MR. HISER: We do.

22 HEARING OFFICER ORTH: Terrific. Mr. Smitherman,
23 if you can join us. Oh, I need to make you a panelist
24 first. There you are.

25 Mr. Smitherman, if you would please raise your

1 right hand. Do you swear or affirm to tell the truth?

2 MR. SMITHERMAN: I do.

3 HEARING OFFICER ORTH: Thank you very much. Your
4 voice is coming out loud and clear. Go ahead, Mr. Hiser.

5 JOHN SMITHERMAN,
6 having been first duly sworn or affirmed, was examined
7 and testified as follows:

8 DIRECT EXAMINATION OF JOHN SMITHERMAN

9 BY MR. HISER:

10 Q. Mr. Smitherman, can you please state your name
11 for the record and spell it for the court reporter?

12 A. Certainly. John Smitherman, J-O-H-N,
13 S-M-I-T-H-E-R-M-A-N.

14 Q. Can you discuss what your involvement is in this
15 proceeding?

16 A. Certainly. I am currently a senior adviser to
17 the New Mexico Oil and Gas Association. I mostly deal
18 with regulatory matters and I have been instrumental in
19 coordinating NMOGA's efforts to respond to this
20 rulemaking.

21 Q. Is NMOGA Exhibit No. 29 an accurate copy of your
22 resume?

23 A. It is.

24 Q. Can you please state your qualifications and
25 background as they relate to your participation in this

1 hearing?

2 A. Certainly. Would it be acceptable to share my
3 screen?

4 Q. I see the Hearing Officer is working her magic.

5 A. Of course that assumes that I can successfully
6 share my screen once given permission.

7 Q. She believes that you should be able to click
8 share now.

9 A. Okay. Okay.

10 Q. We can now see your -- we are seeing your
11 background.

12 A. Lovely. Thank you very much. I'm a petroleum
13 engineer. I earned a Bachelors in Engineering degree in
14 1980. And I worked for an oil and gas upstream
15 exploration and production company for, roughly, 40 years;
16 mostly in operational roles: production engineer, did a
17 little reservoir engineering, but worked up through
18 operational engineering, operations management, general
19 management and executive management, all with the focus of
20 operations and operations data management.

21 So I bring that experience to the table, if you
22 will. I kind of know, in essence, how things work. I've
23 got extensive experience in Southeast New Mexico. Our
24 company had very, very large acreage position in that part
25 of the state.

1 Q. Thank you. Do NMOGA Exhibits A1 and 41 reflect
2 your direct and rebuttal technical testimony in this
3 matter?

4 A. Yes, they do.

5 Q. Do you wish to make any modifications to Exhibits
6 A1 or 41?

7 A. Not that I recall.

8 Q. And have you prepared a summary of your direct
9 and rebuttal testimony -- which is very short tonight,
10 because we're only talking about one little section?

11 A. It is. Thank goodness it's short. It's late
12 already. And I have.

13 Q. And do you adopt your written direct and rebuttal
14 testimony for purposes of this hearing, as your testimony?

15 A. Yes, I do. Thank you.

16 Q. Thank you.

17 What were the comments that you made concerning
18 the scope provision of 20.2.50.2 and what were the
19 concerns that you were trying to bring out?

20 A. Certainly. First of all, I'm assuming that the
21 counties that are going to be included in the scope of
22 this new Part are going to be Doña Ana, Eddy, Lea,
23 Sandoval, San Juan and Valencia. I'm not really going to
24 talk about the technical and legal bases for those. I'm
25 just stating that that's what I believe.

1 More importantly, what I'd like to touch on --
2 and I'm glad Ms. Kuehn has mentioned this already, is that
3 there needs to be a process in the future if areas or
4 counties are added to this rule, that somehow they meet a
5 criteria in the future, and are added to the rule, that
6 there needs to be a public process to understand that
7 the -- to give the public an opportunity to challenge and
8 understand how those criteria have been met, and that
9 adding those counties is, in fact, the appropriate thing
10 to do.

