BEFORE THE UTILITY FACILITY REVIEW BOARD

In the Matter of the Petition For Review Between Rocky Mountain Power and Tooele County for Consideration By the Utility Facility Review Board.	)))))	Docket No. 10-035-39 Volume II of II

TRANSCRIPT OF HEARING PROCEEDINGS

TAKEN AT:	Public Service Commission 160 East 300 South Salt Lake City, Utah
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TIME:	9:11 a.m.
REPORTED BY:	Kelly L. Wilburn, CSR, RPR

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Ric Campbell (Commissioner)
Ron Allen (Commissioner)
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WITNESSES

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MAY 12, 2010 9:11 A.M.

P R O C E E D I N G S

CHAIRMAN BOYER: We're back in session, we'll go back on the record now. We apologize to those in the audience waiting. We had some procedural issues to talk about with counsel, but we're ready to go.

And the procedure this morning is gonna be slightly different than what we announced on Monday. We were going to hear just legal arguments this morning, but as a result of the public hearing last night in Tooele the Board members had a number of questions that they wanted to ask the expert witnesses.

Rocky Mountain Power wanted to recall and clarify some points in their testimony. We want to have as complete a record as possible. So what we're going to do this morning is we will hear from Messrs. Gerrard and Smith again.

The County will have an opportunity to cross examine them. The Board members will ask questions of them. And once we've completed that phase of the, of the hearing this morning we will hear the legal arguments from counsel for both, for both parties.

So with that, let's begin. Mr. Moscon?

MR. MOSCON: Thank you. Rocky Mountain Power

will recall Mr. Darrell Gerrard.

CHAIRMAN BOYER: Mr. Gerrard, you're still sworn from yesterday, so you may be seated.

THE WITNESS: Thank you.

DARRELL GERRARD,

called as a witness, having been duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. MOSCON:

Q. Good morning, Darrell.

A. Good morning.

Q. Darrell, after your cross examination and after hearing from the public comment portion of these proceedings I'd like to direct your attention to a few specific topics to have you clarify some points for the Board.

So rather than going through a chronological outline of your testimony we're just gonna kind of move from topic to topic. The first thing I'd like to draw your attention to, Darrell, is timing. And by "timing" I mean the in-service timing of the project.

On Monday you provided some testimony about a June 2013 date for when the system needs to be operational. And a question I want to ask first to lay foundation of where I'm headed is not what is the

date when the Company wants this system online. Not when the Company thinks it's desirable or would be the best bet.

But if you were asked, When does this system absolutely need to be operational, what is that date?

A. That date is June 2013. And I think on Monday I was able to demonstrate that currently our company cannot serve all of our customer demand in the critical load area with parts of our system out of service currently. And by 2013 we'll be unable to serve our customers with all of our system in service.

Q. Okay. So Darrell, specifically, who is at risk? If this new transmission line coming up from Mona does not connect to Oquirrh by June 2013, who is at risk, and of what?

A. Well, I think the risk really falls in the critical load area that I described on Monday. And our inability to maintain service to existing customers and any future customers, including those of Tooele.

I think it also puts at risk our existing generation fleet in the Southern part of state. We won't be able to utilize it.

Q. And so again to clarify, what does that mean? You say it puts their service at risk. What happens?

A. We would have to -- as I showed on the graphs the other day, we would end up curtailing customer demand -- in other words, turning off customers during certain hours, especially during peak times -- with all of our system in service in 2013.

Q. All right. Darrell, I now want to direct your attention to the standards by which you must design and plan a transmission line system such as this. There was an implication during some of your cross examination that the, the BLM receives the system requirements from you, from the Company.

And so one way the Company might gain the system, if you will, is to simply tell the BLM, Well, we need to have at least 1,500 feet for our system. And therefore the BLM, out of hand, will reject any northern corridor that doesn't provide that much distance.

Based on that, would you please describe for the Board the actual standards, codes, whatever the standards are, that you must plan to when designing a system like this?

A. Yes, certainly. I'd like to start with, first I would put an exhibit up here if I can get this to move forward. Thank you.

