EXHIBIT D

The Matter Of:

Great Basin Unified Air Pollution Control District
v.

Governing Board Meeting VOL

July 15, 2013

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BH CDR Job # **1011328**
number of pages 172

Word Index Included with this Condensed Transcript.

GOVERNING BOARD MEETING OF THE

GREAT BASIN UNIFIED AIR POLLUTION CONTROL DISTRICT

Monday, July 15, 2013

Held at Alpine County Administrative Center

Markleeville, California

Volume I

Board Members Present:

John Eastman, Chairman
Matt Kingsley
Linda Arcularius
Byng Hunt
Larry Johnston
Ron Hames
Mary Rawson

On Behalf of Great Basin Unified Air Pollution Control Air District:

Ted Schade
Stacey Simon, ESQ.

PROCEEDINGS

CHAIRMAN EASTMAN: We're going to call to order our meeting for July 15th at 10:30 a.m. It's a regularly scheduled meeting of the Great Basin Unified Air Pollution Control District, and we'll go ahead and have the Pledge of Allegiance led by Mary Rawson of Alpine County.

(Whereupon, the Pledge of Allegiance was recited by all assembled.)

CHAIRMAN EASTMAN: This is the time on our agenda for anyone in the audience wishing to speak on any item that is not otherwise agendized for today. Is there any public comment?

If not, we'll close the public comment section and we have the approval of the minutes of May 16th before us. Any additions or corrections from the Board members?

MR. HUNT: I move to approve the minutes.

MR. JOHNSTON: Second.

CHAIRMAN EASTMAN: A motion and a second. Those in favor?

(All members said "aye".)

CHAIRMAN EASTMAN: Any opposed or abstentions?

Motion passes seven/zero.

We'll go ahead at this time and open our public

hearing for the certification of the Joint Final Environmental Impact Report and Environmental Impact Statement for the Casa Diable IV (CD IV) geothermal plant and well field east of the town of Mammoth Lakes. At this time we will hear a statement and presentation by District staff.

MR. SCHADE: Thank you, Mr. Chairman. Before we get started, I just want to introduce to the Board or let the Board know that we have Stacey Simon here today as counsel for the District, so if you've got any questions, she'll lead you through it.

I'm actually going to turn this over to Great Basin staff member Jan Sudomier. She's been working on this project for about three years. She knows far more about it than I do, so I'm going to let Jan sort of give you a background.

MS. SUDOMIER: Good morning. I'm Jan. CD IV project is a power plant and 16 additional wells over in the Basalt Canyon area. There exists already two wells and a pipeline hooked up to their existing power plants. The new project would almost double the power output of geothermal power, an alternative source.

As far as the impact on the environment goes, there is, of course, the visual aspects of having 16 additional wells and two additional pipelines and a new

power plant, and there's construction air quality issues that are also substantial. They're significant.

The visual impacts, there are -- it's an industrial thing, there's going to be visual impacts. The scenic route of 395, the plant is going to be visible only a very short period of time. 203, which is a Mono County scenic route, there will be a more sustained view of the power plant, and of course Shady Rest Area will have sustained views of the pipeline as will Antelope Valley loop road which will pass the power plant.

As far as the air quality issues, it's really kind of a tradeoff whether you want to drag the -- construction is limited in the Mammoth Lakes area to the time when there's not ten feet of snow on the ground. You can either have two drill rigs maybe over two summers drilling it, or you can have one drill rig over four summers drilling the wells associated with the power plant. The construction of the power plant itself will take probably a summer-and-a-half.

At this time to further explain the project, I'm going to bring up Charlene Wardlow. She's with Ormat. She has a Power Point presentation more about the plant, and then we'll get to more concerns afterwards.

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MR. SCHADE: Mr. Chairman, before Charlene gets started, I'd just like to give the Board a brief explanation as to why we are doing this here today. Some of you may have that question.

Typically Great Basin does not certify environmental impact reports for projects likes this. This typically would fall under the county or the town's purview, but in this case when this project started, it looked as though the only non federal agency that would issue any kind of discretionary approval or permit was Great Basin, and so because there wasn't going to be any involvement from any other agency, then we by necessity would end up being the lead agency, so we took that responsibility on, like I said, about three years ago.

As the project developed and we came to realize that there actually is -- the pipeline itself will cross the private land which makes it subject to a use permit from Mono County, so Mono County will end up considering this for use permit approval, but Great Basin had started the project before that was really completely understood and kind of gone a ways down the processing path.

I consulted with staff at Mono County. At that point we probably could have punted this, but because we had started off, I made the decision to go ahead and

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continue here, so it's a little bit unusual for a single purpose regulatory agency like ours to take on approval of a project like this, but that's really why -- that's how we got to where we are today.

CHAIRMAN EASTMAN: Thank you, Ted.

MS. ARCULARIUS: Mr. Chairman?

CHAIRMAN EASTMAN: Please.

MS. ARCULARIUS: What was the time line of that when Mono County, the private property -- the time when you could have punted, when was that?

MS. SUDOMIER: I believe it was November of 2011.

MR. SCHADE: And we started this when, six or eight months before that probably?

MS. SUDOMIER: We started it in May of 2010 was the first meeting, and then the consultant was brought in August or September of 2010.

UNIDENTIFIED SPEAKER: It might have even been earlier than 2010.

MR. SCHADE: So more than a year.

MR. KINGSLEY: And will Mono County have approval on the entire EIR?

MS. SIMON: So Mono County as it's currently set up will serve in the role of a responsible agency. Their permitting authority, if indeed this pipeline is

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going to cross over private land, would be limited to approval of the use permit authorizing that pipeline and would not be a comprehensive certification of the EIR. The EIR would already have been certified by your Board.

MR. KINGSLEY: And I'm unsure whether it will cross private property.

MS. SIMON: I believe the current alternatives do show it crossing that private property, yes.

MR. SCHADE: Thank you. Larry?

MR. JOHNSTON: Are there grading permits involved and who issues those?

MS. SUDOMIER: Grading permits for building the power plant?

MR. JOHNSTON: Grading permits for whatever, whether it's the power plant, the pipelines, the well site. Who issues the grading permits?

MR. SCHADE: Mike, why don't you introduce yourself, Mike.

MR. MONKA: I'm Mike Monka. I'm with Environmental Science Associates. We're the consultant for the EIS.

The grading associated with the power plant would occur on Forest Service land, so the permitting associated with that would be issued by the federal agencies.

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MR. JOHNSTON: And who issues the building permits for the construction of the facility?

MR. REINHARDT: My name is Collin Reinhardt. I'm a geologist with the Bishop field office of the Bureau of Land Management, and they'll all be issued under a site construction license.

MR. JOHNSTON: So Mono County or the town are not involved in grading permits or building permits?

MR. REINHARDT: I think that's correct.

CHAIRMAN EASTMAN: Any more questions from the Board? We'll go back to Charlene if we may. Thank you.

MS. SIMON: While they're working on that, just to inform the Board, there is one more comment letter which the Alpine County clerk has kindly offered to copy which the District received on Friday and she's making copies and I'll bring those in.

CHAIRMAN EASTMAN: And that comment letter is from whom?

MS. SUDOMIER: Adams Broadwell.

MS. SIMON: The Coalition of Unions for Responsible Cure.

CHAIRMAN EASTMAN: Thank you.

MR. SCHADE: We received a number of letters after 4:00 on Friday.

THE CLERK: Members of the Board, you do have a

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hard copy of her presentation. It looks like this.
MS. WARDLOW: Good morning. My name is Charlene Wardlow and I work for Ormat Nevada, Inc. I'm based out of our corporate office in Reno, Nevada, but I work on permitting -- trying to permit our projects in California.
I'd like to just tell you a little bit today, this is just to locate you project-wise. This is Highway 395 heading north. This is the Casa Diablo project here. This is the original project built in 1984. These are two projects that came on-line in 1990, I'll tell you a little bit about those.
This is looking off towards the town of Mammoth Lakes, Highway 203, and the power plant location I'll show you later is actually like right over here where the SCE substation is, and then the Basalt Canyon wells are back up here behind the Shady Rest Park for those of you who are maybe from Mono County.
CHAIRMAN EASTMAN: Charlene, real quick can you share with the audience when that plant that you just had on there, when that began?
MS. WARDLOW: Yeah, and I'll go over the dates a little bit more. The original project came on-line in 1984 and it's on private land and there's a 90 acre parcel here that's in between LADWP lands right here and

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then we're surrounded by U.S. Forest Service land, so this project right here that came on in 1990 is also on the private parcel, and then this power plant here is on, again, U.S. Forest Service and then the mineral is managed by the BLM.
So Ormat is a publicly traded company. We are on the New York Stock Exchange under ORA, and so anything I say may be forward looking. I think we've quit forecasting a date for this project and you'll see why, but we've been working on this project with the agencies -- actually, we submitted the application to the BLM in February of 2010. Internally we were working on the project probably several years before that, so we've kind of quit forecasting when we might get this project permitted and built, but it is listed on one of our projects that we are working on in California and we look forward to getting it permitted and hopefully under construction.
So I'll tell you a little bit about Ormat for those of you that are not from Mono County. We have given presentations to the Board of Supervisors in the town over the last couple years.
I would like to introduce John Bernardy. John is our plant manager. The project there is called Mammoth Pacific, L.P. and it's owned by Ormat Nevada,

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Inc., and then some of you know Larry Nickerson. He was the plant manager there for a long time. He's actually been there since the project was in construction and Larry is now overseeing some overhaul work we're doing on the existing projects, and then I'll tell you about the CD IV project.
So Ormat is interesting in that the company I think is actually closer to 50 years old now. It's over 40 years old. We have about almost 600 megawatts of installed capacity and 18 projects around the country and the world.
The interesting thing about Ormat is it's a vertically integrated company, and I've been in geothermal a very long but, but Ormat is the only company that has the capability of doing it all. We acquire land, we have a land department, we have a permitting department, we have our own geologists, geophysicists.
A couple years ago when the price of oil was very high, you couldn't find a drilling rig. We started our own drilling company, so we actually do our own drilling now. We engineer our power plants and we build our power plants. We actually build the equipment, and except for the turbines, we build the Ormat energy converters, the air condensers, and then we also do

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engineering procurement and construct, not only for ourselves but also for other companies around the world. We're currently building a project in New Zealand, for example, for another company, and then we supply equipment to other companies as well.
MR. SCHADE: Alpine County can send us a bill for copying.
MR. HAMES: We might.
MS. WARDLOW: This is just some pictures of our different projects. We're currently drilling in Kenya, we're currently drilling in Guatemala. We're looking at a project in Honduras. As I mentioned, we're building a project in New Zealand, we built projects in the Philippines, and I have to say, unfortunately geothermal is kind of slowing down in the U.S., but internationally geothermal is booming which is exciting for us since we supply equipment to other companies.
So in California we have four complexes. Heber, North Brawley and Ormesa are all in Imperial County. Then we have the project at Mammoth which currently generates about 29 megawatts.
We have a project on the island of Hawaii and it's just outside of the town of Hilo, and then in Nevada, if you drove out Highway 50 or Highway 80 pretty much every little basin that you would go into has a

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1 potential geothermal project, and you'll see some of
2 those are small like 12 megawatts and that's the great
3 thing about Ormat's equipment is we can build easily to
4 the size of the resource.
5 So the great thing about Ormat's equipment, and
6 this is the technology that would be used for the CD IV
7 project, is it's air-cooled binary. So what does that
8 mean? For those of you particularly that are in Inyo
9 County and are familiar with the Koso project, this is
10 very different than the Koso project.
11 So what we do is we take the hot geothermal
12 fluids, the geothermal brine out of the geothermal
13 resource, and we take it and we transfer the heat from
14 the fluid to a mode of fluid, which in this case would
15 be normal pentane. It's a hydrocarbon that boils at
16 about 85 degrees Farenheit, and it's that vaporized
17 pentane that turns the turbine instead of like at Koso
18 where you have a steam turbine where part of the fluid
19 is flashed, so the great thing about this is it's two
20 completely closed systems.
21 The heat from the geothermal fluid is
22 transferred to the n-pentane and then all the geothermal
23 fluid is injected back into a geothermal reservoir. The
24 pentane then goes through the turbine and it's cooled
25 and condensed in an air condenser and then it's

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1 completely close loop system and it comes back through
2 the system, and with the binary system at Mammoth we are
3 not using any water for cooling.
4 At Koso, for example, they use the steam
5 turbine, they use the condensate from the steam turbine
6 as the cooling water supply, so we have no water
7 consumption because we're using air cooling as our
8 cooling mechanism.
9 So just technology-wise, if you're familiar
10 with the geysers in Lake and Sonoma Counties, that's a
11 totally steam dominated resource. Steam flows -- like
12 an artesian water well, steam flows out of the ground,
13 goes directly to the power plant and turns the steam
14 turbine, and then that steam is condensed and that's the
15 water for the water cooling.
16 That's very high temperature and only about
17 eight percent of the world's known geothermal resources
18 are steam only. Then you have Koso and our projects in
19 Imperial County. They're hotter, but they aren't all
20 steam. They're hot water and we flash a percentage of
21 the hot water to steam, and again it goes through a
22 steam turbine and then we do use part of the water
23 sometimes for cooling.
24 At Mammoth our fluids are a little bit cooler
25 here. Our hottest well here is 365 degrees Fahrenheit,

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1 but our average temperature is about 325 degrees, and
2 the great thing about Ormat's technology, back in the
3 '80s when the oil companies were involved, we were
4 looking for hot and big. If it wasn't 400 degrees
5 Fahrenheit and it wasn't 100 megawatts, we didn't even
6 foot with it.
7 So the great thing about Ormat is I show you
8 the project under our Nevada operations, we can go out
9 and we can put in 15 megawatts, we can develop economic
10 projects now that were not economic, and Mammoth was
11 actually the first binary project in California. It was
12 not built by Ormat, but it really set the stage for what
13 could occur in future geothermal development.
14 So we're down here in the lower temperatures.
15 It's a function of your Delta T, the temperature between
16 the ambient and the reservoir, but we're able to develop
17 an economic resource here at Mammoth and that's what
18 we've done over the last 25 years.
19 So our existing project that I mentioned, MP-I,
20 or it's called G-1 sometimes, began operation in 1984.
21 It's generating about seven megawatts. It's on private
22 land. We actually two years ago were looking at
23 replacing this project with a brand new project, so we
24 planned to be in construction two years ago this
25 September.

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1 It went through a lot of public comment and
2 LIUNA, which you'll probably hear from later, actually
3 sued Mono County on that project, so we're two years
4 down the road and we have not replaced this existing
5 project.
6 The other two projects built in 1990, 12 and
7 ten megawatts, again, private and federal land, and
8 they've been operating now almost 25 years.
9 So the existing environmental benefits from
10 this project, the 29 megawatts is about enough
11 electricity for almost 22,000 homes. Geothermal is
12 considered renewable, clean and sustainable. It does
13 qualify for the renewal portfolio standard in California
14 and in Nevada.
15 We don't have any fossil fuels for the
16 generation of our electricity, and we avoid about
17 200,000 tons of CO2 a year with the existing projects
18 alone, and because we're localized generation, we also
19 help to stabilize the grid locally in Mono County and
20 help support national dependence and national security.
21 So Jan talked a little bit about visual
22 impacts, but I'll show you some pictures that actually
23 has low visual impacts. I know a lot of people that go
24 to Mammoth or drive through Mono County, I'll say did
25 you see our geothermal project? And they're like,

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where?
So because we are air-cooled, we don't have a plume from a cooling tower like you do if you're using water cooling and everything is painted green to blend with the environment, so you really would have to know where you're looking, and even the project -- the pipeline that goes up through Basalt Canyon, it's all painted green and blends in with the background out in the forest.
Closed loop, I talked about that, and yes, just like any power plant, we do have fugitive emissions of the n-pentane and that's what Jan talked about. When you look at the amount of fugitive emissions that we plan to permit for operating the plant, in Mono County and Great Basin, it does end up having a significant impact for air quality and that was part of what you've looked at, but we have the best available control technology on the plant and we just can't have everything 100 percent tight in a piping system.
I think the important thing, there's been no documented adverse environmental effects from any of the existing projects in the 28 years of operations, and I'll talk about the specifics. And importantly, I think on the water side for surface and groundwater, there has been no impact to surface features, the town's water

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supply, anything in the whole time that the project has been operating in Mono County.
Obviously this would bring new jobs to Mono County. We currently pay about a million dollars in property taxes to Mono County. We have 23 full-time employees and these are good paying jobs. Our total payroll is about 2.2 million dollars and our payroll taxes are about $180,000 a year.
On the federal lands, we have two wells currently in Basalt Canyon. Again, as Jim mentioned, we have a few other federal wells down at the Casa Diablo complex.
We actually pay royalties to the Bureau of Land Management in California. About 20 percent of that comes back to the county of origin, and then under legislation that was passed back in 2005, the county actually gets 25 percent directly from the BLM, so there is money coming back directly to the county and I know Supervisor Hap Hazard was involved. The original project on federal land actually paid for the new fire station that's down at Crowley. It has a haz-mat team, so we do hire locally construction jobs and I'll tell you in a minute who some of the local companies are.
As I mentioned, we do the engineering, procurement and construction, but we do hire locally to

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the best of our ability. I can vouch for using local lodging and I try and support the economy whenever I'm down in Mammoth, and our local businesses, too. We go into town for lunch and we do support -- there's nothing out at the plant to eat unless you bring your PBJ sandwich.
We've been really involved in the community over the last 25 years in education and cultural activities that are going on in the town.
This project has received a lot of awards over its last 25 years. You can read them for yourself. I think one of the most important things is the California Division of Oil, Gas and Geothermal Resources which oversees the wells that are located on private land, it gives an outstanding lease maintenance award and we won it every year. We didn't win it in 2012 because they changed their procedures on how they get the award, and so we missed out on last year, but it's really important that -- they give one on oil and gas and they give one in geothermal and the fact that we've won it for all these years is important to showing how the State recognizes how clean and green this project is.
So to talk about the facilities, here's 395 heading north. This is the Casa Diablo complex, and so we have the existing MP-I project right here and the

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existing other two power plants right here and then there's an existing pipeline that goes from this complex up here into Basalt Canyon. Here's Shady Rest Park, here's Highway 203, and these two wells were drilled about 2004, 2005 and so they've been producing geothermal fluids from Basalt Canyon for about eight years.
So the new CD IV project is proposed. Here's the SCE substation back up here off Antelope Road, if you're familiar with that, and then there would be additional pipelines built out here to develop additional resource out in the Basalt Canyon area.
So we're proposing a new 33 megawatt binary power plant and the great thing with Ormat's technology is it uses a lot less geothermal brine to get the same amount of electricity out of it, and I actually had to tell our engineers -- in California I said, quit tweaking trying to improve the plant once we submitted the permit application because they're always trying to improve the technology which they've done over the many years they've been building these power plants.
And again, the great thing about this project is the electric transmission line I think is only about 50 yards, so a lot of our projects in Nevada, for example, we have to build ten, 20-mile long transmission

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lines across the Nevada date, and this is great, it's a really short interconnect.

So the BLM is the NEPA lead agency, and as I mentioned, BLM has jurisdiction over minerals on federal lands and then work closely with the Forest Service who has been a NEPA cooperating agency, so anything having to do with the surface, whether it's trees, goshawk, any of the surface related issues, recreation, the BLM works closely with the Forest Service. Whenever they issue a permit, all the mitigation measures having to do with the surface, the Forest Service is involved in those.

So I showed this on the aerial, but this just shows you, again, the existing project location, the pipelines out to the Basalt Canyon area, and we drilled two wells that were approved under exploration projects back about 12 years ago. We drilled two more wells out here. They're not hooked up because they were only exploration wells, and then the pipeline that's discussed that's in Mono County, there's two injection wells proposed down here.

This is old Highway 395 and there's a pipeline for injection that would take fluids from the power plant location through the private parcel down to these injection wells when and if they're drilled.

One thing I want to emphasize. People say, why

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are you proposing so many wells? So if we can get one big boomer hot well, we would drill one well for production and then we would need injection, but as you know, this project has been three-and-a-half years, it takes a long time to permit in California.

So what we did is we laid out a well field that would cover us for the life of the project so that we will only drill the wells we need to support the new power plant and then sometimes you need to drill infill wells, sometimes things happen to wells.