11 And perhaps more importantly to me, as a former
12 executive in an oil and gas company is, we need to have
13 time to transition. Just like this rule has today given
14 operators some time to transition from where we are today,
15 to comply with the rules that this -- this regulatory
16 process will eventually end up with, we need those same
17 considerations if another area is to be added in the
18 future. And I was very pleased to hear Ms. Kuehn say that
19 NMED supports both of those two concepts.

20 Q. Do you have anything else you'd like to add about
21 this or is NMOGA satisfied with the adopted change
22 language that Ms. Kuehn presented today?

23 A. To the degree I understood it properly, yes. In
24 fact, I think it sounded like that it is -- it conforms to
25 NMOGA's suggested redline, and perhaps that was responsive

1 to our suggestion.

2 Q. At least everything except perhaps the county
3 list; is that correct?

4 A. Good point.

5 Q. Okay. Thank you.

6 MR. HISER: That completes the testimony of
7 Mr. Smitherman on the scope.

8 HEARING OFFICER ORTH: Thank you very much,
9 Mr. Hiser and Mr. Smitherman.

10 Ms. Katz, do you have any questions of
11 Mr. Smitherman?

12 MS. KATZ: I do not, Madam Hearing Officer.

13 HEARING OFFICER ORTH: All right. Ms. Fox?

14 MS. FOX: No, Madam Hearing Officer. Thank you.

15 HEARING OFFICER ORTH: Thank you. Let's see.

16 Mr. Jaynes or Professor Pacyniak?

17 MR. JAYNES: No questions, Madam Hearing Officer.

18 HEARING OFFICER ORTH: All right. Mr. Nykiel?

19 MR. NYKIEL: No, thank you.

20 HEARING OFFICER ORTH: All right. Mr. de

21 Saillan?

22 MR. DE SAILLAN: No questions. Thank you.

23 HEARING OFFICER ORTH: Thank you. Mr. Rose?

24 MR. ROSE: No objection to any -- I have nothing,
25 no questions. Excuse me, Madam Hearing Officer.

1 HEARING OFFICER ORTH: All right. Mr. Janoe?

2 MR. JANOE: No questions.

3 HEARING OFFICER ORTH: Thank you. Mr. Butzier?

4 MR. BUTZIER: No questions. Thank you.

5 HEARING OFFICER ORTH: Ms. Gutierrez?

6 MS. GUTIERREZ: No questions. Sorry, I couldn't
7 get to unmute.

8 HEARING OFFICER ORTH: All right. And
9 Mr. Colclasure?

10 MR. COLCLASURE: No questions, Madam Hearing
11 Officer.

12 HEARING OFFICER ORTH: All right. I'm going to
13 turn to the Board members to see if they have any
14 questions. In the meantime, if you are an attendee and
15 have a question of Mr. Smitherman, please reach out in the
16 Chat.

17 EXAMINATION BY THE BOARD OF JOHN SMITHERMAN

18 HEARING OFFICER ORTH: Madam Chair, do you have a
19 question of Mr. Smitherman?

20 CHAIRPERSON SUINA: Not at this time. Thank you,
21 Madam Hearing Officer.

22 HEARING OFFICER ORTH: Thank you. Vice-Chair
23 Trujillo-Davis?

24 VICE-CHAIR TRUJILLO-DAVIS: None at this time.
25 Thank you.

1 HEARING OFFICER ORTH: Thank you. Member Cates?

2 BOARD MEMBER CATES: No questions. Thanks.

3 HEARING OFFICER ORTH: Thank you. Member Bitzer?

4 BOARD MEMBER BITZER: No questions. Thank you.

5 HEARING OFFICER ORTH: Thank you. Member Garcia?

6 BOARD MEMBER GARCIA: One quick question, please.

7 So, just so I understand, so that I'm clear, this
8 testimony you gave is basically saying that you proposed
9 some amendments to the rule, and the Department agreed to
10 those amendments; is that right?

11 MR. SMITHERMAN: Yes, it is.

12 BOARD MEMBER GARCIA: Okay. Thank you. That's
13 all.

14 MR. SMITHERMAN: Thank you.

15 HEARING OFFICER ORTH: All right. Member Honker?

16 MEMBER HONKER: No questions.

17 HEARING OFFICER ORTH: All right. Thank you all
18 very much. Mr. Hiser, are we completed then with
19 Mr. Smitherman this evening?