First of all, the -- this project that's in

discussion today, and the Energy Gateway Project, is built to follow National Electric Safety Codes. And I have a copy of that here on the desk in front of me. That's the basic minimum requirements for the safety of electric supply systems.

And the code is passed into laws in all the states that PacifiCorp serves, including Utah, either through legislative process or through some statutes. So as I talk about these standards going forward I'd make the point to the Board that these are not discretionary standards.

As a utility planner I don't get to pick and choose when, and where, and how I implement these. These are either State law or Federal law that I'm compelled to comply with.

So the code energy -- National Electric Safety Code is the first code. And I've highlighted on the screen here a passage out of paragraph 10 that I think is very important. The NESC goes on to state that:

> "This code is not intended as a design specification or instruction manual; therefore, adherence to this code does not establish or guarantee adequate reliability or service --

levels of performance for electric transmission."

So the code does not tell me what kind of reliability. This is a safety code to protect the public and our workers. That, that basic code has to be met.

So on the next slide. So as a utility planner, the NESC also recognizes that it's not an all-encompassing standard, all-encompassing code. And so I've pointed out here that it says in here:

"For all particulars not specified," so this is more about what's not covered in these rules for the construction, maintenance, "it should be done in accordance with accepted good practice for the given local conditions known at the time by those responsible for the construction or maintenance of these communications and supply lines."

"Known at the time by those responsible." That's me and my company. This clearly places the burden of performance and reliability on the shoulders of our company. This requires Rocky Mountain Pow -- Rocky Mountain Power to follow other industry standards, or requirements, or guidelines.

And also to use our company experience when planning and building an efficient, reliable transmission center. So I share this with the Board that a lot of this falls on the shoulder -- shoulders of the Company.

The next set of standards that I'd like to talk about, I mentioned these briefly on Monday, there are five -- there are a number, but I've listed five out of my testimony on page 15 and 16. These are the new, as of 2007, National Reliability Standards For Bulk Transmission they've passed into law in the Federal Register, and we must comply with these standards.

The first standard is system performance under normal conditions. I showed you an energy triangle map on Monday. With all elements in service we have parameters we have to follow, and the performances specified.

Our second standard for performance is loss of a single -- the BES, sorry for the abbreviation. That's Bulk Electric System Element. So loss of a single element. In the case here today in front of us, that's the transmission circuit.

The third standard that I'm compelled to comply with is system performance following the loss

of two or more bulk electric system elements. In this case that would be two or more transmission circuits.

The fourth standard is a wide and all-encompassing one, is system performance following an extreme bulk electric system event. In this case for this, for this proceeding that's loss of multiple lines -- more than two -- and loss of entire utility transmission line corridors.

I have to comply with all those. The fifth one that you see up there is a regional criteria standard set by the Western Electric Coordinating Council, and it talks about line separation.

Q. Thanks. Darrell, could you call back up the graph that you had that showed the schematic for this particular system, the triangle-within-the-triangle slide? And describe for the Board then how those, those standards that you just described relate to your location of what were line Segments 2 and 3 in that graph?

A. Yes, certainly. I've provided that drawing here again. The Board saw this on Monday as part of my testimony. And again, I'm pointing back to Segments 2 and 3 here. And this is the reliability triangle that I talked about for our Energy Gateway project, and the local reliability triangle that we're

using for the Mona-Oquirrh project.

In this configuration, again, the requirements for Energy Gateway energy triangle were large hubs, resource and load hubs, connected by high-capacity, high-reliability transmission lines -- at least three of those lines for redundancy -- on widely-geographically-dispersed line routes.

This meets all of those requirements and allows me to meet TPL-001, All systems in service, TPL-002, One circuit out of service, and TPL-003, Two circuits out of service. And I'd remind the Board that each one of these lines here, 2 and 3, have two circuits on them.

So we're talking a total of four transmission circuits here. Two lines, four circuits. In this configuration it meets my Energy Gateway requirements, and it meets all of these reliability standards.