We have locations permitted for the life of the project from a NEPA and CEQA perspective. We still have to go back to the agencies to get the geothermal drilling permit from the BLM, to get the air permit for the well from the Great Basin, but that's why we're showing such a large well field for such a small project because we don't want to have to come back and say oh, my gosh, we need another well and it takes us two more years to permit it, so we're trying to be efficient in how we manage the project going forward.

MS. ARCULARIUS: Should we think of this as a not to exceed the 16 wells, or the --

MS. WARDLOW: Right, we would drill only the wells we need for production and injection and then if we decided we needed more, we would have to go back to

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NEPA and CEQA.

MR. KINGSLEY: And you don't have any injection wells now?

MS. WARDLOW: No, we do. So all the fluids that are produced are injected currently and currently all the injection is done down here at Casa Diablo. There's no injection up here currently at Basalt Canyon.

CHAIRMAN EASTMAN: Why so?

MS. WARDLOW: That's where the injection wells were, so when they drilled the two new Basalt Canyon wells, they were so productive that they're just injecting all those fluids down here.

CHAIRMAN EASTMAN: Is there a reason why you don't reinject the used water in the same vicinity?

MS. WARDLOW: It actually goes into the same reservoir rock, it's just at a different location. So for the project for CD IV, we actually do have wells proposed out here for injection, so one of the pipelines it actually comes from, the new CD IV project is to take fluids back out into the Basalt Canyon area.

CHAIRMAN EASTMAN: Thank you.

MR. KINGSLEY: So there would be more than one pipeline?

MS. WARDLOW: Correct. Currently there's one pipeline going from the two existing wells right here.

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It's basically full. There's no room for additional brine, so there would be an additional brine pipeline bringing fluids from Basalt Canyon, and then an injection pipeline as well into the two wells that are currently proposed for injection, and then these wells are also proposed for injection and the geothermal reservoir model takes all that into account in looking at history maps, looking at what has been historical production, matching the historical production with the reservoir models, and then looking out into the future for the 30 years on what would be the effects of not only the geothermal reservoir, but all the surface features in the area as well.

So historically we had no impact on the migratory deer population, and for those of you that live there, there's a huge deer population that migrate through the area actually over to the Casa Diablo across 395. We've had no impact on the fish hatchery over the last 25 years, and thankfully we don't have any sage grouse habitat in the project area.

Hydrology, there's the Long Valley Hydrologic Advisory Committee. Ormat pays the majority of the bill and USGS Sciences out of Menlo Park are involved in monitoring and reviewing the data. It's also part of the Long Valley Volcanic Hazards Program, so they're

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linked. A lot of the analysis that they do over here is also tied into what we're doing so we're not duplicating effort.

Also, on the committee are Mono County, the BLM and the Forest Service. There's public participation on the committee as well, and there is a thermal subcommittee that's part of that that requires that you sign a confidentiality agreement, and the reason for that is that Ormat shares its production and injection data which is considered confidential and the agencies allow it to be confidential for different periods of time, depending on which agency, but we're open to anybody that wants to come in. The USGS, BLM and Forest Service are all public agencies that have been able to sign the confidentiality agreement and see all that data.

Again, Mammoth Lakes, we've been monitoring over 25 years with no impact to surrounding groundwater or surface water sources.

So the groundwater supply, we've had no impact in 25 years and we've been producing from the Basalt Canyon area for the last eight. Again, with no effect, and again, all of that was modeled in the resource model.

I would like to mention that the town of

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Mammoth Lakes has not been able to sign a confidentiality agreement because they're a public agency. They don't believe that they can sign a confidentiality agreement, but during the EIR/EIS process for this project, we actually did bring up our reservoir engineer that did the geothermal model and they brought their hydrologist over and the town came to the meeting to have the reservoir model presented to them so that they could understand the physics of a geothermal reservoir model. It's much more complicated than a groundwater system because you've got hot water, so we did actually share that with the town even though they hadn't signed the confidentiality agreement.

CHAIRMAN EASTMAN: When you say the town, I think you're referring to --

MS. WARDLOW: I'm sorry, the Water District.

CHAIRMAN EASTMAN: Thank you. They are two separate.

MS. WARDLOW: Yes, thank you for clarifying that. So they were allowed to actually see the model and ask questions of the reservoir engineer who has actually done the model on this project since its inception so that they could fully understand how the reservoir model works, the geology that goes into it.

It's a huge model. It's 20,000 feet deep in

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terms of being able to comprehend the whole system, so it's huge in terms of -- to be able to history match the existing production in the area and to forecast out 30 years, it's a huge model.

MR. JOHNSTON: Was that a public meeting?

MS. WARDLOW: It was at the Long Valley Hydrologic Advisory Committee and the thermal subcommittee.

MR. JOHNSTON: So was it a public meeting?

MS. WARDLOW: No. The Long Valley HAC meetings are public, but not the thermal subcommittee part, but the Water District was invited to participate in that without a confidentiality.

MR. JOHNSTON: When you say the Water District, you mean the Water District board members?

MS. WARDLOW: No. Their hydrologists, their consulting hydrologists came, and staff came.

MR. JOHNSTON: So it wasn't the District then?

MS. WARDLOW: It was the Mammoth community Water District that attended.

MR. JOHNSTON: Staff, but not the board?

MS. WARDLOW: Correct. Interestingly, we can tell how old the water is because you can do tritium analysis of water and that tells you if it pre-dates atomic testing on the planet because if it's younger

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than that, you'll actually have tritium show up in the water supply.

So on drilling, this is a well that was drilled about 25 years ago. This is a typical drilling rig that would be used to drill the production wells. It takes usually 30 to 60 days to drill one well and the wells in Basalt Canyon would be 2000 to 2500 feet deep.

This is one of the wells that's out in Basalt Canyon. So this is actually the completed well and when we drill it, there's actually drilling location and that's reclaimed once it's done and then it's all fenced in. The wells are pumped, they don't flow artesian in that area, so it's necessary to inspect the wells on a daily basis just to make sure everything is okay, including in the winter.

We do have a few underground pipeline crossings out in Basalt Canyon right now and there are a lot proposed for the new project. Again, they're deep enough and they're insulated to prevent melting in the winter to address concerns with snowmobiling and the cross-country skiers, and the engineers can actually model that to see how much insulation that they need to do to insure that there's no melting of the snow on the ground.

So the economic benefits, over 100 million

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1 dollar project that would be built in the county.
2 5.8 million would be retained by Mono County, and then
3 we're estimating 182 construction jobs, and again, six
4 new employees for John to help run the new well field
5 and the new power plant.
6 The current power plant complex has an office
7 and an operating control room and that's where CD IV
8 would be operated from. There would not be a new
9 control room over at the plant. It would be operated
10 from the existing control room.
11 And again, increased revenues to the state,
12 government, property taxes, sales taxes. We buy as much
13 equipment as we can locally. Obviously a lot of
14 equipment to build a power plant couldn't come from the
15 eastern side of the Sierra Nevada's.
16 MR. KINGSLEY: I have a question. Do the
17 employees that you would hire, the six employees, do
18 they have to have a certificate or licenses, or are
19 they -- can it be somebody local that gets those
20 eventually? How does that work?
21 MS. WARDLOW: It can definitely be local. We
22 do require a California driver's license, but they can
23 be trained. Obviously if someone has a mechanical
24 aptitude, that helps, but there isn't any certification
25 required. We can train them, they start out at the

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1 bottom and they grow into the different positions.
2 MR. KINGSLEY: So they don't have to be a power
3 plant operator?
4 MS. WARDLOW: No, we would train them.
5 UNIDENTIFIED SPEAKER: I'll tell you, it does
6 really help us out to hire locally, mainly because when
7 people come in from other areas and get the first
8 winter, they're not likely to stay if they're not ready
9 for it.
10 MS. WARDLOW: I'm sure there's the same problem
11 in Imperial County. After the first summer of 115, they
12 don't want to stay, either.
13 So on construction, I mentioned again the
14 engineering, procurement and construction that Ormat
15 does, and again, we're unique to that. We would supply
16 the Ormat energy converter and our plants are designed
17 specifically to the resource, so we would not take a
18 plant that's designed for, let's say, Nevada at
19 300 degrees and bring it here. It's going to be
20 designed with what the temperatures are and the fluids
21 that we know are in Basalt Canyon.
22 We do the detailed engineering. Our contracts
23 are awarded on quality, price and schedule. We support
24 hiring local contractors and we don't have a preference
25 to union or non-union. We just have a criteria to hire

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1 the best contractor for our project.
2 So these are just some of the companies that
3 are currently supporting us, and as you'll see, we do
4 end up with companies out of Bishop as well. We have
5 companies pretty much coming up and down the eastern
6 Sierra Nevada's, but we do hire -- I know Allen Iron
7 Works is in town, Chuck Villar has done a lot of our
8 work on building well pads and watering the roads. He's
9 in town. Triad Holmes Associates does most of our civil
10 engineering and surveying, so we do definitely try and
11 stay local as much as possible.
12 So just the schedule of where we've been, we
13 are hopeful that you do certify the EIR today. The
14 federal agencies also will -- the Forest Service and the
15 BLM will also be issuing their own records of decision
16 on the project and hopefully that will be out in about a
17 month, so there'll be two separate federal reviews and
18 approvals as well and then hopefully we'll be finishing
19 up this summer or early fall.
20 Thank you very much for your time. If you have
21 technical questions I will call up John, and if you
22 don't I will try to answer them.
23 CHAIRMAN EASTMAN: Any questions from the
24 Board?
25 MS. RAWSON: I have one. The size of pipe that

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1 you're going to use, the new pipe, is it going to be
2 identical to the one you have now because you're going
3 to have more wells producing in there, or is it going to
4 be a bigger size?
5 MS. WARDLOW: So in terms of fluid, we're
6 planning on an additional 6000 gallons per minute and I
7 think -- is that about what we're using now?
8 UNIDENTIFIED SPEAKER: Yeah.
9 MS. WARDLOW: For example, the wells that are
10 out here on their own, this would be a small pipeline,
11 so maybe eight inches or 12 inches, depending on how big
12 the well is, so as you bring fluid together, then the
13 pipeline gets bigger, but then the main pipeline that
14 brings all the fluid across would be about the size as
15 the one that's out there now which I think is 24 inches,
16 and it's insulated, too, so it looks bigger.
17 MS. RAWSON: And the smaller ones at the top,
18 would they be on the ground or underground?
19 MS. WARDLOW: These are above ground, so the
20 road crossings I showed are underground, and then it's
21 proposed that there would be different sections along
22 the pipeline corridor to allow deer migration.
23 Currently the deer are able to get over the one
24 single pipeline quite easily. It's interesting, that's
25 been a discussion for years is how high, how far can the

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deer jump. How far apart do the pipelines have to be, how high, how low, but it is proposed that we would have different sections that would be underground of the new pipeline so that the deer could get across the existing ones, and then there's a mitigation measure that if -- we actually have someone that monitors the deer regularly that if there is a problem with the deer getting over, we would go up and dig underneath to allow them to go underneath the pipeline.

MS. RAWSON: A pathway?

MS. WARDLOW: A pathway, and on this side of the freeway, there's a location right here that's proposed that it would be all elevated because the deer come across through here. They like the roads and they like the hot springs, so the deer migrate through this area, so there's a pipeline right in here that would actually be elevated so that they can just get right underneath that.

MS. RAWSON: Thank you.

MS. WARDLOW: Right now they just kind of wander through the plants and they wander along the fence and they just kind of hang out.

CHAIRMAN EASTMAN: Any more questions?

MR. KINGSLEY: Could you just talk about the monitoring? You said that you've been doing water

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monitoring for the water supply at Mammoth Lakes for the last however many years. Could you just talk about how you're doing that and would that just continue, or would you increase, or --

MS. WARDLOW: So I actually would like to bring up Gene Suemnich if I could. He's a geologist that's been involved with not only drilling in this area since the '80s, but he's very involved and actually did the technical write-up for the monitoring for the EIS, but it is planned that the Long Valley HAC would make decisions about what additional monitoring needs to be added, whether it's additional surface or groundwater location, additional monitoring wells, whatever that the HAC would make the decisions on that based on the input from the USGS geologists on what they recommend we should do. But if it's all right, I would like to introduce Gene Suemnich to address your specific question about existing monitoring that's been done.

MR. SUEMNICH: I am Gene Suemnich. My background in the Mammoth area, specifically Long Valley, extends back to 1974. The well picture that you saw being drilled was a well that I sighted and drilled. I'm working as a consultant for Ormat, although in the not so distant past I was exploration development manager for Ormat.

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The Hydrology Advisory Committee has been monitoring all of the development in Long Valley, as Charlene said, for the last 25 years. It includes an extensive network of springs, wells, pressure monitoring wells within the geothermal system and a limited number of groundwater wells.

The number was larger before. The number of groundwater monitoring wells has shown very little change over a period of time and hence were dropped from the USGS monitoring network.

Part of the funding, as Charlene mentioned, is from Ormat. Part of the funding is also from the USGS, so if their funding is decreased or their support declines, then they're not able to cover those same amounts.

The Hydrologic Advisory Committee regularly reviews every year the wells and springs that are being monitored and adding on to that monitoring program would, of course, have a financial impact. That's the desired effect.

CHAIRMAN EASTMAN: Larry, did you have a question?

MR. JOHNSTON: I had a question for Charlene.

CHAIRMAN EASTMAN: Gene, let's take advantage of you while you're here. You've got several years

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worth of experience in the area. Can you share with us, it's my understanding that the water system in the Mammoth Lakes area, let's say in that basin, from the Lakes basin down to 395 is a fracture system; is that correct?

MR. SUEMNICH: No, it's a confined and unconfined aquifer system. A little bit complicated, but bear with me for a moment.

All of the material in the Mammoth groundwater basin is younger geologically, on the age of like less than 200,000 years. The geothermal system exists in rocks that are 600 to 700,000 years old, and there's a separation between those two units.

All of the groundwater that's produced within the basin itself comes from a mixture of volcanic rocks and glacial till because the area has begin glaciated over last 200,000 years, so that mixture of porous and permeable sediments and volcanic rocks and what the groundwater basin source is and the source of groundwater for the community water district.

The geothermal system exists in fractured rocks at greater depth, so the aggregate thickness of the aquifer -- it thickens as you get farther west, thins as you get over to the east by Casa Diablo, so by the time you're at Casa Diablo, the shallow groundwater system

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and the outflow from the geothermal system is being sort of commingled and the deeper source of the geothermal system is actually farther west at a greater depth.

So say, for instance, the wells at Casa Diablo produce from about a 600-foot depth, an injection takes place at about 1800 feet, so you're injecting into a deeper geologic formation that's actually the source reservoir for the geothermal system.

CHAIRMAN EASTMAN: And hotter rock?

MR. SUEMNICH: Yes, and --

CHAIRMAN EASTMAN: I don't want to take your time or anybody else's, but I do have one more question and that is, the Water District is concerned that either the extraction or the reinjection of the used water might interfere with your ability for groundwater drilling for their customers in the Mammoth Lakes area. Can you tell us if that's true or not in your opinion?

MR. SUEMNICH: The thickness of the aquifer itself that they produce is thicker on the west side of Mammoth Lakes. The aggregate thickness is something a little less than 1000 feet.

The rocks that I mentioned below that are essentially separating the geothermal reservoir from that aquifer system is thicker than the aggregate thickness of the aquifer itself, and they're altered,

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older, impermeable and less likely to allow communication.

What's the evidence of that? Well, a geothermal system only exists if it's separated from all that cold groundwater influence. How do we know that? Well, a lot of the wells and the exploration wells have been drilled around the Caldera are very drastically affected by cold groundwater excursion, so the whole objective behind producing the geothermal system is to avoid any of that cold groundwater interference.

Through 25 years of production history, there's been no evidence of concern -- no evidence of cold groundwater influx, no real changes in chemistry. All of those things would be monitored by Ormat specifically because if their production begins to degrade, their ability to generate electricity begins to degrade and their ability to make money on the project begins to degrade. There's been no evidence of that.

The move into the western part of the Caldera by Mammoth Lakes took place actually about eight years ago, and as Charlene mentioned, there are two wells that have been producing in that area for all that period of time. There's been no evidence of impacts and no evidence of drastic changes.

Most of the wells that will be drilled are out

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of the Mammoth groundwater basin, so the actual section that the Water District produces from is not penetrated at all. Many of the wells -- many of the concerns that are raised were about well integrity, so how do you assure that you're not bringing up geothermal fluids to impact the water or allowing cold groundwater to get into the deeper geothermal reservoir. In other words, flow downwards.

The answer is that all of the wells are produced -- excuse me, permitted through the California Division of Oil and Gas and Geothermal Resources and the entire whole reason that they're so carefully regulated is to prevent any shallow groundwater interference and prevent any shallow groundwater contamination, so they're not completed like groundwater wells. There's a continuous string of casing and continuous cement all the way to the surface for the very specific reason of excluding any cold groundwater interference.

CHAIRMAN EASTMAN: Thank you. Any other questions of Gene from the Board?

MR. JOHNSTON: How far are the wells apart?

MR. SUEMNICH: Forgive me, I'm quoting off the top of my head, but the nearest would be, say, about a mile-and-a-half away.

MR. JOHNSTON: And do you know the depth of

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that well or those wells?

MR. SUEMNICH: Excuse me, I'll consult my notes. I should remember, but I don't.

MR. JOHNSTON: So they're shallow --

MR. SUEMNICH: Yes. Most of the shallow groundwater wells are less than 500, 600 feet deep, and forgive me, I can get you the exact numbers.

MR. JOHNSTON: But that's the range you're talking about?

MR. SUEMNICH: Yes, and the range of the depth to penetrate the two wells that were drilled in the western part of the Caldera around the Mammoth Lakes area, the two new wells are about 1700 to 1800 feet deep, so there's a considerable separation between the shallow groundwater system and the deeper system.

CHAIRMAN EASTMAN: Great. Gene, thank you. Larry, you had a question of Charlene?

MR. JOHNSTON: Yeah, just a public disclosure. Thank you for your presentation. Have you contacted any of the Board members to set up private meetings with any of us?

MS. WARDLOW: With this Board?

MR. JOHNSTON: Yes.

MS. WARDLOW: Yes, I did. I e-mailed you and Supervisor Hunt and met with Mr. Eastman to explain the

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CD IV project.
MR. JOHNSTON: And you met with Mr. Eastman on this?
MS. WARDLOW: Yes.
MR. JOHNSTON: And I had a question about the prime consultant which is listed as Environmental Science Associates; is that correct?
UNIDENTIFIED SPEAKER: Yes.
MR. JOHNSTON: Who is your contract with?
UNIDENTIFIED SPEAKER: So we have a third party contract, so our contract is directly with Ormat, but it's through a Memorandum of Understanding between the Great Basin BLM and Forest Service, so all our direction for the EIR/EIS comes from the agencies and not from Ormat, and that includes what information and communications are done with Ormat regarding draft documents and assessment of technical nature.
MR. JOHNSTON: And you subcontracted with the other subcontractors?
UNIDENTIFIED SPEAKER: Yes.
MR. JOHNSTON: And that was directly with them?
UNIDENTIFIED SPEAKER: That was a direct ESA to subcontractor arrangement.
MR. JOHNSTON: And then it talks about the lead agency. It says list of preparers. How much

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involvement did each of those -- in a general sense, how much involvement did each of those preparers prepare anything, or did they just review? For example, Collin Reinhardt.
UNIDENTIFIED SPEAKER: Each of the lead agencies had a project manager, so Jan Sudomier for the Great Basin, Collin Reinhardt for BLM, and Sara Tomski for the Forest Service, and we had biweekly calls to discuss and they played an integral role in preparation of good portions of the document.
MR. JOHNSTON: They were reviewers, not preparers, though?
UNIDENTIFIED SPEAKER: It varied. They prepared some sections. It depended. ESA did most of the preparation and then the individual resource specialist for the agencies did review and comment and provided evidence in a general sense. There was more interaction than that.
MR. JOHNSTON: Thank you. And then the item today is consideration of the final EIR, and I understand the participation from Charlene, but who is actually going to present the EIR to us?
MR. SCHADE: Great Basin staff.
MR. JOHNSTON: So that was an introduction from Ormat's perspective as the applicant?