20 MR. HISER: We are completed with Mr. Smitherman
21 at the end of this evening. Thank you.

22 HEARING OFFICER ORTH: All right. Thank you very
23 much. I'm delighted we've snuck up on 6:00 there.

24 MS. KATZ: Madam Hearing Officer, Mr. Davis from
25 IPANM also had some testimony on this scope topic, and I

1 don't know if Mr. Rose wants to weigh in on whether
2 Mr. Davis is available and wants to put that testimony on
3 or if we need to delay that.

4 HEARING OFFICER ORTH: Let me see.

5 MR. ROSE: I would prefer to delay it. I haven't
6 talked to him about whether he's available to testify, so
7 I couldn't represent that he is, so...

8 HEARING OFFICER ORTH: All right.

9 MR. ROSE: But his testimony is pretty much
10 limited to the same extent Mr. Smitherman's is, so it
11 shouldn't take much time to finish. It's just I don't
12 know if he's available right now and prepared to do this.

13 HEARING OFFICER ORTH: Okay. Tell me his first
14 name. I'm not sure if he's an attendee or not.

15 MR. ROSE: He was signing on, Ryan Davis.

16 HEARING OFFICER ORTH: Yeah, Ryan Davis. I'll
17 make him a panelist right now. Mr. Davis, can you hear
18 me?

19 MR. DAVIS: Yes, I can hear you. Can you hear
20 me?

21 HEARING OFFICER ORTH: Yes. Would you be
22 prepared to go forward so we can bundle up this topic?

23 MR. DAVIS: Yes, Madam Hearing Officer.

24 HEARING OFFICER ORTH: Terrific. Do you have
25 slides?

1 MR. DAVIS: I do not.

2 HEARING OFFICER ORTH: All right. If you would
3 please raise your right hand. Do you swear or affirm to
4 tell the truth?

5 MR. DAVIS: I do.

6 HEARING OFFICER ORTH: Thank you. Mr. Rose?

7 JEFFREY "RYAN" DAVIS,
8 having been first duly sworn or affirmed, was examined
9 and testified as follows:

10 DIRECT EXAMINATION OF JEFFREY RYAN DAVIS

11 BY MR. ROSE:

12 Q. Mr. Davis, could you please state your full name
13 for the record?

14 A. My name is Jeffrey Ryan Davis; I go by Ryan.

15 Q. And with whom are you employed?

16 A. I'm employed by Merrion Oil and Gas in
17 Farmington, New Mexico.

18 Q. And in what capacity are you employed?

19 A. I am the Operations Manager for Merrion.

20 Q. Could you give the Board a brief description of
21 your educational and work background?

22 A. Yes. I've got a Bachelor's of Science in
23 Mechanical Engineering from New Mexico Institute of Mining
24 and Technology. I have worked for Merrion since obtaining
25 my degree. I've worked for the company approximately 13

1 years. Worked as the production engineer initially and
2 worked my way up into operations management, where I
3 oversee all of our operated properties through the
4 Rockies, including New Mexico.

5 Q. And do you hold a position with IPANM?

6 A. I do. Well, I am currently the past president of
7 the Independent Petroleum Association of New Mexico. I
8 just recently handed that off at our annual meeting
9 earlier this month.

10 Q. And did you prepare written direct and rebuttal
11 testimony in this proceeding?

12 A. Yes, sir, I did.

13 Q. And if we were to ask you the questions in your
14 written -- prefiled written direct and rebuttal testimony,
15 would you give us the same answer under oath today that
16 you did in writing?

17 A. Yes, sir.

18 MR. ROSE: Madam Hearing Officer, we would
19 move -- it's IPANM Exhibits 2 -- and let me see. That's
20 his direct testimony and his rebuttal -- I'll find it
21 here. His rebuttal is Exhibit 10. I'd offer those into
22 evidence.

23 HEARING OFFICER ORTH: I don't remember
24 objections to IPANM exhibits, but I'll pause for a moment
25 in the event anyone would like to speak up.