Q. Darrell, if -- notwithstanding everything that you've said, if the Company were forced to put Segments 2 and 3 in the same corridor -- which would amount to what's been called the Grantsville route or the northern route.

If the Company were forced to do that and, you know, you talked on Monday about the things that can happen. The floods, plane crash, fire, whatever?

A. Yes, I do.

Q. If that happened, if you had 2 and 3 in the same corridor, besides the fact that you wouldn't meet these standards, what's the practical reality of what would happen to the system in that event?

A. Well, if we were to co-locate these -- which we do not want to do -- we increase the chances that there are multiple circuit outages. Significantly increase the risk. And as I re -- remember telling the Board on Monday, each of these lines can carry up to 1,500 megawatts each. That's what they're planned to do in the future.

With those co-located, that's 3,000 megawatts of capability in these, in these two circuits. By co-locating these I cannot meet TPL Standard 4 without significant amount of risk, and TPL-003 without a significant amount of risk.

Should these two lines become interrupted -- remember, there's four circuits here. Should these become interrupted, I have 3,000 megawatts flowing across these lines, that has to go somewhere. And where it will flow is on the existing system that's there today.

And it cannot handle that. It will overload and disconnect.

Q. Give the Board some context then. Three thousand megawatts sounds like a high number, but in context. So for instance, compared to the entire Salt Lake Valley or even the critical load area, how much of a, of an impact is that?

A. Yeah. You may recall on Monday, the critical load area demand -- the customer demand in the critical load area was in excess of 4,400 megawatts in 2007. So with this carrying 3,000, and if you use 2007 as your reference, that's roughly two-thirds of the entire load in the critical load area.

Another way to size that maybe to help, 3,000 megawatts is about six -- approximately six of our Lakeside Power Plants located down just south of Camp Williams there in Lehi.

Q. And that's the amount of power that would be interrupted if those two lines had a common outage?

A. When they're in their fully-loaded state and the project is fully utilized, that's correct.

Q. All right. And again, on Monday during your cross examination and even in your direct testimony there was some discussion about impact of if, if Line 2 went up around here it added length to the line and, and decreased efficiency. You discussed that.

Could you describe for the Board then, fine,

it decreases efficiency, but again, what is the practical reality? What would that mean to customers across the state?

A. Yes, certainly, certainly. In the design of -- if the Mona-Oquirrh project, the ideal situation would be, in an ideal world, would to have Line Segment 2 between Limber and Oquirrh zero length. The shorter the length, the better.

In the case here, if we took -- and the reason that that's, that's important is that if you make Line Segment 2 here short, it looks like the same electrical resistance between Mona and Oquirrh as this path here.

So what we're trying to do by making Segment 2 short -- I'm shaking a little bit here. Make it short is we want to match the same electrical characteristics that exist here. So if we could make those the same length I get the most utilization and the most efficiency out of my system.

So contrary to that, by taking the route that's been suggested or proposed and taking Segment 2 and running it up along the I-80 Corridor, as it's been coined, and back around and down to Oquirrh, Mr. Brandon Smith tells me that's about 60 percent -- approximately 60 percent more line length.

Sixty percent more line length trans -- trans -- transfers to 60 percent more line losses. Because you've got 60 percent more line miles. Line losses are a function of energy transfer over the power line. And that's just heat radiated out into the air.

So we have a, from a, from a green power line standpoint, if you will, it's 60 percent less efficient in radiating energy to the air over the life of the project. That never goes away.

Q. So what does that mean to a, to a ratepayer? What -- again, if we accept, Fine, your system's less efficient, what's the result?

A. Well, that means we have to generate 60 percent more electricity to push over this line, and it goes out in the air as heat, so our ratepayers will pay for that for the life of the project. So making Segment 2 as short as possible mitigates that problem or reduces that problem.