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MR. SCHADE: Yes. Any kind of questions on the document itself, any conclusion of the document should be directed to Mike through Great Basin staff because, as he mentioned, he was working for the agencies.
MR. JOHNSTON: I guess the presentation thus far has been from the orientation of the applicant and not a neutral party, correct? So we would have --
MR. SCHADE: Would you like Mike to talk about things like that?
MR. JOHNSTON: I'm wondering how you want to proceed here basically. Is this the end of the presentation, or do we have more?
MR. SCHADE: This is the end of staff presentation, but Mike is here to answer questions and I thought more than likely to respond to issues raised by the public if the Board doesn't have any more. We're here to respond as you'd like.
MR. JOHNSTON: So there is no -- you haven't scheduled a presentation, for example, going down each of the items of the impact areas in the EIR?
MR. SCHADE: No.
MR. JOHNSTON: Okay.
CHAIRMAN EASTMAN: Since it was brought up, Stacey, do you have an opinion, a legal opinion on whether it was appropriate or inappropriate for me to

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meet with Ormat?
MS. SIMON: You know, you're a public official. You represent the public, including Ormat, including any project opponents. They do have a right to contact you.
I think it's a best practice to disclose that contact on the record, which has been done, and in particular if there is any piece of information or knowledge that you gained from that contact which is persuasive in your decision making, something that has influenced the decision that you're going to make, that should be disclosed.
CHAIRMAN EASTMAN: Great. Thank you.
MS. ARCULARIUS: I will disclose that I was contacted by the Mammoth Community Water District and nothing they said influenced me. I told them I needed to participate in the public hearing first.
MR. KINGSLEY: And same for me. They contacted me and I had a short phone conversation.
CHAIRMAN EASTMAN: Thank you.
MS. SUDOMIER: If I could add one additional thing. Jan with the Air District again. I was very involved with initial plans with the air pollution and how the air pollution calculations were made and that we used Imperial County and such.
Forest Service and BLM have experts on Tuhy

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Chub and other things and the whole analysis for the 106 project for the Native American things that might have been influenced with this project on the Native American sites, there are experts in BLM and I let them do that, but I was involved with air pollution. I mean, to directly answer your question.

MR. JOHNSTON: The question I had is you listed Bernadette Levato as a preparer of this environmental document.

MS. SUDOMIER: She was involved initially --

MR. JOHNSTON: I don't think she actually prepared anything. Probably she had staff review it for her. I'm just guessing.

MS. SUDOMIER: Initially she was the planner and the motivator, but she bowed out very early on, you're right, and now she's of course moved to --

MR. JOHNSTON: I'm just clarifying that when it says list of preparers, probably a lot of those preparers on the BLM and Forest Service were actually not preparers, they were reviewers.

MS. SUDOMIER: Indeed.

MR. JOHNSTON: Okay, thank you.

CHAIRMAN EASTMAN: We're going to -- unless there's any other questions at this time from the Board, we're going to go ahead and move on and call for public

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testimony.

Is there anyone from the public who would wish to give public testimony today? Please come to the podium and state your name for the record, please.

MR. DRURY: Thank you, Honorable Chairman, members of the Board. My name is Richard Drury and I'm a lawyer with the firm of Lozeau, Drury representing Bishop residents Russell Covington, Robert Moore, Randy Sipes, and Randy Sipes, Jr., all of whom live in Bishop, as well as the Laborers International Union of North America, Local 783.

We submitted comments just this morning, and first off I'd like to apologize for the late submittal, but the final EIR was only released on July 5th. We had our experts working around-the-clock to try to get these comments done in time to commit today. The final EIR period was only ten or 12 days total, so that was as fast as we could humanly get it done.

And we have comments submitted along with our letter from expert hydro geologist Heidi Rhymes who is a professional geologist, wildlife biologist Dr. Sean Smallwood, and as atmospheric scientist Dr. James Clark. They all believe that there are significant issues from this project, environmental impacts that have not been adequately analyzed or mitigated.

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I'll get into that in a moment, but first off, I'd like to address some issues that have just arisen this morning which are somewhat concerning to me. One is whether this body is the proper CEQA lead agency, and I would submit that it is not.

Under CEQA, the lead agency is supposed to be an agency of general jurisdiction which is typically a county or a city. The reason for that is because counties and cities can mitigate and have jurisdiction over everything, air quality, water quality, land, traffic, et cetera, whereas an Air District such as yourself has limited jurisdiction, and your staff has said they really look to be air quality issues and for the other issues, they defer to others.

Well, a CEQA lead agency is supposed to, as a matter of law, look at everything, look at the whole project, and that's why it is extremely unusual to see an Air District as a CEQA lead agency unless it's reviewing its own action, for example, its own adoption of air quality rule that may have impacts on economy, et cetera.

So we believed two years ago when the Air District learned that the county had permitting authority over the project, the Air District had a duty under CEQA to seed lead agency status to the county, not

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to the Air District. That's my first kind of threshold issue here.

Second threshold issue is, it appears that there is an extremely close relationship between the Air District staff and Ormat to the extent where Air District staff has essentially allowed Ormat to present almost the entire EIR, make the presentation to this Board, to summarize the impacts of the project, and to have an extremely large role in preparing the EIR.

Just last week, the Fifth District Court of Appeals in the case of Siri vs. Superior Court held that the lead agency is legally obligated to have an adversarial relationship with the project proponent until the time of project approval; that the lead agency is essentially supposed to hold the project proponent's feet to the fire, make sure that the applicant complies with everything, air rules, water rules, hazardous materials rules, and is not supposed to be in a cooperative relationship with them. Not that they can't be nice and cordial, but it's essentially a watchdog role, and that, it appears from today's presentation, has not occurred, so I would submit for this reason alone the Air District shouldn't get beyond the threshold issue and should make an initial determination that their District is the wrong lead agency, the county

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1 should take over the lead agency role in CEQA, and take
2 no further action on reviewing the EIR. That's my
3 first point.
4 If the Air District decides to take on the role
5 of lead agency and proceed with review and certification
6 of the EIR, I would submit that the EIR has several
7 fundamental flaws and I'd like to summarize some of
8 those. We submitted detailed comments several months
9 ago on the draft EIR. Today we submitted additional
10 comments on the final EIR.
11 With the Air District's gambit of air pollution
12 control agency, first off, I'd like to point out this
13 project admits -- the EIR admits that the project will
14 generate 410 pounds per day of VOC emissions, volatile
15 organic compounds, namely n-pentane, and that's
16 primarily from leaks.
17 Now, under the Federal Clean Air Act and your
18 own Air District rules, the significant threshold for a
19 major new source that triggers what's called new source
20 review is 250 pounds per day, so this project at
21 410 pounds per day is far above the major new source
22 significant threshold of 250 pounds per day, and I'd
23 like to point out, I've been doing this kind of work for
24 25 years. It's very rare to find a project that exceeds
25 NSR thresholds in the State of California.

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1 Our experts have pointed out that there is
2 technology available. Leaks primarily come from valves
3 and flanges where pipes join and where valves happen.
4 There is leak-less technology. I've been involved in
5 cases for the Sierra Club and other environmental
6 organizations where we force refineries to put in these
7 leak-less valves.
8 They work. They're in use in the State of
9 California and elsewhere throughout the country. They
10 bring your leak emissions down to almost zero. The
11 company has refused to install those valves to make them
12 part of the project and the Air District has refused to
13 impose them as a mitigation measure even though it is
14 feasible.
15 Once you trigger those NSR thresholds, the
16 250 pounds per day, federal law requires what's called
17 best available control technology, BACT, and that means
18 the best technology that is available anywhere in the
19 country regardless of cost, so it doesn't matter how
20 much it costs. All that matters is, is the technology
21 available and is it in use, and here the answer is yes.
22 Therefore, as a matter of law under the Clean Air Act
23 and CEQA, we believe that technology is legally
24 required.
25 Also, I'd like to talk about hydrogen sulfide

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1 risks. Two experts, Dr. Petra Pless and Dr. James Clark
2 have concluded that this project may have significant
3 hydrogen sulfide emissions. Hydrogen sulfide, or H2S,
4 more commonly known as sour gas, is a toxic chemical and
5 it's toxic at very low levels, below the odor threshold,
6 so it's toxic at levels before you can smell it.
7 The EIR itself admits that this project may
8 cause leaks that could last up to 30 days. That's a
9 very long leak of H2S.
10 Now, as you know, I'm representing laborers,
11 basically guys who dig ditches and work in the soil.
12 Our experts have concluded that studies show that it's
13 the workers who are most affected by hydrogen sulfide
14 because they're right there on site where those
15 emissions may be occurring, digging the trenches and the
16 ditches where those emissions can happen.
17 MR. JOHNSTON: Is H2S lighter or heavier than
18 air?
19 MR. DRURY: It is heavier, which also makes it
20 more dangerous because it travels at ground level and
21 can affect residents fairly far away because it can
22 travel in a mass at ground level. It could also affect,
23 our experts believe, the Shady Rest recreation area
24 nearby to where these wells are being dug. I think
25 there are eight well sites there around the Shady Rest

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1 recreation area, so the workers, the nearby residents
2 could be affected by hydrogen sulfide.
3 We believe that the EIR dismissed that impact
4 as insignificant without adequate analysis and without
5 adequate mitigation. The EIR says that if emissions
6 exceed 30 parts per billion, then the developer would be
7 required to take action, but our experts have submitted
8 evidence that adverse effects happen at eight parts per
9 billion, so you can conceivably have a 30 day leak of
10 30 parts per billion, nothing happens, and have health
11 impacts on workers and nearby residents.
12 I don't know if there's a time limit on --
13 CHAIRMAN EASTMAN: You're fine.
14 MR. JOHNSTON: Are you summarizing your whole
15 letter?
16 MR. DRURY: No, I'm just trying to highlight a
17 couple of points here. I'm certainly not going to
18 summarize the whole letter.
19 One additional point I'd like to mention is
20 geothermal temperatures. The existing well fields have
21 already been shown to reduce geothermal temperatures
22 between the years of 1985 to 1998. This is going to
23 essentially double the amount of heat that's being taken
24 out of that reservoir.
25 A geothermal plant essentially works by taking

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1 heat out of that geothermal reservoir and using it to
2 spin vaporize gases and then spin turbines. This is
3 going to double the amount of heat being removed from
4 the reservoir. There's already been significant
5 reductions in the geothermal heat in the reservoir.
6 This impact was dismissed, and I think there was some
7 mention of it today --
8 MR. JOHNSTON: Why is that an impact?
9 MR. DRURY: Because the geothermal reservoir is
10 an important resource in itself in that it provides heat
11 to things like the Hot Creek fish hatchery, and also
12 it's an important resource I think for recreational uses
13 which are important uses as well.
14 MR. JOHNSTON: The heat in the ground is
15 important for recreational uses?
16 MR. DRURY: Because it heats things. It can
17 heat the hot springs, it can heat -- the Hot Creek
18 receives heat and there's been noticeable reductions in
19 heat into the Hot Creek itself.
20 MR. JOHNSTON: Anecdotally they closed the hot
21 springs at the Forest Service site because it's too hot.
22 CHAIRMAN EASTMAN: Yeah, I'd like to let
23 Richard finish his presentation and then if we have
24 questions for you, we can ask them.
25 MR. JOHNSTON: I just don't like to have

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1 information thrown out that's not quite factual.
2 MR. DRURY: Well, it is factual that the heat
3 has been reduced through the existing removal of
4 geothermal resources. Whether the Board thinks that's
5 important or not --
6 MR. JOHNSTON: You said it was an impact.
7 MR. DRURY: It is an impact. It's an impact on
8 the temperature of the geothermal resource, and
9 generally it's a significant impact if the heat is being
10 removed at a faster rate than it can be replenished.
11 The EIR dismisses that impact based on what
12 they call a secret proprietary study. Today you heard
13 that that study was shown to people who were -- certain
14 staff members who were willing to sign a confidentiality
15 agreement.
16 CEQA prohibits the use of secret studies.
17 Under CEQA, if the EIR is going to rely on a study for a
18 conclusion, that study has to be made public, part of
19 the public record, and Ormat has refused to do that
20 because of some secret proprietary study or methodology.
21 That's disallowed under CEQA.
22 Second, I'd like to talk briefly about
23 groundwater contamination. Our expert, Heidi Rhymes,
24 who is a professional geologist has stated that there
25 has been hazardous materials, leaks that have been

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1 documented for a period of five years from the existing
2 facilities and that that is a significant impact.
3 I understand there's been contrary testimony
4 today. I am not a geologist by training, but it appears
5 that there is a significant difference in the record as
6 to whether there's an impact here. I think the impact
7 at the very least should have additional research and a
8 supplemental EIR to clarify this uncertainty because
9 there are expert professional geologists who believe
10 that there is a significant risk of hazardous materials
11 entering the drinking water, or the fresh water
12 aquifers.
13 And finally, there are several places where the
14 EIR relies on deferred mitigation, and what deferred
15 mitigation means is we have a significant impact. We
16 promise we're going to mitigate it, but we don't know
17 how yet, and so we'll think about that later. We'll
18 develop the measures later, and again, CEQA prohibits
19 deferred mitigation.
20 In this case there's deferred mitigation for
21 fugitive DOC's, sour gas emissions, mule deer migration
22 impacts, hazardous material releases, and visual impacts
23 all of which are relying on mitigation measures that
24 will be developed later. Under CEQA, those mitigation
25 measures have to be made part of the ERI so that the

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1 public can analyze them, so that you can analyze them
2 and determine if they're indeed adequate to mitigate the
3 impacts to the level of insignificance. Without seeing
4 those measures, there's no way that the public can make
5 that determination.
6 Again, for that reason we submit that the EIR
7 ought to be sent back to staff for a supplemental EIR so
8 that those mitigation measures can be fleshed out.
9 Thank you, and I'd be happy to take any
10 questions for you.
11 CHAIRMAN EASTMAN: Thank you, Richard. Any
12 questions of Richard?
13 MR. JOHNSTON: So you don't represent anybody
14 that lives in Mono County?
15 MR. DRURY: The Laborer's Union has members who
16 live in Bishop which is only about 30 miles away, but I
17 believe not in Mono County.
18 MR. JOHNSTON: It's about 40. It's Mono
19 County, not Mawn-o. So you don't represent anybody that
20 lives in Mono County that would be directly affected by
21 this?
22 MR. DRURY: Correct, although the named members
23 that I mentioned, Mr. Covington, Mr. Sipes, travel to
24 Mammoth quite often. They fish there, they hunt there.
25 MR. JOHNSTON: Do they work there?

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MR. DRURY: They have worked there.
MR. JOHNSTON: Under a union contract?
MR. DRURY: They are union members, so I assume there was a union contract when they were working --
MR. JOHNSTON: You don't know for sure?
MR. DRURY: Yeah, I don't know for sure, but I have spoken with them and I do know they fish in these streams, they hunt in this area, they recreate in the area, and the Courts have held that unions have standing to bring CEQA concerns because even as Ormat has submitted, one of the positive impacts of the project is creation of economic opportunities, employment opportunities, and we believe that those employment opportunities are relevant, as does Ormat, but also --
MR. JOHNSTON: Why would you want to delay then those opportunities by your statements you said? You want to have a supplemental EIR, you want to extend the review process, you haven't had time to look at certain studies. Why would you want to delay that if that is indeed your goal?
MR. DRURY: Because I believe the agency and Ormat have failed to comply with CEQA which means this project will have unacceptable environmental impacts. I'm an environmental lawyer. I represent the Sierra Club, the Audubon Society, the League to Save Lake

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Tahoe, and I sometimes represent labor unions.
When I get involved in a case, I'm looking solely at the environmental impacts, whether it's the Clean Air Act or CEQA or the Clean Water Act, and this project hasn't complied with those impacts.
MR. JOHNSTON: But you stated that the purpose was to create economic good, jobs, but yet, your tactic is to delay those good jobs potentially.
MR. DRURY: No, our tactic is to --
MR. JOHNSTON: It seems like it's not the same -- you are doing one thing and then you're saying another.
MR. DRURY: Our tactic is to make sure that the agency and the developer comply with all of the environmental laws. If they do that, we don't have an issue here.
Now, Ormat has brought up --
MR. JOHNSTON: It has nothing to do with unionization of the project?
MR. DRURY: Personally, I'm an environmental lawyer. If my client asks me to look at a project, I determine does it comply with environmental law or doesn't it. If it does, I tell them there's not an issue here. If it doesn't, I say there's an issue.
These members, Mr. Covington, Mr. Sipes, they

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may be union members, true, but they're people. They breathe the air like anyone else. There's no question if they were Sierra Club members, and I don't know, they might be, there would be no question as to their standing to protect the air they breathe, the streams that they fish in, and the areas where they hunt, and they don't lose the right to a clean environment by virtue of the fact that they happen to also be union members.
The Courts have held that people are people. Whether they're a union member or a Sierra Club member, they're entitled to have the agency and the developer comply with the law.
MR. JOHNSTON: Well, I just think your motives are suspect. That's my thought.
CHAIRMAN EASTMAN: Okay, any other questions?
MR. HAMES: I have a question. The geothermal, you're implying that it's actually going to be cooled by this project --
MR. DRURY: Oh, there's no question.
MR. HAMES: But if I may finish, and like Larry mentioned, the Hot Creek has been closed to the public because the temperature has gone up during the time of this project, so how can you have that kind of logic connection when the temperature has gone up where most

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recreation of people in the area were famous for going to Hot Creek to use that hot water. They've been denied going there now.
MR. DRURY: Now you're getting into hydro geology, which I'm not an expert, but from what I understand reading the expert's letter, Heidi Rhymes, apparently there has been elevation in the Caldera, I believe it's called, which has brought the heat higher up towards the water.
She believes, and I think most experts believe, that that was based on a phenomenon that is not likely to recur. However, the way these plants work is they essentially are sucking heat out of the geothermal reservoir, so the heat is taken out, it's used to heat up gases and then cold brine is reinjected into the reservoir, so there's no question that the way it works is by taking heat out.
MR. HAMES: So your argument is that the air -- that once it's gone to the air and it's been cooled, we're going to cool that aquifer that's heated by the mantle by that little bit of air temperature? Do you really believe that's going to really happen?
MR. DRURY: Yes. Actually, it's been document to have happened from '95 to '98, there was a measured reduction in the temperature of the geothermal

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reservoir.
MR. HAMES: And that couldn't be just because of the earth has changed for those two weeks or those two months that they measured that?
MR. DRURY: No, it was '85 through '98, so we're talking about a 13 year period.
MR. HAMES: And how long has Hot Creek been closed?
MR. JOHNSTON: It's been a couple of years.
MR. HAMES: At least five that I'm aware of, and in '85 I was going there on a yearly basis. Every season we'd go there at the end of the season, but not any more, and the reason why is the Forest Service has deemed it too dangerous because the temperatures have raised.
They're not saying that it has cooled, they say it has raised, and now it's too dangerous for the public to even go into the Hot Creek area, so I'm kind of having a real disconnect how you can tell me that's going to lower it where the obvious evidence that I have is that it's actually made it more dangerous in the time frame.
MR. DRURY: Well, there's no question that the way these plants work is by sucking a very significant amount of heat out of the earth, out of the geothermal

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reservoir, and what you want to do is make sure your extraction rate is no faster than the replenishment rate because the earth's mantle is heating the reservoir as you're pulling material out. When you exceed that extraction rate, you can have a fairly precipitous drop in the reservoir temperature.
Our experts believe that that in fact did happen between '85 and '98 and that there was some type of geological episode that occurred that heated it after that time period which is not likely to repeat itself, but this project is going to be doubling the amount of heat withdrawal from that reservoir.
MR. HAMES: Wasn't that also the time when Mammoth was worried about blowing up and having an earthquake? Wasn't that the same time frame --
MR. JOHNSTON: We're still worried about that.
MR. HAMES: But there was a time when condos dropped 20 percent of their value and that was during that time frame.
MR. DRURY: That's correct, and that's actually another issue I didn't get into today, but our expert believes that this geothermal plant has the potential to induce seismicity as well, a seismic activity. There are very recent studies showing that geothermal plants have in fact caused earthquakes of magnitude 5.1.