1 All right. The exhibits are admitted.

2 (IPANM Exhibit 2 and IPANM Rebuttal Exhibit 10
3 received into evidence at this time.)

4 Q. (BY MR. ROSE) Mr. Davis, did you hear the
5 testimony from NMED and from NMOGA with respect to the
6 scope provision?

7 A. Yes, I did.

8 Q. Okay. And could you -- does -- does the changes
9 that the Department proposed, do they -- are they
10 responsive to your comments in your direct and rebuttal
11 testimony?

12 A. Yes. I believe they address the majority of the
13 concerns that we put forward in direct testimony and
14 rebuttal. I would say, as NMOGA mentioned, the only
15 exception would be the inclusion of Chaves and Rio Arriba
16 Counties when they listed the counties applicable.

17 Q. Mr. Davis, I have no further questions.

18 MR. ROSE: Madam Hearing Officer, Mr. Davis is
19 available for cross-exam.

20 HEARING OFFICER ORTH: Thank you. Ms. Katz, do
21 you have any questions?

22 MS. KATZ: Thank you, Madam Hearing Officer. I
23 just have one question.

24 CROSS-EXAMINATION OF JEFFREY "RYAN" DAVIS

25 BY MS. KATZ:

1 Q. Just to clarify: Mr. Davis, I believe in your
2 direct testimony, at least in the redline that was
3 submitted with that testimony, you were proposing that
4 there be a process to remove counties from the rule. And
5 I -- and I'm just wondering if that is -- if you were
6 withdrawing that, or you're fine with just what the
7 Department has now proposed based on what NMOGA -- NMOGA's
8 revisions were?

9 A. Ms. Katz, I appreciate you bringing that up. You
10 know, that was definitely a concern. We did not see any
11 off ramp in the provisions, so that was something that we
12 had put forward. I think at this point we are comfortable
13 with -- with the revisions that the Department has put
14 forth.

15 MS. KATZ: Okay. Thank you very much, Mr. Davis.

16 HEARING OFFICER ORTH: Thank you. Ms. Fox, any
17 questions?

18 MS. FOX: No questions, Madam Hearing Officer.
19 Thank you.

20 HEARING OFFICER ORTH: Thank you. Mr. Jaynes or
21 Professor Pacyniak?

22 MR. JAYNES: No questions. Thank you.

23 HEARING OFFICER ORTH: Thank you. Mr. Nykiel?

24 MR. NYKIEL: No questions. Thank you.

25 HEARING OFFICER ORTH: Thank you. Mr. de

1 Saillan?

2 MR. DE SAILLAN: No questions. Thank you.

3 HEARING OFFICER ORTH: Thank you. Mr. Hiser?

4 MR. CURTIS: This is Brandon Curtis. I have no
5 questions, Madam Hearing Officer.

6 HEARING OFFICER ORTH: Thank you. Mr. Janoe?

7 MR. JANOE: No questions. Thank you.

8 HEARING OFFICER ORTH: Thank you. Mr. Butzier?

9 MR. BUTZIER: No questions. Thank you.

10 HEARING OFFICER ORTH: Thank you. Ms. Gutierrez?

11 MS. GUTIERREZ: No questions. Thank you.

12 HEARING OFFICER ORTH: Thank you.

13 Mr. Colclasure?

14 MR. COLCLASURE: No questions, Madam Hearing
15 Officer.

16 HEARING OFFICER ORTH: All right. Thank you.

17 I'm going to turn to the Board in the event they have
18 questions. In the meantime, if you're an attendee and
19 have a question, please reach out through the Chat.

20 Madam Chair?

21 CHAIRPERSON SUINA: I have no questions at this
22 time, Madam Hearing Officer. Thank you.

23 HEARING OFFICER ORTH: Thank you. Vice-Chair
24 Trujillo-Davis?

25 VICE-CHAIR TRUJILLO-DAVIS: I have no questions

1 at this time. Thank you.