Q. All right, Darrell --

A. There is, there is a second efficiency that I would like to talk about --

Q. Okay, please. Yes.

A. -- that I think is maybe more important. And I did touch on this a little bit on Monday. By adding

60 percent more line length and 60 percent more electrical resistance to this path, when I try and push electricity or power flow up around Segment 1 -- remember, our goal is to get it to Oquirrh -- I have 60 percent more impedence, or 60 percent more resistance to flow. It doesn't want to go there as easy as it does with this segment being short.

The result of that is the energy flow will move around on this path, because it's lower resistance. Now remember, that path's already overloaded. That's why we're building Mona-Oquirrh. The upshot of all that is 60 percent more line resistance does not let me load this brand new asset to its capability.

So as a utility planner, the way I, the way I could fix that is to make this line look shorter. By making Segment 2 look shorter I would be forced to build a third 345 transmission line from Limber to Oquirrh.

When I do that, I put those two parallel. So now I'd have a third line. That resistance or that 60 percent goes in half. That's how it would load up the project. So from an energy efficiency, radiating heat into the air that the customers never use but pay for, it's inefficient.

Also, from a utilization of a new asset and existing asset, making that line longer makes it less efficient and less utilization. That's very important.

Q. And would require a third line to be built?

A. That's, that's the way you would make the energy flow from Limber to Oquirrh.

Q. Okay. One question that Tooele has asked me to clarify -- which is a good question -- is you're talking about, you know, the dangers of making this line longer if you wrap it around up north.

Are you necessarily talking about going all the way around Point of the Mountain and coming back? Or are you talking about coming up to the I-80 Corridor and then cutting back across and still up Pat's Canyon (phonetic)?

A. Both of those are both inefficient. Both of those are longer line routes, one is a little longer than the other, but both are inefficient. As I understand the line routes.

Q. Okay. And we can ask Brandon about miles. Darrell, on Monday there was a number that was going around of 1,500 feet of separation. You were asked, you know, repeatedly about this. And I want to kind of understand if this is a magic number or where it

comes from.

Can you clarify for the Board what that number means, that 1,500 feet of separation, and how it applies specifically to this system?

A. Yeah, certainly. The last standard that I put up on the Board there I mentioned was a WECC regional criteria. And that criteria has a separation criteria in it.

And basically what it says is if two lines -- two circuits, excuse me. Two circuits are located closer together than the largest span length, or 500 feet, then as a utility planner I need to make -- I need to, I need to take that into account and provide redundancy. Because those circuits are close together and they have a chance of having a common outage caused.

The 1,500 feet comes from a standard span length of a 500-kV transmission line, which is about 1,500 feet. So that's where the number came from. What that standard doesn't say, though, is what you do when you have more than two circuits.

That's where TPL-004 comes in and tells me as a planner to look at loss of all lines, or all lines in a corridor. So I don't want, I don't want the Board to get fixated on a 1,500-foot separation. That

only appl -- that's only one of the criteria that we have to meet. We have to meet all five of those criteria.

Q. Maybe this is the way to just put a point on it. If there was a way for Brandon to engineer and construct a system along any of the various configurations for a northern route in which he was able to find a way to, you know, thread the needle, so to speak, and keep both of those lines 1,501 feet apart -- so at no point do they come closer than 1,500 feet -- would that then satisfy your system needs?

A. No, it does not. And for the same reasons I mentioned on Monday. Our Energy Gateway reliability triangle design criteria is widely-dispersed lines separated by at least a mile. Up to five miles if we can get it.

I know five miles is not practical here. But it does not meet that, that fundamental requirement. And makes it impossible, really, for me to meet all five of those standards I just went through.

Q. Darrell, maybe as a concluding question to drive this home then for the Board. If, notwithstanding everything that, that you've said, that Brandon has said, if the Board were to pick and

select and say it thinks the best route is one of these northern routes and that's the corridor the line should be built in, would the Company build that route?

A. No, I don't believe we would. And we've talked about that a lot as a company. And Mr. Smith, my colleague, we've talked about that with the highest levels at Rocky Mountain Power. And they're in agreement with, with my assessment.

MR. MOSCON: I have no additional questions. I'll -- however the Chair wants to proceed.