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MR. JOHNSTON: From extractive methods or from reinjections?
MR. DRURY: They believe it's primarily from reinjection, but this plant has both extraction and reinjection. We believe that that has not been adequately analyzed or mitigated in the entire EIR.
MS. ARCULARIUS: Excuse me, I think we have lots of skills here, but we don't have skills to predict the unknown or past or future occurrences that occur naturally, so I appreciate the debate, but we're here to deal with facts, and beliefs are not going to enter into my decision making or "there could be's," so thank you.
MR. DRURY: I'm not talking about beliefs, I'm talking about expert opinion. We have Ph.D. hydro geologists, atmospheric scientists who have submitted comments on the record. It's just not conjecture, and under CEQA, expert testimony is substantial evidence under CEQA.
CHAIRMAN EASTMAN: Thank you, sir. Appreciate it. Ted, I have a couple questions of Stacey if I could that were brought forward by this gentleman.
MR. SCHADE: Absolutely.
CHAIRMAN EASTMAN: Are we comfortable that we can be the CEQA lead agency?
MS. SIMON: What Mr. Drury is referring to is

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the process of selecting a lead agency under CEQA. I think you heard the history from staff regarding the unknown county involvement at the time that Great Basin took over lead agency status.
There's a regulation -- unfortunately, I just came back last night from vacation and found out I was coming here today, so I don't have my CEQA book with me. There's a regulation that talks about determining the correct lead agency.
There is a preference, Mr. Drury is correct, for agencies of general jurisdiction, but that kicks in -- my recollection is that it kicks in when other factors are not present, and those other factors include which agency is going to be acting first, because obviously you need a certified document prior to acting, so if you have an order of action, someone who is not an agency, an entity that's not an agency of general jurisdiction may need to be a lead agency to certify that document because they are issuing the first approval for the project.
You have other factors such as which agency has primary responsibility or more significant responsibility, and then finally, you have an ability for agencies to agree amongst themselves that one or the other will serve as the lead agency, and I'd be happy

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again to get my hands on that regulation if the Board would like.

CHAIRMAN EASTMAN: That's fine. I just want to make sure we're not breaking new ground.

MR. SCHADE: And we reviewed that section of the CEQA guidelines very carefully when this decision was made. As Stacey said, there's some preferences, but not requirements, and I was pretty careful to review that. I don't remember if it was with Marshal or -- we're pretty convinced that we are allowed to be the lead agency.

MR. JOHNSTON: Good. And if there's disagreement, I understand --

MR. SCHADE: There's a process where if you can't agree with the lead agent, you're fighting over the agency status, then there's a process, but that was not the case here. There was a discussion and we made the decision to go ahead.

CHAIRMAN EASTMAN: Thank you. One more question. Is there -- maybe two more, I'm sorry, Stacey. It seems like there was a statement made that generally said that there was an extremely close relationship between the Great Basin Air Pollution Control District and Ormat. Is that pretty subjective?

MS. SIMON: You could interpret it as being

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subjective. I think that's a fair interpretation.

CHAIRMAN EASTMAN: Thank you. That's enough for right now. Thank you. Anyone else?

MS. ARCULARIUS: I'd just like to point out that certainly we have to look at the design of the project and how that all falls under CEQA with our responsibility here, but even under number seven in our staff report, this certification does not represent approval or disapproval of the project itself and it does not constitute final action on the project by the District.

The District has no ability to approve or disapprove this project, and under CEQA, and maybe, Stacey, it would be important for you to just review what our responsibilities are in determining that this entire EIR and the process used is adequate.

I don't think we're tasked with it being absolutely perfect because we've all been involved in this enough that there is a point to determine if it's adequate and reasonable to make the kind of determinations that we have to make as a decision making body on the over one thousand pages of information that we've reviewed.

MS. SIMON: Sure. I'm happy to do that. I'm also wondering if there is more public comment and you

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wanted me to do this now?

MS. ARCULARIUS: I just want to get this idea of us being the lead agency and what our role in that is.

MS. SIMON: Yes. So the actual permit that the District is issuing is the ATC related to the emissions from the drilling and the ultimate facility operation. You are, however, as the lead agency responsible for certifying the entire EIR, and so that means reviewing and being satisfied that the entire EIR has served its function as a decision making tool for the public and for yourselves, that it has provided the analysis and the information that you need in order to understand the impacts of the project and to make a reasoned decision on it.

As Board Member Arcularius pointed out, it does not have to be perfect. Certainly experts disagree when there are scientific issues at stake and CEQA allows for that, the Courts allow for that, as long as there's several evidence in the record that supports the expert opinion which is supporting your determination.

MS. ARCULARIUS: Thank you.

CHAIRMAN EASTMAN: Is there any other members of the public that would like to give public testimony today?

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MR. PETERSON: I'm John Peterson, I'm with the Mammoth Community Water District. We have submitted written comments.

The Water District, to summarize these comments, has concern about the analysis of the impact to the shallow or the groundwater basin that we supply water to the community of Mammoth Lakes, and at this juncture and what's been a very long process out there at Casa Diablo, at this point they want to double the production out there and there will be a decision made today as to closing the administrative record for CEQA on this particular project.

The Water District, and it's very detailed in our letter, is concerned that there are issues that haven't been resolved in relation to those impacts and there's been some discussion by members of Ormat. Charlene and John came and met with us last week, but we want to ask you that you put this over because with certification of this, there's no recognition of impacts, there's no -- actually, it goes on to say that they went even further and looked if it would benefit the human environment, and they didn't think it would benefit the human environment to do additional monitoring of the groundwater, so to say that the Long Valley Hydrologic Advisory Committee is going to do

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anything further than what they're already doing and what they've done, they're essentially looking at one well which happens to be our monitoring well.

What's going to be stopped here is that really Long Valley Hydrologic Advisory Committee, there's no mandate. If this is certified, there's no impacts identified.

I've talked to the Chairman at the Long Valley HAC and his understanding is that they're not even looking at it because there's really -- this process is going on and if this process ends with the conclusion that there's no impacts, there's no -- you know, they're a volunteer group, they have people who have permit conditions that are related to findings in environmental documents. That's what they're looking at.

I just don't see that as being what the Water District would like to see as a way of alleviating our concerns about the water supply out there, and that's why we presented this and that's why we're asking for the continuance, so that's all I have.

MR. HUNT: How much more time do you think the Water District will need to make determinations that would support or deny this?

MR. PETERSON: If we could have this held over, I don't know how often you meet.

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MR. SCHADE: Every two months.

MR. PETERSON: So two more months, that would be time to look at data that would be submitted. As we've said in our comments, there is data that is considered proprietary and is not going to come out presumably, so we won't be able to see that.

There is a meeting of the Long Valley HAC. They meet quarterly. They would be able to meet sometime in August, I don't know exactly what the date is. We could meet with them in the public part of the Long Valley HAC meeting and talk to them about any expansion of a program. We could continue discussions that we've had with Ormat about what is appropriate.

We did talk about potential monitoring with Ormat. We've met with them before and have talked about these things before, but if the administrative record closes at this point, I don't think that everything is set in place such that our discussions with Long Valley HAC would be that meaningful. I just don't feel it would put that forward, so at least until your next meeting.

MR. HUNT: Has this come before the Water Board itself, or is this a staff --

MR. PETERSON: I report to the Board on this issue in my management reports. The Board has not had

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an opportunity or had to make any decisions other than to approve consultant contracts, so I have brought those to the Board and those have been approved and there's an understanding on the Board's part that this is an important issue that we feel there is the need for this type of follow-up, so the Board has met and made decisions relative to this mainly getting consulting contracts in line.

CHAIRMAN EASTMAN: Is either yourself or any other members of the District members of the Long Valley HAC?

MR. PETERSON: No. We have participated in the Long Valley HAC meetings. Individuals can go, but the place where the information, the production data, the pressure data from the geothermal production, that takes place in a closed door meeting and in order to participate in those meetings, a non-disclosure agreement or a confidentiality agreement has to be filled out.

If myself or somebody else from the Water District signed that, we couldn't discuss at a public Water District meeting the findings of the Long Valley HAC and why they came to those conclusions. I personally don't believe that that's a good way to conduct the Water District's business and we've had

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advice from counsel that it's not a good way to do it, but --

CHAIRMAN EASTMAN: We were made aware of this earlier, I'm sorry.

MR. KINGSLEY: I have a question. It was stated earlier that to date there's been no impact from this project on the Water District's wells. Do you agree with that?

MR. PETERSON: I don't think you can say whether there has been or not. I don't think there's been enough data --

MR. KINGSLEY: How many years have they been doing it?

MR. PETERSON: They've been doing it for 25 years, something along that order.

MR. KINGSLEY: And when they reduced the monitoring wells, was that over your objections?

MR. PETERSON: Well, we couldn't object. I guess we could have objected, but it wasn't really our decision. The wells were reduced because they were being funded by the USGS Hazard Prevention Program or they were being funded by USGS. USGS didn't feel that they were -- that they were getting any information about hydrologic hazards and dropped the funding for it.

We asked that they not be dropped, but it was a

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funding issue. Whether or not the Long Valley Hydrologic Advisory Committee is the right committee to monitor the cold water impacts or not is something that they should discuss and make that determination and we would certainly have to deliberate on participating based on what's recommended.

CHAIRMAN EASTMAN: Great. Thank you. Any other questions?

MR. JOHNSTON: When were the production wells of the Mammoth Community Water District installed? I know they're different times, but when was the first ones?

MR. PETERSON: Well number one was put in in about 1980.

MR. JOHNSTON: Before --

MR. PETERSON: That was probably the only one before, because I believe the first project was '85. Tell me if I got my dates right.

UNIDENTIFIED SPEAKER: '84.

MR. PETERSON: Then '88 we put the wells in the meadow on-line and built the treatment plant at old Mammoth, and then in '94 we expanded and added some other wells that go to another plant, so from the Water District it's been basically 1980, '88 and '94 has been the progression of our water program.

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MR. JOHNSTON: There's some question about the data on your end of whether you have sufficient history to show a change if there was one?

MR. PETERSON: That's part of our concerns, yes.

CHAIRMAN EASTMAN: Thank you. Linda?

MS. ARCULARIUS: So is there -- I mean, you've given this a lot of thought. Is there a mitigation measure that could be incorporated into some decision making today that you would be willing to support? Maybe we could hear from Ormat as the project proponent if they could support that kind of mitigation?

MR. PETERSON: Well, yeah, I'd be willing to listen, but what I have in front of me in the document is that there is no --

MS. ARCULARIUS: I'm asking you is there one that you could propose that would satisfy some of your concerns?

MR. PETERSON: Our concerns are two parts. We don't feel that we've seen all of the data that we requested to evaluate that question, and the reason is from what I understand is that it's considered proprietary, and we would like to see that to determine what the mitigation would be, but absent that, we do feel that we could somehow either look at the data --

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the data that's proprietary comes out after ten years if it's on federal land and two years if it's on state land. That's how long it stays proprietary.

Potentially looking at some of the older data and looking at some of our data, there's kind of a ten year lag period there, but Linda, to answer your question, I don't have this one statement that says, yeah, if you agree to this today, we'll withdraw our request. I think that's something that we would like to work out.

MS. ARCULARIUS: So there's not a monitoring program that you could think about today that you feel, if instituted, would give you the kind of information you need to satisfy your District's concerns?

MR. PETERSON: Right. Our concern is that the monitoring program has not been developed. It's been identified that it's not needed. It's been also stated in the environmental document that it wouldn't benefit the human environment, whatever that is, so I don't have the program that would change our mind right now.

We would like to determine what that would look like. Actually, Charlene had said that maybe a monitoring well could be drilled, but we feel that those types of things need to be done ahead of this time when certification is being asked for, and right now what

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you're certifying says there's no impact.

MS. ARCULARIUS: One more time. If today the proposal was made by the decision making body here that a monitoring well be installed to address the District's concerns and the project proponent was agreeable to installing a monitoring well, that still would not satisfy your concerns?

MR. PETERSON: That would be a positive development. I think that, and I believe -- let me just say what I believe, that a monitoring well without any further definition as to what it is or where it is or anything else, I think a monitoring program would take longer and more information than what we have right now.

If you're asking me certification or a monitoring well, I'll take the monitoring well. Does that answer your question?

MS. ARCULARIUS: Kind of.

MR. JOHNSTON: I have a question. Who determined that the geothermal source is proprietary? Who decided that's somebody else's -- that the public couldn't have that information? I mean, it's under federal land, most of this.

MR. PETERSON: Collin, do you -- the information is provided to the BLM and it doesn't go any further, so I'm sure Collin --

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MR. JOHNSTON: Why is it a big secret?
MR. REINHARDT: It's a federal regulation.
MR. JOHNSTON: It's a regulation.
MR. SCHADE: And we see that at Koso as well. As part of our permitting process, we see considerable amount of information that's considered to be proprietary.
MR. JOHNSTON: Because it's hotter than it's supposed to be? It doesn't make any sense why this is so secretive.
MS. SUDOMIER: Their thought is they could back-engineer the whole plant from knowing the temperature and flow rates of the wells.
MS. ARCULARIUS: There's a huge economic --
MR. JOHNSTON: It's about money is what it's about.
MR. KINGSLEY: There isn't any chance that just the commitment to a monitoring plan that might include one or two wells and then some sort of -- that you guys could work out a triggering mechanism that would -- I mean, we've done that in the past, certified the environmental document with the idea that you could work out a monitoring plan with the proponent that would satisfy your -- without more data, but just with a monitoring plan, a water monitoring plan?

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MR. PETERSON: Actually, I think that is what would be ultimately the right answer. My concern is that I'm going to walk out today knowing whether this body has determined that there's no impact and no reason to have a monitoring plan. That's what you basically have here.
CHAIRMAN EASTMAN: Ted, did you have something to say?
MR. SCHADE: I think it's important right now for the Board to remember that you are not county supervisors, that you're Air Pollution Control District folks.
What you might do at a Mono County Board of Supervisors meeting is slightly different than what you would -- it's probably not appropriate for you to be negotiating a monitoring plan for a water district at a Great Basin Air Board meeting. That's just my -- my attorney may not agree, but from a policy standpoint, remember that we're an Air Board. We've been asked to weigh in on some of these things and we need to -- I put myself in John's shoes.
If John had a project, a water project that we had some air concerns about, I would hope that he would allow me the time and effort that I needed to resolve any air quality issues that I had.

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MS. ARCULARIUS: I didn't mean to be negotiating, but we're establishing a record here that has a ton of mitigation in it. I was wondering if there would be one more mitigation that we could add to the record today that would alleviate some of the concerns, because there's a ton of other mitigation in here that we're doing.
MR. SCHADE: There may or may not be. I was just worried that we were going down a path --
MS. ARCULARIUS: A lot of the mitigation in here has nothing to do with air, so I was just asking if there's a proposal that you were willing to put forward.
MR. JOHNSTON: One other question. Wildermuth, did you guys hire him?
MR. PETERSON: Yes.
MR. JOHNSTON: And this is the report attached?
MR. PETERSON: That's right. I have two attachments to the letter. One is from Wildermuth Environmental. They're a hydro geologist consulting firm and they have reviewed the document, as well as Ken Schmidt Associates who has also provided us with expert review of the document and particularly the portions of the document related to our groundwater resources.
MR. JOHNSTON: So these are consultants you typically have hired to give you advice on different

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issues?
MR. PETERSON: Yes. They've been working for us for probably 15 years. Ken Schmidt, 25 years in studying the groundwater basin in Mammoth and they have these concerns.
MR. JOHNSTON: Not connected with ESA's subcontractors?
MR. PETERSON: No. Getting to your question, Linda, Wildermuth, at the conclusion of their document, Page 4 of 5, they provided suggestions as far as moving forward, and yes, they do as one of those things recommend monitoring of the resource, so to get a better technical answer there, I advise you to read that.
MR. HUNT: It seems to me that nothing is going to change between now and next month or two months down the road or six months down the road, so something has got to take place today that's going to give us some guarantee that monitoring will take place long-term and allow us to proceed with this and not ride it out any further than we have. That's just my personal opinion.
I don't see things changing in two months. I was originally willing to hold off on this certification today until our next meeting, but I don't see that giving us an advantage of establishing better monitoring quality or anything that we could establish then.

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MR. PETERSON: Well, one of the things that we would be able to do is to meet with the Long Valley HAC at their quarterly meeting in August.

MR. HUNT: Which would be a secret result of some type?

MR. PETERSON: Presumably, although the thermal community is the one that meets behind closed doors, but the Long Valley HAC, they monitor the thermal resource and they have mitigation measures and permit conditions that they need -- they're the entity that has been set up by the permits from BLM and the county in order to do that.

The discussions they have at the non-thermal committee which is really just where everybody in the public hears what the people who were behind closed doors come out and say, and we can talk about the cold water -- we can talk about things all we want to the extent that people want to stick around and be at that meeting, but there's really no mandate or permit condition or monitoring program that is looking for the results of that deliberation.

Charlene mentioned that they brought their modeler and the modeler provided a report at that portion of the meeting and our hydrologist did hear the report on the model, so there's benefit to those

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meetings, but they're really a public discussion of things and sometimes there's some disagreement, but there's really no decisions to be made with the non-thermal committee because there's really no mandate, and that is continuing right now and that's why we thought that as the way things stand in the document, the status quo will remain and there won't be any change in the way this project is being monitored even though they're doubling the output.

MR. HUNT: This is a real stumbling block for me personally because I highly respect the Water District and what they do and you guys, the engineers, the science behind a lot of the actions that are taken at the Water District, but I also recognize that we've had this geothermal project there for 25 years and we have kind of a running background of what it may or may not do to water tables and water temperatures, that type of thing, so it's not like we're starting from scratch.

We're not a monitoring program, we kind of have monitored this thing to some degree over the years. Obviously it's not the impacts in these higher production facilities, but it gives us an idea of what can and can't be done down there, so I'm really having trouble with this. At first I thought my only objections would be the recreational impacts and

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cross-country skiing in the wintertime, but that's kind of on the side now.

CHAIRMAN EASTMAN: Stacey, did you want to --

MS. SIMON: No.

MR. JOHNSTON: I sort of agree with you, John, that there should be some sort of monitoring plan put in place here. It's an issue that I think needs to be resolved before we certify this. It doesn't have to be a grandiose plan, but it's something that should be worked out because you are the main water purveyor in the town of Mammoth Lakes and that region and I'd hate to proceed with something over your objection. It doesn't make a lot of sense that we would do this before we certified this document.

Otherwise we're stuck with it, and to me it's a little bit of an unknown that needs to be set down on a piece of paper and worked out and presented to us at a subsequent meeting. That's my feeling. It's that important.

I have a number of other questions on the environmental document. I don't know --

MS. ARCULARIUS: I just have a follow-up on that. To follow-up on that, earlier the presentation was made that the separation between the geothermal and the hot water and the separation between the cold water

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aquifer is extremely important to the project proponent, and at that point I thought that each entity, if you're interested in the cold water aquifer or the hot water aquifer, you have kind of a mutual interest to protect one another in that.

So from the project proponent, how is it that you are going to monitor either within your business plan and within your operation to make sure that that influx is not having the opposite of what the District is concerned about? Is there internal stuff that you do, and could that be a joint project? Help me out here.

MS. WARDLOW: There's a few different things I want to touch on. Specifically to that question, the purpose of the geothermal model and the model itself is proprietary and it is used to analyze the 30 year history of our proposed project. We will have a power purchase agreement for 30 years.

It is not our desire to have any detriment to the resource. It's renewable because injection is so critical to sustainability, and it's important that we maintain temperatures and pressures within the geothermal system for the longevity of a resource. Otherwise, we would be out of business.