2 HEARING OFFICER ORTH: Thank you. Member Cates?

3 BOARD MEMBER CATES: No questions. Thanks for
4 the testimony.

5 HEARING OFFICER ORTH: Thank you. Member Bitzer?

6 BOARD MEMBER BITZER: No questions. Thank you.

7 HEARING OFFICER ORTH: Thank you. Member Garcia?

8 MEMBER GARCIA: No questions. Thank you.

9 HEARING OFFICER ORTH: Thank you. And Member
10 Honker?

11 BOARD MEMBER HONKER: No questions. Thank you.

12 HEARING OFFICER ORTH: Thank you very much, all
13 of you. I believe then, Mr. Rose, that there's no reason
14 not to thank Mr. Davis for his testimony and complete the
15 testimony for the day.

16 MR. ROSE: Madam Hearing Officer, we'll certainly
17 see Mr. Davis later, just not today.

18 HEARING OFFICER ORTH: All right. Thank you so
19 much. Thank you all. We'll adjourn for the evening and
20 we'll see you tomorrow morning at 9 when we will begin
21 with economic analysis testimony. Thank you.

22 MR. CURTIS: Madam Hearing Officer, can I ask one
23 quick question? This is Brandon Curtis on behalf of
24 NMOGA. Would be it possible to try and identify the
25 topics that are upcoming the next two days so we can

1 prepare our witnesses?

2 HEARING OFFICER ORTH: Ms. Katz, I think you're
3 the best person to answer that.

4 MS. KATZ: I can try to give my estimation, but
5 it's going to depend on how long these topics take. So I
6 think we shouldn't have a problem getting through the
7 economic -- the economic analysis tomorrow, the small
8 business facility definition and requirements. So those
9 are Topics 5 and 6.

10 Now we've been -- we'll be jumping down to -- and
11 then -- excuse me. So I think we will need to have, I
12 guess, was it Mr. Hernandez at some point tomorrow. We'll
13 need to have EDF's modeling witness, Ms. Thompson, provide
14 her rebuttal testimony on the model. And so, then we'll
15 have -- then we'll be on Topic 21, which is the
16 definitions; 22, which is the applicability of the rule.

17 So I guess it's hard to know how long the
18 economics and the small business facilities might take.
19 I'm expecting them to take at least all of the morning and
20 probably into some of the afternoon. And then the -- so,
21 you know, 21 and 22, you know, there are several witnesses
22 on those topics, both direct and rebuttal, so... But
23 those -- those seem foreseeable -- could come up.
24 Possibly Topic 23, 24.

25 When we're getting to engines, that Topic 24,

1 that's a big topic and so I would think if we're getting
2 to that and it's toward the end of the day, we're going to
3 want to bump that off until the following day. So, sorry,
4 I can't give any more on that.

5 HEARING OFFICER: All right. Well, thank you.

6 And Professor Pacyniak, if you -- oh, you
7 disappeared. I thought maybe you were on screen. If you
8 would just like to text me with Mr. Hernandez's
9 availability, that's fine.

10 PROFESSOR PACYNIK: Okay. Yes, I will do that.
11 Thank you very much. And I -- and I -- actually, I
12 confirmed with him that we apparently made an error in
13 providing his availability, so tomorrow he's actually
14 available in the afternoon and not available in the
15 morning, which I think might make it easier for him to be
16 able to fit the schedule tomorrow that you-all have
17 outlined.

18 HEARING OFFICER ORTH: All right. That's a good
19 fit. Thank you.

20 All right. Thank you, all. See you in the
21 morning. Good night.

22 (Proceedings concluded September 21st at
23 6:10 p.m.)
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STATE OF NEW MEXICO
BEFORE THE NEW MEXICO ENVIRONMENTAL IMPROVEMENT BOARD
PROPOSED ADOPTION OF RULE 21-27 NMAC
RULES HEARING

REPORTER'S CERTIFICATE

I, THERESA E. DUBOIS, RPR, CSR #29, DO HEREBY
CERTIFY that on September 21st, 2021, the Public Hearing
of the New Mexico Environmental Improvement Board was
taken before me, that I did report in stenographic
shorthand the Proceedings set forth herein, and the
foregoing pages are a true and correct transcription to
the best of my ability.

I FURTHER CERTIFY that I am neither employed by
nor related to nor contracted with (unless excepted by the
rules) any of the parties or attorneys in this matter, and
that I have no interest whatsoever in the final
disposition of this matter.



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