The model showed no impact -- the model also

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1 looked, as Gene mentioned, when you go east of 395 out
2 into the eastern side of the Caldera, the groundwater
3 system and the geothermal systems do come together and
4 there is a thermal component in the hot springs areas on
5 the east side. There is not commingling of the
6 geothermal system and the groundwater system up where
7 the Mammoth Community Water District system is. The
8 chemistry supports that, the geology, the pressures, the
9 temperatures always support that, and the models
10 supported that that was run out for a 30 year history.
11 The temperature changes that occurred that Mr.
12 Drury mentioned, we made changes in injection when we
13 saw that because we were impacting the viability of our
14 plant, so we changed injection, and so our engineers are
15 constantly watching projection and injection on a
16 monthly basis, if not more often, to insure that we
17 don't impact the reservoir.
18 That said, our reservoir engineer's data was
19 reviewed by another reservoir engineer, a Ph.D., who has
20 been in the geothermal industry, is well respected. He
21 reviewed the reservoir model and did a technical report
22 that's in the document analyzing the results, as well as
23 a technical analysis by Gene Suemnich that's in there
24 describing the history of the Long Valley Caldera, the
25 conductivity between the geothermal system and the

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1 groundwater system.
2 MS. ARCULARIUS: It's really interesting.
3 MS. WARDLOW: I always learn more. It's a very
4 complicated geological system, and I'm a geologist and
5 it's a complicated system.
6 I'd like to say that the well records, and as
7 John just mentioned, all of the well data that's older
8 than ten years old, there's public date. The California
9 Division of Oil, Gas and Geothermal has all the well
10 drilling records, all the mud logs, all the production
11 is on their website. You can just go into their
12 website, you click on it, and it shows every single
13 piece of data on that well from the day it was drilled,
14 so their hydrologists have had access to that data.
15 It's public information.
16 The BLM data is all public except the two.
17 Basalt Canyon wells, which are currently only eight
18 years old, in two more years all of that data will also
19 be public, so if they wanted to do their own geothermal
20 model which is much more complicated than groundwater,
21 all of that data except two wells has been available to
22 them for years, and I've been meeting personally with
23 the Water District for a long time because at one time
24 this project included taking tertiary treated water from
25 the Water District and doing evaporative cooling where

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1 you spray the air condensers with water in the summer
2 and we dropped that part of the project, so I personally
3 have been meeting with the Water District for over three
4 years on this project talking about different phases of
5 it, so it's not a new project.
6 I'd also like to say that at our last Long
7 Valley HAC meeting in February, the BLM and Collin
8 presented the letter to the Long Valley HAC requesting
9 that the USGS come back with a monitoring plan specific
10 to CD IV, and they have not put the data together yet.
11 We have a meeting coming up.
12 I actually called Dan Leitzer back in April, I
13 said are we ready to have a meeting to talk about the
14 USGS's recommendation on what they would recommend for
15 additional monitoring for CD IV, whether it's additional
16 groundwater wells, whatever it is.
17 We have not heard back from the USGS yet on
18 their recommendations, but we're depending on them
19 because they worked in the Caldera for all these years
20 to make that recommendation at the HAC.
21 I would like to say that the BLM as the mineral
22 right holder for the federal government has jurisdiction
23 on the wells, on where we produce them, how we complete
24 them. They're also watching -- they have petroleum
25 engineers on staff that also look at our data on a

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1 monthly basis, and they have authority to shut us down.
2 Not only do they have authority to designate where we
3 drill, how we drill, where we inject, but they can shut
4 us down if the project is a detriment, so we're
5 obviously trying to run an economic problem. It's not
6 our desire to impact the town's water supply, but the
7 BLM does have jurisdiction to shut us down.
8 MS. ARCULARIUS: So they have the trigger?
9 MS. WARDLOW: They have the trigger under our
10 leases and under the permits that they will issue for
11 the actual project. So it is on federal land, and in
12 California because we have CEQA, when we do our projects
13 in Nevada we don't have the secondary oversight, but the
14 BLM can change our project, they can change the well
15 completion.
16 I had that happen in Siskiyou County where
17 Siskiyou County was the lead agency. The BLM came in
18 and changed our well completion requirements because of
19 the potential concern with the groundwater resource, so
20 I think we're doing that. Whether there's a specific
21 monitoring measure in the document, no, but the plan has
22 always been in the HAC that the USGS would designate
23 where we should add additional monitoring and it would
24 be -- we would drill another well.
25 There used to be another monitoring well out

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there that DOE drilled I think in 1977 and we actually plugged and abandoned the well because there were concerns with its completion and potential air quality issues with that well, and it's actually out also just west of -- northwest of Shady Rest Park is where that was.

CHAIRMAN EASTMAN: Okay.

MR. PETERSON: Any further questions? Linda?

MS. ARCULARIUS: No, thanks.

MR. PETERSON: I'd just like to say that the BLM will have oversight on this, but in the document that they have, the conclusion is that the monitoring would serve no purpose to do any monitoring on the cold water aquifer, so I think that direction would be something that would be carried through in their work with the Long Valley HAC.

CHAIRMAN EASTMAN: Is there anyone else from the public this afternoon that would like to make public comment, public testimony on this issue?

IRENE: Can I just add a little bit to the Water District?

CHAIRMAN EASTMAN: Please.

MS. YAMASHA: My name is Arlene Yamasha, I'm with Mammoth Community Water District and I think the whole purpose of CEQA is to give you a report that you

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can review and you can determine whether or not there's going to be impacts to public utilities and environment, things like that, and it's really wonderful to hear that the BLM has a process in place to look at monitoring concerns of the Water District, but we don't see that in the CEQA document which would make us feel a whole lot better if we can see that there's a commitment for the USGS to develop this program.

If there's disagreements about how that program is developed, BLM or Ormat or any of the other participants don't agree with USGS's program, how will we come up with that final program, and will the Water District be involved with the development of that and implementation of it? We don't know that. It's not in the CEQA document.

BLM has talked about that there will be permit conditions. Well, we don't see them in the CEQA document, so I would like you to consider that this is what you're looking at today for certification.

Our intention is not to shut down the project. Geothermal has a lot of advantages for our country right now, but what we do as a Water District is we supply the town with water and we're very concerned that the model is not perfect and we know our models aren't perfect, so we would like assurances that our water supply is

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protected for the community.

We have been monitoring our wells. We know that there's a geothermal plant there for many years, but we can't correlate what the production date is with what we see in our wells. We just don't have that data, and the project is moving closer to town, so yeah, we might have some -- we might go back to records from ten years from now, but it's not maybe relevant to what's happening closer to town.

Shady Rest is pretty close to town, so I would just like you to consider those things. Is there as much transparency in the document as you would like to see to make your decision? Thank you.

CHAIRMAN EASTMAN: Thank you. We're getting ready to close the discussion and the public hearing unless there's any more input.

Then we will go ahead and close the public hearing and ask for Board deliberation and discussion.

MR. JOHNSTON: I have a few questions, and someone could answer these. Why is there no mid range alternative?

MS. SUDOMIER: Mid range like building a 15 megawatt plant?

MR. JOHNSTON: No. You're proposing two 21.2 megawatt gross plants with a net of 33. Why isn't there

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just one 21.2 megawatt plant as an alternative?

MIKE: We did consider that and eliminated that alternative from consideration. It was not going to reduce the footprint to any substantial degree. There's a couple pages explaining -- it's under reduced power alternative, explaining the rationale for why it was considered and why it was not carried forward as an analysis.

MR. JOHNSTON: And you think that rationale is sufficient for this document?

MIKE: Definitely.

MR. JOHNSTON: It references a national historic district. Is that a future historic district or an existing one at the Long Valley --

MIKE: I'm sorry, I don't know the answer off the top of head. It was part of the SHIPO discussions that were going on between BLM and the Office of Historic Preservation.

MR. JOHNSTON: Because I don't know of an existing one.

MIKE: I don't think it exists. I think there was a discussion of creating one.

MR. JOHNSTON: It talks about wild horses and burros.

MIKE: That's part of the BLM NEPA requirement.

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MS. ARCULARIUS: They always have to talk about them.
MIKE: There are certain resources that have to be discussed.
MR. JOHNSTON: And it says there's 15.3 acres affected. Does that mean on the grazing side of it?
MIKE: Permanent during plant operation vegetation removal to accommodate facilities, so the power plant and the pipeline footings and the well pads.
MR. JOHNSTON: And that affects the grazing allotment.
MIKE: That affects the 15.3 acres of grazing habitat. There are grazing allotments in that area, so --
MR. JOHNSTON: Population housing section, it says there's a positive impact on local and regional businesses, 13.4 million creates six permanent jobs. In the economic benefits, it says it creates 250 construction jobs, 57 new jobs by out of state firms, 1.06 billion in the economy, and then you conclude in the document that there's no impact on housing and population.
For me, that's not true. This has significant multiplier effects that create impacts on housing, and as you know in Mammoth, there's a housing impact.

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There's a waiting list for people seeking housing, so how do you reconcile that problem?
MIKE: I'd have to look back at the document to answer that specifically. I think there's a distinction between the temporary impacts associated with the construction period for two years versus the long-term operational impacts of six additional employees.
I think under the CEQA criteria, the focus was on the long-term six people impacts and whether that would affect the population and housing, and then there's some additional discussion about how the temporary construction employees would be housed.
MR. JOHNSTON: So you feel that the report is sufficient because the six new jobs that are created are so well paid that they'll be able to afford to live in the Mammoth vicinity, is that your conclusion?
MIKE: I couldn't answer that off the top of my head.
MR. JOHNSTON: Who can answer that?
CHAIRMAN EASTMAN: I'm thinking maybe the six new jobs might be people that are already living in the community and be trained for the job at the plant.
MIKE: I think there's a combination of either --
MR. JOHNSTON: It says six new ones.

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MIKE: Six new positions, but not necessarily six people from out of the area.
MS. ARCULARIUS: Currently there's people working there that live in Benton.
MR. KINGSLEY: And Bishop.
MR. JOHNSTON: Visual resources are considered significant. One of the issues about Sawmill Road area and the Shady Rest Park area, it's I believe significantly impacted already from dust from ATVs and motorcycles and other vehicles using those roadways, but there's really no mention of that in the document. There's also no mention of lighting from the well sites. Is there night lighting at the well sites?
MIKE: There is a discussion of the lighting to be used during construction. I don't believe -- and if I recall, there's visual mitigation measures that require the way that the lighting is placed and the way the lighting is directed, it has to be down and away from other areas.
MR. JOHNSTON: Is the lighting on the existing two wells out there, is that on all the time?
MIKE: Charlene or John, do you know the answer to that?
JOHN: I wish I could tell you the answer to that. I don't think it should be on all the time. I

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know they're not on during the day. I can't tell you if they're on all the time at night.
MR. KINGSLEY: Have you seen whether they're on or not?
MR. JOHNSTON: The current plan is non-compliant regarding the dark sky ordinance that we have. You can see those lights from a long ways away and if you say that you're compliant, your new plant is going to be like the old one, then you're not fulfilling the dark sky compliance.
Are you intending to retrofit those plants and is the new plant going to be compliant with the dark sky ordinance in Mono County?
MS. WARDLOW: John and I were just saying we don't think the lights are on at night. They have motion sensors on them.
The existing plants were actually retrofitted as part of the permitting for M-1. We did that on our own because they were older ones, didn't have the new down shrouded lighting, so the new plant will have all compliant lighting on it.
MIKE: And I should mention that the CD IV project is completely independent of the existing projects.
MR. JOHNSTON: I understand. There is

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1 confusion who was doing what. I believe the town plows
2 at Shady Rest Park now. I think there was reference in
3 the document that the Ormat people would be plowing that
4 road, so you don't have to plow that.
5 CHAIRMAN EASTMAN: No, no, don't say that.
6 MS. WARDLOW: I believe we paid for that. We
7 paid for it, but the town did it.
8 MR. JOHNSTON: That's good. Air quality, it
9 says n-pentane contributing to poor air quality. What
10 is that level? There was some discussion of it before
11 from the attorney from --
12 MS. SUDOMIER: Can I discuss that?
13 N-pentane is a VOC which is a ozone precursor.
14 As you know, the area right around Mammoth Lakes is out
15 of compliance for ozone. It's carryover from the San
16 Joaquin Valley.
17 How ozone is formed is over time, so it doesn't
18 form right at the plant. It's downwind to ours, and
19 it's a reaction that happens only in daylight hours when
20 the sun is out, so there's a -- like night and day,
21 there's levels of ozone goes up in the day and down at
22 night.
23 The significant impact aren't the VOCs from the
24 plant, it's the construction era drill rigs and the NOX
25 which is also an ozone precursor, and again, they're

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1 going to be drilling during summer which is the ozone
2 time, and it's going to -- ozone is going to form
3 downwind to ours like it's going to with n-pentane.
4 And as far as the leak-less technology, if I
5 could address your issue, is they have leak-less
6 technology. The only things that have to be sealed and
7 monitored and everything are so they can have access to
8 the turbine. You can't just weld every single joint in
9 the whole thing and have access to mechanical devices
10 and you'd have to cut it with a plasma torch and reweld
11 it, you know, so it is leak-less.
12 MIKE: Jan, can I supplement that, because you
13 brought up a good point. Because of the point of the
14 emissions, the ROG emissions associated with the
15 n-pentane did trigger the CEQA significance criteria.
16 What Jan clarified is how in reality that results in
17 ozone formation.
18 MR. JOHNSTON: On that subject under the air
19 quality section, it says that ozone is being exceeded
20 and we're not in compliance.
21 MS. SUDOMIER: In the small area around Mammoth
22 Lakes.
23 MR. JOHNSTON: But there's no monitoring for
24 ozone in Mammoth Lakes, so how do you know that?
25 MS. SUDOMIER: That's from data that was

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1 collected on the roof of the hardware store a million --
2 not a million, I'm sorry, some years ago by ARB. Right
3 where we have our PM monitor now, they used to monitor
4 for ozone.
5 MR. JOHNSTON: It says the closest monitoring
6 for ozone is in Death Valley. That's what it says.
7 MS. SUDOMIER: There is an ozone monitor now at
8 the Encore site at the White Mountain Research Station.
9 The data hasn't all been certified yet, so it's not
10 available on-line yet, but we are monitoring starting
11 like two months ago for ozone.
12 MR. JOHNSTON: And then H2S, concluded not
13 significant.
14 MS. SUDOMIER: I can talk about the H2S, too.
15 To have H2S emissions, you have to have geothermal fluid
16 flow in the atmosphere, so it's got to be flowing out on
17 the ground to have the H2S come up.
18 While they're drilling, they're monitoring for
19 H2S, and of course like they don't want the groundwater
20 to cool their geothermal fluids, they certainly don't
21 want to lose their geothermal fluids out onto the
22 ground, so there is a monitoring thing while they're
23 drilling, but the H2S levels at Mammoth Pacific and in
24 that area are not very high compared to our 24/7 H2S
25 monitoring that goes on at Koso because the geothermal

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1 fluid down there has way more H2S.
2 MR. JOHNSTON: So you think that it's not
3 significant still?
4 MS. SUDOMIER: Right.
5 MR. JOHNSTON: Under mitigation measure,
6 wildlife five, it says the pipelines are going to be
7 overlaid at some point, and somebody earlier mentioned
8 they're going to put these pipelines overhead so the
9 deer can go under them.
10 Don't you think that's visually detracting and
11 should they not be underground in that section? Because
12 it's right next to the scenic highway.
13 MIKE: Yeah, there are two different
14 alternatives discussed, and under alternative one there
15 was a combination of undergrounding some of the
16 crossings and overheading some of the crossings. Under
17 alternative three, which is the environmentally
18 preferred alternative, the crossings are underground, so
19 that will not --
20 MR. JOHNSTON: So they will be underground
21 under alternative three, okay. The U.S. Forest Service,
22 it says, "You may seek reimbursement for grazing loss if
23 the operation results in stray livestock."
24 MIKE: That's in relation to the BLM grazing
25 program, so one of the concerns that was raised by one

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of the allotment holders was that it could result in their livestock getting routed other ways and need to be gathered again, so there was a measure put in to allow for the allotment holder to seek reimbursement if the project resulted in problems with their grazing program.

MR. JOHNSTON: So the Forest Service is going to resolve that at some point?

MIKE: It would be the BLM. No, you're right, it's Forest Service because they're the service manager there. They have the allotments.

MR. JOHNSTON: The location of well site 3825 which is 160 feet from here across the parking lot to the Shady Rest Park, why on earth are you putting a well so close?

MIKE: That was part of the application that was submitted by Ormat. They placed their well sites based on the modeling and geologic information they have, so that was why it was considered in the position it is.

MR. JOHNSTON: And you don't think that's significant?

MIKE: Based on the analysis we conducted, it was not determined to be significant.

MR. JOHNSTON: I totally disagree with that. This is a significant impact to this project having that

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well site so close. If you were out there during the drilling of the site that's down the road a bit to the east of the park, that was sort of okay because it was much more distant, but having this 160 feet away from where children are playing and people are recreating and trying to get peace and quiet over the long-term just doesn't make any sense to me, so I really can't support that well site.

I'm almost done.

The Sierra Nevada red fox is mentioned as being medium in its probability of occurring on the site, and yet, there have been no sightings in the proximity for many, many years and the only known sighting has been in the Sonora Pass area, so how can this be medium? It should be unlikely at most.

The pallid bat, do you know about the pallid bat? Apparently it's widely distributed across the west. The population trends are not well-known, but there are indicators of decline. It's also in parts of South America and other places, and it's found in "Ponderosa pine forest and arid desert habitats." Yet, it's thought to be present based on habitat suitability. That's what it says in the document, so they're totally contradictory.

I don't get why the pallid bat is even on the

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list. I just wanted to say that.

Standard Industrials has the mine site, owner of the mine site, and it says that they're still mining that site, but they have gone bankrupt and are no longer doing that.

Under the population housing section, there's no mention of the county's -- you conclude there's no significant impact. Yet, you don't even reference the county's housing element which says there is from the major construction projects.

I think I ran out of time. That's all I have.

CHAIRMAN EASTMAN: Thank you, Larry.

MR. JOHNSTON: Oh, one other thing. Whoever provided this says this is the economic benefits. It's a prejudicial document because it says economic benefits. It concludes it on the title, and it should say economic impacts, and if there are benefits, it should say that, so this is somehow irrelevant for -- I don't know who did this. It says Wahlstrom & Associates.

MIKE: So the process that we went through doing the NEPA and CEQA, that was an economic report supplied by Ormat, and then our team of economists which included a subcontractor specialist peer reviewed that report and used the applicable information from that

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report that they agreed with in conducting the analysis that appears in the entire EIR/EIS which is why there's -- it's not just a regurgitation of that. It's a peer review and an independent analysis.

MR. JOHNSTON: Okay. I just don't like reports that on the title conclude something that may not be concludable. You're actually doing an impartial study of something. It's just an inappropriate title.

CHAIRMAN EASTMAN: Further Board discussion?

MR. JOHNSTON: Mr. Chairman, I think with the advent of the Broadwell comments received last Friday, I think it would behoove us to not take action on this today so that we have a chance to incorporate those comments or at least respond to them, and also I'd like to have us in that regard allow some time for some sort of monitoring plan to be developed that could be incorporated into the environmental document.

I don't think that -- and this would be two months from now. Given this has gone on for three or more years already, I don't think another two months is that critical to having reviewed and having a complete and adequate document.

Despite being County Supervisor, too, I think that there is a need to have the Water District's concerns at least addressed in some fashion, and if

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1 possible, I'm not saying it is possible, but to at least
2 have a chance to look at a monitoring plan that could be
3 adopted with this project. That's kind of my position
4 on it. There are few tidbits I've talked about, but I
5 think those could be rectified.
6 MR. HUNT: Mr. Chairman, I was ready to certify
7 this document, but because of the discussions today I
8 really think that we need to set up some kind of a
9 monitoring plan using the BLM and USGS and whoever else
10 to make sure that's in place.
11 The track record for Ormat over the last 25 to
12 30 years has been long and very positive, so I think a
13 lot of the concerns in these documents are negated to a
14 degree.
15 I think this project in itself has good
16 economic benefits for the local community, both
17 short-term and long-term, and I want to see this proceed
18 and I don't want to see it delayed to the point where it
19 may be detrimental to their operation.
20 I think adequate research has been done on this
21 environmental analysis, but I'd like to defer to Mammoth
22 Community Water District because I do highly respect
23 these guys and their concerns and I want to see some
24 kind of monitoring program put in there, maybe a very
25 descriptive plan or program that can be incorporated

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1 into this CEQA document.
2 I think it's, for the most part, complete and
3 adequate. I appreciate Larry's comments. You can tell
4 who on this Board has had a lot of CEQA background and
5 experience because he's come forth with some very valid
6 questions and hopefully some of those will be addressed.
7 As far as the union issues are concerned, I
8 would throw out there that I think if we guaranteed this
9 project was turned in to a total union shop that a lot
10 of the concerns would be dropped immediately, so I'm
11 really concerned that they're doing this for personal
12 union benefit and not for the good of the community and
13 the environmental document we're working with.
14 So anyway, I would concur with Larry and defer
15 this to our next meeting and give our staff time to
16 incorporate more monitoring programs and monitoring
17 plans into the well program.
18 CHAIRMAN EASTMAN: Any other comments from
19 Board members?
20 MS. ARCULARIUS: I had a question of Larry.
21 You said that you couldn't support the well site being
22 at Shady Rest. If it's not removed from the project
23 description, can you not support the document?
24 MR. JOHNSTON: I would have a problem with that
25 because --

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1 MS. ARCULARIUS: Well, I just want to know what
2 you cannot support.
3 MR. JOHNSTON: Of the things that I mentioned,
4 that probably is the most important other than the Water
5 District's monitoring.
6 MS. ARCULARIUS: I just wanted know what that
7 meant, and --
8 MR. JOHNSTON: That well site should be --
9 there should be, I think, a better evaluation of it.
10 It's across the parking lot from a major -- the town's
11 major park site, recreation facility, and it should
12 never have been proposed there in the first place.
13 CHAIRMAN EASTMAN: Just a little bit of input.
14 I was fortunate during the months of April and May to
15 walk that site on four different occasions with
16 different people, and it's an ideal site for the
17 proposal in the sense that it's down kind of low, it's
18 well protected in forest.
19 The only time -- and I walked basically from
20 203 down close to 395 and did a loop around it, and the
21 only place that I could see anything that was going on
22 on the two existing well sites and the other proposed
23 well sites was on top of a mountain which is rarely --
24 people rarely go there, so I'm not concerned with the
25 well sites in that area from either 395, 203 or Shady

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1 Rest.
2 MS. ARCULARIUS: I just wanted to understand
3 what that meant so the public was fully aware that we
4 might have one board member that no matter if there's a
5 monitoring plan could not support it otherwise.
6 In regards to the concerns brought up here, I
7 think that I, too, came prepared to make a decision
8 today, but if there's some kind of glean of hope that a
9 proposal could be brought forward for a monitoring plan
10 before our next meeting, that would be my expectation,
11 and if that doesn't occur, I would just have to have
12 really good reasons to extend again.
13 I think there's opportunity to do that. I
14 think we've heard from the project proponent that they
15 are as interested in a monitoring plan as those that
16 have very valid concerns, so within the next couple of
17 months if one could be brought forward. In the document
18 itself, there's other areas that says there will be a
19 plan developed, there will be a plan developed, there
20 will be a plan developed, so I think if you were able to
21 bring back to this Board and its authorities that might
22 be instituted at the next meeting, at least the tenet of
23 what a monitoring program would entail, who would be
24 involved in it, that would be valuable information.
25 CHAIRMAN EASTMAN: Thank you. Mary? Ron?

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Matt?
MR. KINGSLEY: I would just say that I'm going to follow the lead of my Mono County Board members, but I do think -- the only area that I have a concern is the town water system because I think that's clearly something that we want to protect.
I do think that we -- could we certify an EIR with the provision that a monitoring plan was produced before anything could start -- before any construction could start? I think we did that once in Inyo County and that's actually what I would propose is that we approve the EIR, but with the provision that before any construction started, a monitoring plan that was agreed to by both the proponent and the town water system be provided.
CHAIRMAN EASTMAN: Thank you.
MS. RAWSON: I'm much like Matt, this is my first EIR, it's my first 840 pages I've read, and a lot of my concern, of course, is noise which they're going to be having a monitoring system.
Another one was close to the Shady Rest. I don't live there. I take the Chairman's word for it. It's in a low elevation and highly treed.
I don't have anything other than that. All my questions were answered that I had.

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CHAIRMAN EASTMAN: Great. Thank you.
MR. HAMES: I only had a few questions about it and one of them was answered by the lawyer that brought up the leak-free technology and you expressed that that is being established. I want to make sure that is being established because that is a significant overreach from 210 pounds to 400 pounds.
And the water monitoring system, I think we have a unique spot here where both people want to have this watering system not to be mixed. The people that are trying to get this and the water company do not want that to mix, so I think you both have the same interest in that, and I would concur with the rest of the Board that we wait until the next meeting. So I'm voting to shelve this is what I'm going to say.
MR. KINGSLEY: And I want to go on record as saying that's not what I'm proposing. I'm actually proposing approving the EIR with the provision that before construction could start, that a water monitoring system would be presented from the proponent and the town water system or the Mammoth Community water system or whatever your name is that is in agreement with both parties, so I think I am saying something different than not certifying.
CHAIRMAN EASTMAN: As I read the Board members

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comments, it seems like we have a --
MS. ARCULARIUS: I just -- either way I would be okay, but I think there's an issue that was brought forward. We just got to glance at the Water District's comment letter there, but there was a proposal in the monitoring plan that the project be started up on a gradual basis.
I think that that changes the project and changes how it was developed. I'm not looking for that monitoring plan to be based on a gradual basis. I'll just say from what I know from reviewing the documents, I don't know that that serves any great -- I don't know what gradual means, and if gradual is you've got to have a little bit for ten years, I'm thinking that that's a little unrealistic, so my expectation in the monitoring plan is not based on the gradual component as one Board member said.
MR. JOHNSTON: I just have a question, John, of you. When you were out there looking at this, and I'm looking at this map that shows where the well sites are, this is the well site that is existing and that indeed is in a hole, and it's quite a ways away from Shady Rest Park. The new well, 3825, is 160 feet from it.
CHAIRMAN EASTMAN: In heavily forested land.
MR. JOHNSTON: Well, it's 160 feet and around

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that, they're going to take out an acre or more of forest, so it's maybe heavily forested now, but it isn't going to be heavily forested when this thing is built and I'm just wondering from Ormat's perspective whether 3825 is really needed in that exact point.
Why can't it be at least as far away as the existing well of 57.5. All of the wells are at least as far as that from shady Rest Park, so I'm just wondering -- for me, it's unnecessary because it's so close to the park site and it looks like the other well sites have been well distributed around there that they could easily change this and still have that number of production wells.
CHAIRMAN EASTMAN: I'm not hung up on it, but I've been in Shady Rest Park for in excess of 40 years and I know the area pretty well. It is heavily forested.
The two existing wells that are already developed in that area, those two wells, there's not an acre disturbance of trees. The well site itself is, I'm just guessing, but it's 80-by-120 feet, somewhere like that, so I would think that it's not even a quarter of an acre of disturbance of the forest and that there is a big buffer of dense forest in between, so I'm not hung up one way or the other, but --

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MR. JOHNSTON: If they could still get the well in, but not necessarily as close, would that be okay with you? It looks like they've done it all the way except for that one well site.

CHAIRMAN EASTMAN: I'm not concerned with that level of detail is what I'm saying because of what I see. I think that there is a consensus on the Board to not address -- to not make a decision on the certification today and to encourage the two parties, and when I say the two parties, the proponent and the Mammoth Community Water District, to get together between now and our next regularly scheduled meeting, and the Board as a majority is not interested in making a motion today; is that correct?

THE CLERK: Can we please have a motion to continue the topic?

CHAIRMAN EASTMAN: Thank you.

MR. HAMES: So moved.

CHAIRMAN EASTMAN: Motion and a second by Ron. Those in favor? Excuse me, discussion before we take a vote?

MR. JOHNSTON: Is this continuing our deliberation or continuing the hearing, or what are you continuing?

CHAIRMAN EASTMAN: Continuing the hearing.

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MR. SCHADE: We closed the hearing.

MS. SIMON: The matter would be brought back at your next regularly scheduled meeting.

MR. SCHADE: With or without public hearing?

MS. SIMON: Well, a public hearing is not required in any event, but presumably you would redo the process and have the public hearing since that is your policy.

CHAIRMAN EASTMAN: Or you might not -- would you categorize it as a public hearing and just allow public discussion?

MR. SCHADE: One thing that you could do is say we've heard from the public and we're going to continue our deliberations given some additional information, or you can invite the public to come and perhaps participate in your deliberations. I don't know that there's a --

CHAIRMAN EASTMAN: We don't want to shut the public out.

MR. JOHNSTON: Right now you closed the hearing and I think that's appropriate. To continue the deliberation I think is what I understood what the motion was, but I wanted to clarify it because there is a distinction.

MS. SIMON: And you are welcome to accept

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comments from the public regardless of whether you have a public hearing, but it will affect the way the meeting is noticed.

CHAIRMAN EASTMAN: That's the thing, do we notice it as a public --

MR. HUNT: The public hearing is closed, but I wouldn't exclude the public from commenting if they want a public comment period or whatever, but yeah, as far as continue deliberation --

CHAIRMAN EASTMAN: Same, Ron?

MR. HAMES: Yes.

MR. HUNT: We as a Board are asking for certain things to be done so we can make a final decision.

MR. SCHADE: There may or may not be opportunity for public participation.

CHAIRMAN EASTMAN: On an agendized item, the Chair will entertainment comments from the public.

MR. SCHADE: And it will be agendized as a regular agenda process. It won't have a 30-day or a 15-day public notice.

MR. KINGSLEY: Are we asking the proponent to do something other than a monitoring plan? I guess I'm unclear on that. I know there were a number of comments that Larry made, and so again, I'll say that I feel like if the only issue is the monitoring plan, I would rather

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certify the EIR today and require them to come back with a monitoring plan that they both approve of. That's not the motion, but I just want to go on record again as saying that, because I think if that's really the only thing that we're hung up on, I believe it makes more sense to go ahead and move forward.

CHAIRMAN EASTMAN: Under discussion of this motion that's on the floor right now, is there any other support from any other members of the Board to what Matt just said?

MS. ARCULARIUS: If I was to vote in the affirmative for the motion on the floor, my expectation of that would be that the only outstanding issue is the monitoring plan and that at the next meeting, that will be the subject as an outstanding issue with direction to hopefully have a plan that we can support.

If I support this motion, it's not to open up the entire document again. The public hearing has been closed, and if there's another large document like this presented in the September meeting that has something to do -- that doesn't have anything to do with the monitoring plan, then I will not consider that as part of my deliberation.

I'm ready to make a decision today. If there's a desire to give some more time for the monitoring plan,

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I said that I could go with Matt's motion to have that contingent upon approval, but if it's the anticipation that we're going to open up everything that we closed the public hearing on, that's a different thing.

MR. HUNT: I would concur with that, John. My big concern is meeting the questions that have been raised by the Water District and I want to make sure that we have something in place that satisfies our questions about it before we certify the thing in full, so --

MS. ARCULARIUS: But that's the only issue on the table for me.

MR. HUNT: For me, too.

CHAIRMAN EASTMAN: So let me clarify.

MS. ARCULARIUS: That's why I asked Larry if he still had an outstanding issue on the well.

CHAIRMAN EASTMAN: As it stands now, and Linda, listen to me. I don't want to speak for you, I know better. From the four Board members to my right, it looks like there's a 2-2, two that would certify the EIR today with the stipulation that we come back in two weeks and talk about the monitoring program.

MR. KINGSLEY: Two months.

CHAIRMAN EASTMAN: Two months, thank you, and then I would like to hear from my other fellow Board

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members which side of that you would --

MS. RAWSON: I concur with Mrs. Acularius and her decision to approve the request with the caveat at our next board meeting to be deliberated.

MR. HAMES: And I'll agree with Matt's intention that we can go on with this and set it up in the construction process that that monitoring program comes up, and like I said, both sides of this want to have that monitoring down.

CHAIRMAN EASTMAN: Great. We have a motion and a second on the floor. Is there further discussion?

MR. JOHNSTON: The motion is what?

THE CLERK: One more time for me, please.

MR. HUNT: To continue the deliberation of this body to the next meeting in two months and make a final decision at that time.

MR. KINGSLEY: And that's on the whole --

MR. HUNT: No, for this body to decide.

MR. KINGSLEY: For the whole CEQA, we're not approving it today?

MR. HUNT: No. That leaves it open. If Larry wants to modify a few details, he can probably do that at the same time.

MR. JOHNSTON: I think there's things in there the staff could easily rectify on some of those

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discussion points and I really want the Water District to -- I guess it's because I drink their water, to have a comfort level and I don't think they'll get as far if we certify something today and say go work on it.

I think if we don't certify and have them in a position to be able to talk with the Ormat people and get some logical set of conditions or whatever implemented and incorporated in the EIR, I think we're going to be in a much safer position, and they're the experts on the water and I don't want any -- this is twice as much as what's there now. It's a big deal.

MR. HUNT: So it's a continuation of the deliberation.

MS. RAWSON: And under that caveat, the water board couldn't sign the document, so how are we going to get any further along if they can't sign the document? They have to be able to sign the document and we have to get assurance that they can sign the document to --

MR. JOHNSTON: They may not be able to come up with something that's agreeable with Ormat. That could happen. They may not be able to come up with a legitimate monitoring plan and that could happen, but I would at least want to give them an opportunity to go there. If we certify today, that door is, I think, more closed than it would otherwise be.

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MS. RAWSON: Ted, is that true?

MR. SCHADE: I think this is the way to go. A very wise politician one time in the '90s when Great Basin and DWP were in front of their resources board in a very contentious matter, the Chairman of the Board at that time, his name was John Dunlap and he's about as smart a politician as there is, he said there's a disagreement here, it can be worked out, the two of you sides go away and take care of your problem and come back to us, and if you don't take care of it yourself, we're going to take care of it and one of you won't like the answer.

So I think John's advice then applies here. Larry is right, this gives both sides the motivation to get this solved soon, and they don't have two months. They have six weeks because these 100 page letters the afternoon before the meeting are not the way Great Basin likes to do business, so they need to in six weeks have a plan ready.

MS. ARCULARIUS: So I have one more clarification of the motion. I think the motion reflects the deliberation will continue on every subject that we currently discussed today. That's what I'm understanding the motion to be?

MR. HUNT: It's continuing our discussion.

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MS. ARCULARIUS: On all areas of the document?
MR. JOHNSTON: And Linda, the reason -- this is that 300 page document we just got last Friday, and I don't even know what's in this because I haven't had a chance to read it. There may be something we want to try to resolve that would help us be more solid on the certification. Thus, would help us if there were any kind of lawsuits. This is that document that Alpine County copied for us. That's where I'm headed with this discussion because I want to make it as solid as can be document.
MS. ARCULARIUS: But this document brings up everything.
MR. JOHNSTON: But if there's already been answers in the document already, I think most of it I bet is in there already answered, and LIUNA and whoever else is going to be in a better position if we don't allow some time to digest this.
This is the same argument that we had when the Air Board met concerning the Keeler Dunes and the Department of Water and Power brought up some things at the very last minute, a thousand page document, and we continued it and I think that would behoove us to do this so we can get as solid as can be environmental document and certify that as adequate and sufficient.

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MR. SCHADE: And this also gives time for our consultant to take a look at the comments. Maybe there are legitimate comments that do need to be addressed, for Ormat to review the comments, for Great Basin staff to go through it. These late hits, we've been through this before on this Board and they're difficult for everyone to deal with, so --
MR. KINGSLEY: Okay. It's you guys' backyard and I'll defer to Larry and --
MR. JOHNSTON: When we get this squared away, we'll come over and have a water drinking problem.
THE CLERK: One more question. Are we going to consider a monitoring plan underneath a public hearing, or is this all encompassed in the continued deliberation?
CHAIRMAN EASTMAN: The latter. We have a motion and a second. Without further discussion, we'll call for question. Those in favor, say aye.
(All members said "aye".)
CHAIRMAN EASTMAN: Any opposed?
Motion passes seven-zero. Thank you to the audience, and boy, it's 1:22. We're going to take a ten-minute break if that's all right.
(A recess was taken.)
CHAIRMAN EASTMAN: We're going to call our

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meeting back to order and address agenda item 4(b) which is public hearing, first of two required hearings to consider a request to the California Air Resources Board for the renewal of discretionary exemptions allowing the continued use of burn barrels in Chalfant, Hammil and Stewart Valleys. Ted, if you would.
MR. SCHADE: Mr. Chairman, ten years ago there was a pretty contentious rule that was passed in California that limited the burning of waste in burn barrels and we sort of went through the ringers, as you will, then on that, and what that provided for was in ten years to sort of revisit for a number of reasons, and Jon will talk about that today, but at this point our hands are sort of tied. There's not a lot for the Board to consider here.
If you are allowed to use burn barrels, you either may or may not, depending on your population growth at this point still be allowed, and if you are allowed, you have to request permission, and Jon will give us a brief presentation with some background on that.
CHAIRMAN EASTMAN: Thank you. Jon, if you would, please.
MR. BECKNELL: Thank you. My name is Jon Becknell and I have been working as one of my jobs to do

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smoke management review for various types of projects and this was among them.
In this case what we're looking at in this agenda item is a State air toxic -- airborne toxic control measure which was passed to eliminate the toxic emissions from the burning of refuse, household waste, so what has happened with the implementation of this rule is that no longer can you burn any refuse such as plastic, food materials, other types of materials that could be produced in a household.
Only dry vegetative waste, non-glossy paper, and cardboard are allowed, so the toxicity of paper and cardboard is essentially like a particulate from wood burning. It's nowhere near in the same category, so what this rule is restricting -- what we're actually discussing today is whether or not you can burn paper and cardboard in areas that are less populous and it's not a toxicity issue, but more like a nuisance issue.
If your burn barrel is -- if you're densely populated in an area, the houses are closer together, somebody's burn barrel could be right across the fence from somebody's swamp cooler intake or central heating furnace intake or just an open window.
The issue is we have allowed this before. In 2004 this is what was presented to us. The Air

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1 Resources Board broke down the entire state, including
2 our district, into population and density areas. The
3 dark green are zero to three people per square mile
4 which allowed for automatic exemption from the rule, so
5 they are allowed to burn paper, cardboard and allowed to
6 use burn barrels to do so.
7 The light green areas are slightly more
8 populous. They're three to ten people per square mile
9 and in those areas they said we're going to allow the
10 locals to request from their Air Resources Board
11 continued use of burn barrels in certain areas, in some
12 areas possibly where it's a little less dense because
13 one of the impetuses of this rule, why the Air Resources
14 Board even set up the zip codes is there's differences
15 in areas.
16 The less populous areas also have a higher
17 chance of not having services, trash removal services,
18 and it's a great advantage to be able to burn some of
19 their materials and not have to haul it themselves to a
20 landfill, so between that and the nuisance regulation --
21 the nuisance issue concerns, those are what we're really
22 looking at.
23 The high density areas are in red on this
24 original map, this is the 2000 map that we started with,
25 are all burning of paper and cardboard and the use of

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1 burn barrels is prohibited, as well as in the
2 incorporated areas of Mammoth and Bishop.
3 Bishop is a little smaller. It can't really be
4 seen on this map, and the devil is in the detail with
5 State rules. They try to come up with something that's
6 fair and reasonable and practical, but then it's up to
7 the districts to implement that rule, and unfortunately
8 in 2010 when they redid the census upon which we have to
9 now consider our rule, the zip code really changed a
10 lot.
11 Now they have a lot of areas that are not
12 tabulated. Basically there's no people in these white
13 areas, whereas before they lumped the land mass of those
14 areas into some of the other zip codes and thereby
15 brought down their population densities, so now we have
16 to look at what the difference is.
17 In the original map, if you were light green
18 had the opportunity to apply for discretionary
19 exemption, and the only area that did that, and I'm
20 sorry, I don't have the laser pointer, is this area
21 right in here, Chalfant and Hammil valleys were the only
22 two areas within the light green that applied and were
23 actually granted the ability to use burn barrels to burn
24 paper and cardboard.
25 All other light green areas on that map

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1 essentially went to red because they did not apply it,
2 so they are now prohibited for time and memorial from
3 using burn barrels to burn paper and cardboard, so what
4 I've done, with the help of our GIS staff, I put
5 together a new map which is hanging on the wall behind
6 Matt and Tori over here which breaks it down into what's
7 on the slate right now.
8 All the dark green areas are still
9 automatically exempt, still allowed to burn paper and
10 cardboard in burn barrels. The red areas now include
11 the ones that were light green before that didn't apply
12 last time per discretionary exemption, so they're now
13 prohibited as well, but there were a few new areas that
14 came into play because of the way they redid the zip
15 code tabulations, and this is on the federal government.
16 They eliminated a lot of the dark green areas
17 and went to non-populous areas, but those essentially
18 stay the same. They were allowed for, so they still are
19 allowed under the new map, but what came into play is
20 some new areas that appeared that were dark green areas
21 and were automatically exempt and now they've lumped
22 into zip codes that make them more densely populated and
23 now decisions need to be made.
24 I may also say that I have a category on this
25 new map called renewed discretionary. If you were

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1 granted by the Air Resources Board a discretionary
2 exemption in 2004, you can apply again, so that is also
3 on the board and that's what actually went into notice
4 for Hammil and Chalfant.
5 MR. SCHADE: You have to apply again if you
6 want to continue to burn.
7 MS. ARCULARIUS: Otherwise you, too, will be
8 red.
9 MR. BECKNELL: But there was a lot of overlap,
10 too, in how they redesignated the boundaries of zip
11 codes. As you can see, a quite a bit larger area around
12 Chalfant and Hammil got designated. It's basically
13 non-populated areas to the west of Hammil and Chalfant,
14 and as far as I know there may be one ranch out there
15 and it's probably under the same fire jurisdiction as
16 Hammil or Chalfant, and the area to the east of Hammil
17 and Chalfant is basically a little bit of BLM and more
18 national forest out to the border, so it's really pretty
19 much unpopulated, and I don't know that we really need
20 to discuss those.
21 CHAIRMAN EASTMAN: Excuse me for interrupting.
22 Are there any questions of Jon at this point?
23 MR. BECKNELL: I don't know if you all had a
24 chance to read my presentation in the Board packet and
25 how much detail I need to go into on this, but one of

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the caveats for getting a discretionary exemption is that the Fire Protection District has jurisdiction over this sub area that we're looking at has to write a letter stating that they believe there would be a safety hazard if they were to be banned from using burn barrels, and White Mountain, which is Benton, and the Hammil Valley Fire Departments both submitted letters before in 2004 and have again are considered for renewal again this year this time around.

MR. KINGSLEY: Jon, on the map on the detail, and maybe you addressed it in here and I couldn't get it, but what's Keeler?

MR. BECKNELL: Keeler is included now in a red area as it extended along the northeastern shore of Mono Lake. There's a bigger area right under the label of Lone Pine that's actually kind of like the Dolomite area, but that red area does extend down and encompasses the town of Keeler.

MR. KINGSLEY: It does? I couldn't tell from the detail.

MR. BECKNELL: And that area is actually new in terms of being red, new prohibited. There's another one up in the town of Kirkwood that used to be dark green and it's now red, and those areas staff believes should be considered red and no provisions should be made.

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They really -- those populations are too dense, and staff believes that even though there is a provision in the rule, it's complicated still.

The red areas -- the newly designated red areas can request a five-year discretionary exemption if they can define a little sub area within that entire zip code that's less than three people per square mile, and neither of those communities could actually pull that off. Keeler is more dense, Kirkwood is more dense, so we don't really need to consider that.

Down at the lower -- I tried as best I could to simplify this process, but it is a State rule, so it's convoluted. There are some new areas on the southeastern corner of Inyo County that came into play because they were in basically zip codes that were labeled XX on the 2010, and now they would be in the white areas as of 2010. They were in XX zip codes of 2000, so they got lumped in with zip codes from Nevada, basically the Pahrump area, and that drove up their population densities.

Charleston View which has been kind of in the news and an issue because of the solar power plant that was proposed is one of those and they went because of how they did the zip codes to over ten people per square mile. They came up with tiny little block sections to

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define the boundary.

MS. ARCULARIUS: You see that green in there, Matt?

MR. BECKNELL: Yeah, there's red in there. Matt is right next to it. If I had the laser pointer, that red dot would be too big to actually show --

MS. ARCULARIUS: Like they're going to notice a burn barrel in Charleston View.

MR. BECKNELL: So that one is maybe one that we could and maybe should potentially consider coming up with a new area, and then my attachments, I believe it's attachment nine, I've actually drawn on a new boundary of what I think it should be.

It's on Page 125 of 172, and north is oriented towards the binder of your folder. The zip code that they defined are these tiny little areas south and it only encompasses seven-tenths of a mile and there's clearly houses outside of those boundaries. In the southeast corner, there's a very apparent home right there -- southwest corner, excuse me.

So what I proposed to ARB, and they said this is a possibility, is that we could look at all the private parcels, and I've drawn up a thin red line around all the private parcels in the area as a potential build-out for that community and a more

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appropriate boundary for the zip code that would be out there. That's a 25-mile square area. It's a 25 square mile area and there's 50 people on the census for the community of Charleston View, so that would bring it down into the light green area, and the chief of the fire department who has jurisdiction over this area has stated that he has issued a number of burn permits for burn barrels to be used in that community and they would be hurt somewhat if we were to follow through and ban burn barrels in this area.

CHAIRMAN EASTMAN: Jon, I have to excuse myself. I have a prior commitment, so I have to leave.

MR. SCHADE: I'm going to cut to the chase on this, though. We had to come to you twice since the first time. What I would like to let you know is the areas that have to be red are going to be red.

If there is a way to make them not red, like in Charleston View by redefining an area, we'll work with the local fire officials as well as the local community. There's an area in Stewart Valley. I didn't even know where Stewart Valley was. You can't get to it from Inyo County. You have to go to Pahrump first.

There are some outliers that, as Jon mentioned, for public safety purposes really should be allowed to continue to use if they can, number one, and if the

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1 community wants them, we'll come back to you with a
2 final recommendation. It will either be red or green
3 next time and we'll know which areas are allowed and
4 which areas aren't allowed.
5 MR. KINGSLEY: I would encourage some of those
6 areas out there in southern Inyo County, if you can make
7 them green, do, any color green.
8 MR. SCHADE: And Matt, you've probably got some
9 connections out there. Maybe we have a burn barrel
10 night out in Tacopa and everybody from Charleston to
11 Stewart Valley can show up and Jon can talk about the --
12 MR. KINGSLEY: Sure.
13 MR. BECKNELL: What I was hoping was a little
14 direction from the Board, if you would, as to your
15 general feeling about this. There is an option, and I
16 brought it up in one of my points in C-7 on Page 92 that
17 a lot of agencies have decided that this is too onerous
18 of a process. It's a good overall goal to get burn
19 barrels out of the system entirely and they've written
20 their rules such that burn barrels are prohibited
21 everywhere.
22 I think the allowances that were built into the
23 rule for more rural communities that don't have trash
24 services is appropriate for our district and something
25 that we should consider, but there is options to

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1 simplify the process and rewrite our burn barrel rule.
2 MR. JOHNSTON: What do they do with their other
3 garbage? If they only burn paper and cardboard, what do
4 they do with their other garbage?
5 MR. KINGSLEY: There's transfer sites at all of
6 these communities.
7 MR. BECKNELL: That's the other issue I wanted
8 to bring up, too. Thanks, Matt. Were you done, or --
9 MR. JOHNSTON: We just have to have a hearing
10 on this and then continue it until next --
11 MR. SCHADE: We don't even have to have a
12 hearing. Oh, it is a public hearing, I'm sorry.
13 THE CLERK: John Eastman is going to go ahead
14 and leave, and Ron Hames is going to take over as
15 Chairman, so bye, John.
16 CHAIRMAN EASTMAN: Bye. Thank you.
17 MR. SCHADE: So that completes staff
18 presentation.
19 MR. BECKNELL: No, I wanted to say that in the
20 ten years since the rule has come into play, I've only
21 had a couple of burn barrel complaints. They have not
22 had any violations. I was not able to find evidence
23 that -- it was basically neighbor to neighbor
24 complaints. They just didn't like the smoke, that there
25 was no evidence that materials were being -- improper

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1 materials were being burned.
2 One of those areas was in the community of
3 Bridgeport which is in the dark green area. As dense as
4 the town is, this rule and the way they set it up missed
5 that community. This was in a neighborhood on the south
6 end of Bridgeport.
7 So I would like a little direction as to how
8 rigorous do we want to be? There's multiple issues.
9 There's that community that got missed that probably
10 really should be red, but it's not because of the way
11 the zip codes were laid out.
12 MR. HAMES: So you're asking the Board to come
13 up with some more answers for you?
14 MR. BECKNELL: Do I want to pursue all
15 possibilities? I possibly can to get discretionary
16 exemptions, or do we want to rewrite our rule to
17 completely prohibit or something in between?
18 THE CLERK: At this point we should take some
19 questions from the Board and then deliberations and a
20 conclusion.
21 MR. KINGSLEY: I don't have any questions. I
22 would just say for southern Inyo, I would propose that
23 we make as many areas green as we could make.
24 MS. ARCULARIUS: Yes. I was here before and
25 was sad to see the red and I can't imagine that all this

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1 work goes in for one quarter of a person. If they can
2 be green, stay green or be turned green, go for it.
3 MR. HUNT: Even Lee Vining and Bridgeport, what
4 is the detriment to air quality up there? The
5 population is pretty --
6 MR. SCHADE: It's pretty pretty. If you're in
7 a neighborhood, it's pretty dense. It's kind of
8 distance to the nearest neighbor and both of those
9 communities got people living pretty close to each
10 other.
11 MR. JOHNSTON: This is crazy. We shouldn't be
12 burning paper and cardboard because you can't control
13 it. It's hazardous to communities that people are
14 burning in, it's obnoxious, and who knows what they're
15 burning in the barrels? No one is inspecting them, so I
16 would -- today why are we burning, incinerating anything
17 like this? If they have to put their garbage someplace,
18 then they should be putting their paper and their
19 cardboard with that. That's my feeling.
20 MS. ARCULARIUS: They can burn it in their wood
21 stove.
22 MR. JOHNSTON: And just as an example, I don't
23 know if it was a burn barrel or not, but there was a big
24 fire that started in the mountains east of Mammoth that
25 burned almost clear out to Benton Crossing road, big

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fire, and I don't know if it was from a burn barrel or whatever, but that stuff could happen and does happen, so I'm surprised these fire districts are in favor of this at all. It just adds additional hazards.

MR. BECKNELL: One of their contentions is that burn barrels are safer than burning in piles on the ground. If you disallow burn barrels, they're just going to burn anyway not in a contained --

MR. JOHNSTON: Whether it's red or green or black or purple, people are going to do what they're going to do in some of these outlying areas.

MR. BECKNELL: And I kind of agree that we don't know what's actually in their barrels. Just because I didn't find evidence on a couple of complaints that I followed up on doesn't mean it didn't happen, so it's only non-toxic and allowable if they're not burning extra materials like plastics, and who knows?

MS. RAWSON: I just would like it to be as green as possible and open so people have the privilege to do that. It's guided by the fire marshal. He tells you when you can burn and when you can't burn, and if it's wintertime, a great deal of people have fireplaces so we have that and that's not monitored. That's all I have to say.

MR. HAMES: Is there any questions from the

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public? Any response to the public testimony by the District staff? Obviously no public, so no. I'm going to close the public hearing. Everybody agree?

MR. JOHNSTON: Do you continue it to the next meeting?

MR. SCHADE: There will be a second hearing.

MR. HAMES: Does anybody else want to say anything on the Board?

THE CLERK: Does any of the Board have perhaps any direction for him or things he needs to consider?

MR. SCHADE: I think we got that.

MR. BECKNELL: There's nothing we can do about Bridgeport. You can't make an area more restrictive than the law allows, so that one is going to fall through the cracks.

MR. HAMES: If there's no other comment, thank you very much. Thank you, Jon.

We'll move on to consent items.

UNIDENTIFIED SPEAKER: I have a comment on 5-d when you get to it.

MR. HAMES: Anybody else want to pull anything?

MR. HUNT: Mr. Chair, I'd like to move that we approve items A, C and D on the consent agenda.

MR. JOHNSTON: Second.

MR. HAMES: Any discussion? I guess we'll take

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a vote on that. All those in favor say "aye".

(All members said "aye".)

Motion passes six-zero.

Now we'll go to 5-b, submittal of the annual Air Network Monitoring Plan.

MR. SCHADE: Would you like staff?

MR. ADAMS: Good afternoon. Marty Adams from the Department of Water and Power. Real briefly, I won't drag things out.

First, I do want to thank the Board for postponing what was scheduled as the hearing for -- it was originally the 22nd of this month. I apologize, I was unaware that the City Council had moved their recess schedule for their five days. They shifted their summer by two weeks, so that held us up and I thank you for recognizing that and working with us on getting a new date.

And just only to note that we did submit a letter, a very -- the monitoring plan was a long detailed plan and the letter we submitted is probably long and detailed as well, so I'm not going to rehash any of that. I just wanted to note that we had submitted a letter with comments to the plan.

Generally the biggest thing about the plan we noticed is that for the number of monitors in the plan

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that's required in the Owens Valley planning area is one monitor, and we have 12 monitors and the monitors focused on Owens Lake for obvious reasons. We know it's a shoreline issue, but we have concerns that you're going to put the lake under a microscope and not the whole OBPA and we know there's been a lot of dust historically in the entire area.

The ideas that we had when we talked about the Keeler Dunes resolution and about the phase seven resolution is that we need to kind of look at the monitoring, or from a technical level it's going to be very challenging to ever wrap this project up. We think that if we're looking at the lake for the dust and not looking at everything else around it for dust, it would be very difficult to come to any kind of resolution that we can then send on to CARV or EPA and say that from a number's standpoint, we've done what we need to do and we've met the air quality, or at least we're back down to natural levels or background levels for what's been there historically.

So at some point if there's ever a time that we have a meeting with nothing on the agenda, it might be worth having a discussion of the details of a monitoring network, monitoring plans and the way they're set up and some of the issues that we have, it might be worth

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vetting some of those to understand our concerns and how we see that having an accurate and good monitoring plan is going to be critical to moving forward to wrapping up the whole project, so that's it. Thank you very much.

MR. HAMES: Any questions from the Board?

MR. SCHADE: Mr. Chairman, I have a question or a comment for the Board's clarification. Marty, help me out here. You're saying that we only need one monitor, but you're suggesting that we actually do more monitoring?

MR. ADAMS: That's a good question, because I know you always said the more monitoring we have, the more refined dust. The issue is that there's a lot of monitors, but they're all looking in one spot for the most part, and so we know -- we talked about things like Lone Pine, Linda Arcularius has frowned at me when I said that before, but there are places that are dusty.

The whole area has got a long dusty history since the first newspaper article of 1834, so if we concentrate on Owens Lake and we don't look at what's going on around that around, then whether the dust is from the lake or the area surrounding that, it will continue to be assessed at the lake, so I can say that we need to really kind of look at the way it's done in the future and see if it's giving us the right picture

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because otherwise we're going to keep solving and solving and solving and it will never be solved, because I don't think it was ever -- that whole area was always dusty and so we have figure out what we're curing because I don't think we'll ever get there numerically the way we're going about it. That's what I'm saying.

MR. SCHADE: My comment is that Great Basin doesn't approve this plan. Today is the close of the public comment period, so it was an opportunity for the Board to make comments and the public to make comments and then all the comments are packaged together along with the draft plan and sent to EPA, and then EPA considers the plan for approval, so the public comment period will be closed and we'll send it off.

EPA did approve our 2012 plan, had pretty glowing things to say about our plan, so we expect that this will also go through.

MS. ARCULARIUS: So would this be the time to say that as a Board member or as a Board, that we were in favor of monitoring dust throughout the area and not --

MR. SCHADE: Sure, this is public comment, so --

MS. ARCULARIUS: -- in particular to a certain area?

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MR. SCHADE: But remember, a monitor on the north end of Owens Lake gets Owens Lake dust when the wind blows from the south, but when the wind blows from the north, it gets Lone Pine dump dust if there should be any, so just by the near proximity to something is not necessarily an indicator as to where its measuring comes from.

We put the -- there are limited resources. We put the monitors -- actually, it's my decision. I put the monitors where I believe the greatest threat to public health is. It's a balancing of your resources and where your air pollution is.

We'd love to have monitors everywhere all the time. That's just not practical, so it's a balancing act and one that I believe, and at least at this point EPA concurs, that we're doing a pretty good job.

MR. HAMES: Any other comments from the Board?

MR. HUNT: I move for approval.

MR. HAMES: Second?

MR. JOHNSTON: Second.

MR. HAMES: Any other discussion from the Board?

MR. KINGSLEY: The only comment I have is that I do appreciate the tone of your letter. I understand that you're not necessarily in agreement with the

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monitoring plan, but I do feel like we are trying to work towards a relationship where we can discuss things better and not just always be in litigation or disagreement, so thanks.

MR. HAMES: I think we're ready for a vote on the motion. All those in favor?

(All members said "aye".)

MR. HAMES: All those opposed?

Motion passes, six-zero.

So now we're on to number six, informational items, report on the Straw Bale Demonstration Project.

MS. HOLDER: I'm just going to give you a brief presentation on our Straw Bale Demonstration Project that we're doing down near Owens Lake. We talked about this project for awhile and we actually got it started within the last couple months, so I just want to kind of give you an update of how the project is going and what's been involved so far. If you have any questions during the course of the presentation, just let me know.

My name is Grace Holder. I'm the geologist with Air Pollution Control District.

The test location is on the northern end of the Keeler Dunes. You can see that up in the upper left corner with the halo around it. It's been in the area called the northern dune. Kind of the brown outline is

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the outline of the Keeler Dune sand deposit. You can see the green line is Highway 136. There's the old state highway that runs along the west side of the project, and then down on the lower left is Owens Lake. You can see it's near Owens lake, but it is off the lake bed in the northern part of the dunes.

This is just a blowup of the test area, so you can see the rectangle on the left side on the map. That high resolution air photo shows where the test location is.

On the northern dune area, the northern dune is has a few shrubs on it, but it's by and large a barren sand sheet. We have existing monitoring sites called 9808. It's been there for several years and that's a ground view that's on the right side of this shot that shows you what the test site looked like before we put any bale or instrumentation out there.

The access to the site is from the old state highway. We have special permission from BLM. The property is on BLM property. We have special permission to access the site with an ATV in order to get out there to do our monitoring.

This is an overview of what the project looked like in terms of the project design, so on the left side of the slide we have three instrumented transects that

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run down the length of the project. The project is 100 meters long and oriented in a northwest/southeast orientation and 50 meters wide, so it gives you an idea of what the scale is.

MR. JOHNSTON: Is that like a football field?

MS. HOLDER: It's a football field, and it's angled into the prevailing wind direction from the north.

So we have three instrumented transects. We have the center transect which is our main instrumented transect. It's got electronic instrumentation, so we've got net sites and the sand motion monitoring sites, electronic ones called sunsets.

Then we have two transects that are on the east and the west sides of that that just have the sand catches without any electronic instrumentation. So within that, we have 27 total sand catchers and then we have the five met sunset sites. Then we have one existing site from before that we saw the ground photo from.

Then superimposed on that on the right side of the slide are the bale locations. You can see it's not a regular pattern of straw bales. It's kind of an irregular pattern, and the pattern that we chose based on a condition from BLM is a natural vegetation pattern.

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That was taken from an adjacent area that is vegetated, so we had a vegetation delineation so we actually used locations from existing vegetation, clipped that out and then superimposed it on top of the test site to choose where our bale locations were going to be.

So for the project design, we wanted to get a 90 percent dust control efficiency, so based on modeling that DRI has done, they're working with us on this project. We needed 527 bales, and that's in a regular pattern. We found out that supposedly one truckload of straw bales is 500 bales, so we actually reduced the amount of bales to 500 to match that.

With our shipments, we actually got a little bit over 500 bales, so we actually have 504 bales out on the demonstration project, plus 20 existing vegetation elements that were already there, so we pretty much reached our target efficiency. We have a nine percent design control efficiency for reducing the amount of sand motion and dust.

Given the size of the bale that we have, all that translates into about a seven-and-a-half percent ground cover with the bales.

This is a view after we put the instrumentation in, but before the bales went down, so you can see in the upper right -- there's actually a little helicopter

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drone in there. We have two drones, because we figure once the bales are down, it's going to be hard to kind of get an overall view of how the project is doing just visually, so we wanted a way to look at the view vertically from up in the air without having to hire an airplane, so with all the advancement in the drone technology, we decided to try one of these drones.

We actually have two drones. This is the first drone that we tried, so we can actually go vertically up, and this drone is actually pretty inexpensive. It's got two cameras mounted on it. It's got a forward looking camera and it's got a vertical camera.

This is actually run through an I-pad ap, so it does connection with the Wi-Fi from the drone to your I-pad and then you can control it with your I-pad.

MS. ARCULARIUS: So where does the drone live?

MS. HOLDER: It lives in Keeler.

MR. SCHADE: She's got a film that she'll show you in a minute here.

MS. HOLDER: These are a pretty small footprint. We try and make them as compact as possible so they take up little space and don't interfere with the straw bales. They're four meter high towers and then there's four different heights of the wind speed. There's wind direction at each site and then there's a

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1 sun satellite at each one of the towers.
2 You can see on the bottom right, there's one of
3 the sand catchers. It's called a Cox sand catcher after
4 Bill Cox that used to work with us. We're actually
5 looking to the northwest on the bottom picture kind of
6 straight up the main corridor of the test project, and
7 you can see what some of the existing vegetation
8 elements look like. Those pictures were taken in April.
9 We had two straw deliveries. The first
10 shipment was in May, May 22nd, and this is a picture of
11 the first delivery. They actually didn't deliver as
12 many bales as we wanted. We wanted 500 bales, they only
13 delivered 336, so we had a second shipment that
14 supplemented that in June and that was the additional --
15 it was supposed to be 164, but they gave us more than
16 that, so we got four extra bales. Then we had them
17 off-loaded with what's called the squeeze which is down
18 in the lower right.
19 We had to transport the bales up to the test
20 site, so District staff did that with our ATV's and
21 little trailers. We were able to haul anywhere from
22 about six to ten bales up to the site, so it took quite
23 a few trips to move the bales up. We off-loaded
24 everything along the old state highway and accessed the
25 site off to the east.

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1 So after we delivered all the bales up to the
2 site, the CDF crew out at Round valley came out and put
3 the bales at all the pre-located spots out on the test
4 site. You can see them marked with the pen flags. It
5 took us hours to get all the bales up there and they had
6 them all spread out within 45 minutes, so it was a very
7 efficient way to put the bales up there.
8 This is a view from our first drone looking at
9 the placement of the bales after the first shipment, so
10 it's not complete. You can see some of the pen flags
11 are still present down in the lower corner, but that's
12 336 of the bales. So you can see they're all oriented
13 so the main front of the bale is in the prevailing wind
14 direction, but it's kind of that irregular pattern.
15 As part of the project, it's not just placing
16 straw bales on the test site, it's actually hoping to
17 provide the control of plants, so in advance of the
18 project over a year ago we started plants from two
19 different methods, cuttings and seedlings.
20 We originally had 225 plants, five different
21 native species, but based on the delay in getting the
22 project going, we only ended up having 141 of the plants
23 survive, so we put 141 plants out there at the end of
24 May.
25 MR. SCHADE: Grace, the delay was caused by the

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1 City's refusal to pay the assessment fee. We had to go
2 to court and then in January they finally made the
3 payment.
4 MS. HOLDER: So anyway, these are the plants as
5 they looked like a year later. They're in these long
6 pots. They're kind of root-bound. This is not the
7 optimum time to put the plants up. The fall was the
8 best time to put the native plants up. This is right
9 before the giant heat wave that we got, so this is
10 pretty tough conditions to put the plants out, so we
11 pre-watered the ground underneath the bales -- --
12 MS. ARCULARIUS: If they can survive that,
13 they'll survive anything.
14 MS. HOLDER: Pretty much, so I was pretty
15 encouraged by that. We have 141 plants, five different
16 species, and we put them at 47 bales. We put three
17 plants per bale, all concentrated at the south end of
18 the project so they're easier to water and monitor and
19 take care of.
20 MR. JOHNSTON: Which side of the bale?
21 MS. HOLDER: We put them on the north side so
22 they'll be protected. They're going to be as protected
23 as they can be from -- they're as far as they can be
24 from the north end of the project, so they should be as
25 far into the project on a north wind for the main sand

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1 transport orientation, so they're going to be protected
2 from sand transport as well as the sun beating down on
3 them from the south, so they're on the north side of the
4 bale.
5 MR. JOHNSTON: So the north side of the bale,
6 not the south side. If the wind is blowing from the
7 north, isn't the leeward side of the bale.
8 MS. HOLDER: Yes, but this is your test plot
9 and the wind is coming from this direction. You're
10 going to have the most amount of control at the south
11 end of the project.
12 MS. ARCULARIUS: Trust her, Larry. Just trust
13 her.
14 MR. SCHADE: The bales are protecting them from
15 the wind. The orientation on the north side is
16 protecting from the sun.
17 MR. JOHNSTON: All right.
18 MR. HUNT: Why do the CDF guys wear those big
19 orange uniforms?
20 MS. HOLDER: That's their uniform. For
21 fighting fires, they have to wear that.
22 MR. HUNT: There's no reason for that other
23 than just --
24 MR. JOHNSTON: They could be striped.
25 MS. HOLDER: We also used these watering tubes

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because we realized that the plants would be stressed not only from being pot down, but just in the high heat conditions, so we put watering tubes in along with each plant location. That's what the pipes are for.

MR. JOHNSTON: And you just filled the pipes with water?

MS. HOLDER: We do, so the water gets down to the root down without having to infiltrate down through the sand. So we put three plants per bale, two watering tubes per site, 47 bales, 141 plants, so this is just a view as we're starting to plant.

This is our watering system. It's an ATV with a trailer and a 200-gallon watering tank and a fire hose.

MS. ARCULARIUS: Where are you getting the water from?

MS. HOLDER: We have two water locations. We either have to fill up the tank at Keeler and drive it out there or we have a well site out on the lake and then fill it up there and take it out.

So with the initial watering schedule, we watered for the first month twice a week and now we started -- this is the second month of planting. We're watering once a week, and then based on how the plants are doing at that point we may back it off to every

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other week or even once a month.

So here's a view one month later after putting the plants in. The plants are actually doing really well, much better than expected. This is right after a watering event, so you would just take the caps off, water a little bit on the surface, but most of the water goes down in the pipes and they're about a foot long, so the water gets down into the root zone.

MR. KINGSLEY: So that's done manually?

MS. HOLDER: That's done manually.

MR. KINGSLEY: You just take a hose and dump water into those pipes?

MS. HOLDER: Correct, and we're watering about two or three gallons per bale on each watering event. The plants seem to be doing really well, much better than expected.

So here's an initial table of how the plants are doing. So out of the 141 total plants, you can see that nine have died, there's three that are poor, but almost all of them are in the fair to excellent category with most being in the good, so over 90 percent have survived which I think given the conditions within the last month, it's excellent.

Then an overall initial indication of how the site is doing in terms of dust control. We've had DRI,

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our consultant, looking at some of the data and given the initial data that we have, it appears that the test meets or exceeds the design criteria that we have.

The internal sand motion appears to be about three to five percent of the external sand motion, so that gives you like a 95 percent control efficiency to start with right now.

We have only had one major wind event from the north. The other ones have been small events from the south, so we're sort of waiting for more data before we can give an indication of overall how the test is doing, but the early indication is it seems to be meeting our design criteria, so we're pretty excited about it.

This is a picture of our second drone and this is a radio controlled drone, and you can see on the bottom corner, it is from the ground view, so that's why we want to get up in the air and look down on it. So I have -- it's less than two minutes, a little video that you can watch that Nick put together from the drone. We put music to it, but apparently the music doesn't work on this system.

(Video is played.)

MS. HOLDER: So this is a view -- we'll go ahead and get started. This is a view from the south looking to the northwest kind of down the main

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instrumented transect, and this is with the full layout of all the bales, so it's got all 500 plus bales.

You can see some of the existing shrubs. There's an overview of the stats on how many sites are out there.

This is 100 meters long, so we're getting down to the northern end of the project so we have some sites outside the project on the north and the south so we can monitor what the conditions are like going into the project as well as sites within the project area itself, so that's just on the barren sand sheet there.

This is how we water the plants, so we have Kyle out there watering the plants. You can see the ATV kind of in the background with the water tank. He's backed in there, he's got the firehose.

MR. SCHADE: He's got a little gas generator that pumps the water out.

MS. HOLDER: We started 500 new plants in April, so we're hoping that those are going to be big enough, and our plan is to put them out in the ground on the test site in September, end of September, which is supposed to be the optimum time for planting.

MR. JOHNSTON: Are you the only source of plants? At least similar plants, anyplace else that grows these commercially?

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MS. HOLDER: For a large scale build-out, you would do it commercially or hire a greenhouse to grow the plants for you. We did do some searches for native plants a year ago.

We were hoping to start the project last summer, and there are a few places, but BLM has a requirement that they want them to be locally adapted native species, so fortunately we had a technician in Keeler that has a botany background and she had collected a lot of seed, so we were able to do that.

MR. SCHADE: And the local plant society raised them for us.

MS. HOLDER: So they're actually being raised out at the White Mountain research station.

MR. JOHNSTON: How many jobs did that create?

MR. SCHADE: Six.

MS. HOLDER: Here's a vertical view of the test site, and that's it.

MR. HAMES: How high does the drone fly?

MS. HOLDER: There's the pilot right back there.

UNIDENTIFIED SPEAKER: I haven't taken it as high as it will go. It's remote control, so --

MR. HAMES: We'll find out eventually.

MR. SCHADE: We think it has a lot of

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application. There's a lot of places that are really difficult to get out to, flat and muddy areas, and I think it has -- it's a very cost effective tool to use because our cameras have gotten so good. The HD cameras have gotten so good, and it's cheaper than an airplane or a satellite.

MR. KINGSLEY: Does it transmit realtime? Is the picture realtime?

UNIDENTIFIED SPEAKER: The first one does. This one does not.

MR. SCHADE: But the video is a lot better on this one.

UNIDENTIFIED SPEAKER: If you do go out of range, it comes back and lands.

MS. HOLDER: We're sort of trying it out, so we've only taken it out -- we're trying to figure out how we're going to monitor the site when the dust season really starts.

MR. HAMES: So as the progression of the plants grow, I assume you're going to keep putting these drones up in the air to take pictures. Is that going to be on-line so someone can see this progression on-line or the plants growing from one month to the next month?

MS. HOLDER: Well, I guess we could put pictures on the site.

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MR. SCHADE: We don't have a web page for the test, but there's no reason why we couldn't post --

MS. HOLDER: We're actually developing a web page. We have all of our sites where we can actually monitor the conditions from the day before in Owens Lake and we're developing something similar to the test project.

MR. HAMES: And I think it will help the people from L.A. to actually see what the progression is. They want to do something like this as well, right?

UNIDENTIFIED SPEAKER: Anything that works is great.

MR. HAMES: Exactly. So I think the more that's actually out there so the public can see how well this is doing. Maybe there's not a lot of people that are fond of the drones, but --

MR. JOHNSTON: Don't tell them it's a drone. Tell them it's a DWP helicopter.

MS. ARCULARIUS: That was very, very good, and I think clearly what it reminded me of is I know that when the recently negotiated agreement was in the process, that the confidence level that -- I won't speak for Supervisor Kingsley because he's here, but for me, and he can speak for himself, is that whatever the magic number was, the ten million dollars or whatever, it's

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because of the faith that we had in the District that the number was correct, and then also you had the talent and the dedication to get the job done.

So even though I know you've invested a lot of your professional life into Keeler and that it didn't end up in the process that finally it was its destiny. The fact that it's going to get done and get done soon and get done at probably a level that's going to cause all kinds of excitement and encouragement I think you should be quite proud of.

MS. HOLDER: Actually, just to speak for myself, it's exciting to be doing something more constructive than just sort of dabbling back and forth.

MR. SCHADE: And I think it has a lot of -- and I guess I'm talking to Marty here. I think it really does have a lot of application to the lake bed. One of the reasons -- the big reason that the Keeler Dunes area and much of the lake bed, especially where it's dominated by sand, plants grow out there, will grow out there naturally, but the reason they don't grow is it's just too active. A little baby plant comes up and it gets sandblasted, so this is not a chicken and egg thing. We know what has to come first. What has to come first is the protection.

You have to stop the sand blowing. Once you

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stop the sand blowing, then you have the opportunity to establish these more natural control measures.

The thing about a straw bale is it's pretty cheap. It seems to work really well. It biodegrades, it's going to provide some protection and presumably some nourishment of some kind for the plants, so it seems to be sort of all working together.

MS. ARCULARIUS: And I'm hoping that it does have application. Publicly and privately and anywhere I can say it, such a proponent is finally getting a master plan for the lake and then if 50 years down the road you can look out there and see that some of this natural vegetation had been established and is not an engineered solution over long-term, that's exciting and it's a component of the master plan to save water efficiency, so all of this is exciting.

MR. SCHADE: And the two Inyo supervisors know of a dust problem in Big Pine that could have some at least temporary benefits to something like this as well.

MR. KINGSLEY: And one other I think big benefit, a possible benefit of it is that we can use it in areas that we may have culturally sensitive issues because it's pretty low impact and not --

MR. SCHADE: BLM is pretty supportive. When we talk about controlling the Keeler Dunes because of the

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sensitive resources out there, we got a pretty bad reaction from them, and when we showed them what we were thinking about that you wouldn't put these bales where you didn't have a problem, so it's not like they have to go everywhere.

Where you have the sand piled is where you put bales and where you have the sand piled up, you typically don't have the cultural resource, so it's kind of a low impact before, during and after project we think and we're excited about it.

MR. KINGSLEY: Yeah, it's not like you're going out there and having to pre-treat it or level it.

MS. ARCULARIUS: And it also doesn't put a big red target on the cultural site.

MR. JOHNSTON: Will the bales be sufficient without planting?

MR. SCHADE: Sure, by themselves they're sufficient now, but the hope is that as the bales degrade, the plants will come up and they'll be meeting somewhere in the middle, and then at some point these bales will be gone and we'll have -- our prototype in the Swansea Dunes which is north there, Swansea Dunes are vegetative. It's something similar to this.

MS. HOLDER: It's about ten percent, eight to ten percent.

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MR. SCHADE: Yeah, so that's about all it takes to get a natural cover.

MR. JOHNSTON: Will it naturally revegetate without having to plant?

MR. SCHADE: No, because there's too much sand there.

MR. JOHNSTON: I mean if you put the bales there and that's all.

MS. HOLDER: I don't know what the time line is.

MR. SCHADE: If you had a good rain year and you had some annuals, it might be kind of a chance thing, but what we're doing here is really sort of accelerating those natural processes.

MR. JOHNSTON: Do you have a test plot, a comparison between bales with no plants and bales with plants?

MS. HOLDER: We have 500 bales there and only 47 of them have plants.

MR. JOHNSTON: But you're going to put more plants out eventually?

MS. HOLDER: Only 500, so we can definitely leave some unvegetated.

MR. SCHADE: Yeah, if we get a nice rain winter, we might have lots of stuff growing out there,

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so we'll see.

MR. HAMES: Anything else from any Board members? Thank you very much.

Next is the Great Basin/LADWP Clean Air Projects Program (CAPP) grant awards and programs update.

MR. SCHADE: Excuse me, these are informational items that we don't really need to address unless you really want to hear from the CAPP or from anything else really remaining in the meeting.

MR. HAMES: I'm reading off a list. I guess not. We'll just move down to, anybody else want to go to board member reports?

MR. KINGSLEY: The only thing I'll tell you is there's a number of parking lots getting put in in Lone Pine and a lot of work to be done both at the hospital and sports complex.

MR. SCHADE: Because of the CAPP program.

MR. KINGSLEY: The one particular on 395 is the sports complex. It's really a big improvement for the town.

MR. SCHADE: It makes the whole complex seem a little more uptown.

MR. KINGSLEY: We had plans to try and get that paved and get some sidewalks in, so there's an

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1 opportunity to do it.
2 MR. HAMES: Anybody else? Linda?
3 MS. ARCULARIUS: No, I wouldn't dare say
4 anything.
5 MR. HUNT: No comments here, except I'd like to
6 thank Lisa for all her work she's done on this CAPP
7 program and you've done a good job. Thanks.
8 MR. JOHNSTON: The wood stove program
9 especially.
10 MR. SCHADE: Almost 500 wood stoves.
11 MS. RAWSON: Nothing to report, but thank you.
12 MR. HAMES: I just want to know when the next
13 wood stoves are going to be taken in. What date is
14 that?
15 LISA: When we have more money.
16 MR. SCHADE: Lisa has really set up a pretty
17 efficient program. We had a little bit of a -- we
18 started maybe a little bit in the wrong direction, but I
19 think we figured out a way to let capitalism do its
20 wonders and work with private companies to get these
21 things put in really, really quickly.
22 LISA: Using about 30 people.
23 MR. HAMES: The people in our county are
24 ecstatic about what you've done. I didn't do mine yet,
25 though.

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1 All right, the next thing would be contracts
2 signed by the Air Pollution Control Officer.
3 MR. SCHADE: Nothing to report there.
4 MR. HAMES: Travel report?
5 MR. SCHADE: Nothing.
6 MR. HAMES: We're going to Air Pollution
7 Control Officer Report. Did I read that twice? Okay.
8 And we're going to set the date and location of
9 the next meeting, sometime in September and it's going
10 to be in Mono County.
11 MR. SCHADE: Actually, we need to add to that.
12 Before this went out, we thought we were having our
13 special meeting next Monday to talk about the abatement
14 order. Because of the City's approval process, they
15 won't actually be authorized to approve the term sheet
16 that you approved at your last special board meeting
17 until the 24th.
18 UNIDENTIFIED SPEAKER: Yeah, that would be the
19 general manager's -- City Council has five days within a
20 certain jurisdiction, so that would be the fifth meeting
21 is the 24th.
22 MR. SCHADE: So our meeting then to consider a
23 stipulated abatement order couldn't happen two days
24 before they were allowed to stipulate, so we have to
25 reschedule our meeting to sometime after the 24th,

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1 within 30 days because that's what the agreement
2 requires us to do, so sometime between August 25th
3 and -- I'm sorry, July 25th and August 24th in order to
4 meet the terms. So sometime in that date -- we were
5 going to have the special meeting in Bishop, so sometime
6 in that period the Board needs to set up another special
7 meeting for that.
8 MR. KINGSLEY: When would our regular board
9 meeting be?
10 MR. SCHADE: September.
11 MR. HUNT: I'll be out of town until
12 August 11th, so any time after that.
13 THE CLERK: How much notice do we need on that?
14 MR. SCHADE: Fifteen days. The state law says
15 15. Our agreement says ten, but I believe it's 15.
16 MR. JOHNSTON: Does it need to be unanimous?
17 MR. SCHADE: It needs to be four committed
18 attendees.
19 MS. ARCULARIUS: The week of the 29th is out
20 for me, and I think that we have -- Matt and I both have
21 some other stuff possibly there.
22 MR. SCHADE: We prefer towards the end because
23 we've got some possible issues to resolve at the City
24 awarding things. It's going to take us a little while
25 to get these documents, so sometime mid to late August

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1 would be staff's preference anyway, even the week of the
2 19th or the 23rd.
3 MR. KINGSLEY: How about the 19th?
4 MR. HAMES: You're going to make us drive all
5 the way back up here the next day?
6 MR. KINGSLEY: Oh, I got you.
7 MR. SCHADE: No, the 16th.
8 MS. ARCULARIUS: I have a meeting. Probably
9 John Eastman has that meeting, too.
10 MR. SCHADE: What about the 21st?
11 MR. HAMES: That's my wife's birthday.
12 MS. RAWSON: I'll be in Sacramento, but the
13 22nd is okay.
14 MS. ARCULARIUS: We have to get back from RC,
15 though. We don't have a drone.
16 MR. JOHNSTON: Is the 5th available?
17 MR. KINGSLEY: It's earlier than I think Ted
18 wanted to.
19 MS. ARCULARIUS: And Alpine doesn't want the
20 Mondays, right?
21 MR. HAMES: I don't mind Mondays. I was just
22 joking.
23 MR. SCHADE: What if we had the meeting early
24 and allowed you to come down the night before? We could
25 have a 9:00 meeting and then you'd be out of there

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earlier.
THE CLERK: August 19th is what we're saying?
MR. SCHADE: I can't imagine that this is going to take long.
MS. ARCULARIUS: You guys are going to have it all figured out.
MR. KINGSLEY: 9:00 on the 19th at Bishop.
MR. HAMES: We're also supposed to set up the next meeting as well, the regular meeting. 16th of September?
MS. RAWSON: Where is it going to be?
THE CLERK: Mammoth.
MR. SCHADE: I think we should have it in Mammoth because you'll be considering approval of the EIR rather than Bridgeport.
MS. ARCULARIUS: That would be nice if it were in Mammoth.
MR. HAMES: It says in here it was supposed to be in Mono County and last time we were in Bridgeport, so Mammoth is the -- that's what John and I agreed on before he left. So September 16th.
MR. KINGSLEY: 16th in Mammoth, is that --
MR. HAMES: In Mammoth.
MS. ARCULARIUS: What time?
THE CLERK: 10:30.

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MR. HUNT: Early would be better.
THE CLERK: So 9:30?
MR. HAMES: 10:30.
THE CLERK: 10:30 is fine, yeah.
MR. HAMES: So that's set.
Then we're going into closed session, so I guess we're going to adjourn to closed session. Thank you very much.

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I, DIANNE M. BRUMLEY, a Certified Shorthand Reporter, do hereby certify that on _____, the _____ day of _____, 2013, I reported the hearing in the matter entitled herein;

That the foregoing transcript is a true and correct transcript of the stenographic notes taken by me in the above-captioned matter to the best of my knowledge, skill and ability.

I further certify that I am not an attorney or counsel for any of the parties, nor a relative or employee of any attorney or counsel connected with the action, nor financially interested in the action.

_____
DIANNE M. BRUMLEY, NEVADA CCR #205
CALIFORNIA CSR #6796