CHAIRMAN BOYER: Okay. Well, thank you, Mr. Moscon.

We'll ask Counselor Hogan here if he has any cross examination.

MR. HOGAN: I do.

CHAIRMAN BOYER: Okay. Please proceed.

CROSS EXAMINATION

BY MR. HOGAN:

Q. Mr. Gerrard, the segment on this, on this slide that's labelled as Segment 1, the 500, where it's actually gonna be 500 kV, is there a, is there a system-wide benefit if the 500 kV actually gets further north?

And in fact would there be a system-wide

benefit if the 500 kV made it all the way to the Salt Lake Valley?

A. No, I don't see any benefit to that.

Q. No, no benefit whatsoever?

A. No. I actually see that as a detriment because we would have to build additional substations, I believe.

Q. So cost?

A. Additional --

Q. Cost is the detriment? That's what you just said.

A. Additional substations mean additional cost. There's additional losses. Every time you build a substation you have energy losses with those, so.

Q. Okay. Well, I'm struggling. Let me tell you where I'm struggling. I'm struggling with the idea that in order to improve the system you've said we need a 500-kV triangle. And then we want to have these other regional triangles that are smaller.

But in this case now you're saying that it's not really a benefit, it's a detriment if we actually complete the 500-kV triangle. Which is it?

A. I didn't say it was a detriment to decrease to not complete a 500-kV triangle. I didn't say that, I don't believe.

Q. You just said it would increase cost. It wouldn't help the system. There would be no system-wide benefit to doing it. It would increase the cost and it would not be better.

A. Well, I, I'm not following your, I guess your design of where you're, where you're moving the 500-kV line. Maybe you could clarify that for me.

Q. Sure. Ignore, ignore Segments 2 and 3 for right now. We can make the second triangle later. But the big triangle we're talking about in this, when you showed the big regional map, this was one of three legs of the triangle.

If this third leg went all the way to your, to your big grid in Salt Lake, wouldn't that be better?

A. No, it is not. It doesn't get me what I need at Oquirrh.

Q. Okay.

A. Because, again, in that case --

Q. I'm not saying Terminal. I'm not saying where you connect in. If you need it at Oquirrh wouldn't it be better, then, if the 500 kV got all the way to Oquirrh?

A. No, that's not, that's not, that's not a beneficial configuration.

Q. So, so we need big triangles, except for when you say we don't need big triangles?
A. No. What I'm saying is the most efficient way to get energy into Oquirrh and Terminal is with the line design and the substation design that you see on the Board here.
Q. Okay. Let's talk about the small triangle, because I don't think we're getting anywhere with the big triangle.
A. Okay.
Q. You've said that on the small triangle, the Segment No. 2, shorter is better; is that correct?
A. In service to Oquirrh, that is correct.
Q. Okay. Are you gonna change your mind on that? If I ask another question are you gonna change your mind about whether shorter is better on No. 2?
A. I'll let you ask your question first.
Q. Okay. Would shorter be better for No. 3?
A. Shorter is better for No. 3 as well.
Q. It is?
A. For, for benefits to Terminal.
Q. Okay. Just making sure. Shorter is better on No. 2, and shorter is better on No. 3. You're sure?
A. Yes.

Q. Okay. If this big circle right here were exactly where the circle on No. 3 is, and if I put my pen right here, what shape does that make between 3 and this triangle and this triangle? What shape am I making?

A. I guess that's a triangle, if I see your pen correctly.

Q. You're, you're sure this is a triangle?

MR. MOSCON: Can we ask for a little less editorializing in the questions to the witness?

CHAIRMAN BOYER: Yeah --

MR. HOGAN: I'll try to not to be argumentative. I've had difficulty getting straight answers. I'll try not to be argumentative.

Q. (By Mr. Hogan) On the record this is a triangle. This is a shorter segment here, which you've said is better. This is a shorter segment here, which you've said is better. So for the system, what I've just proposed is better in all facets; is that correct?

A. That is incorrect.

Q. Why is that?

A. Because Limber Substation is -- you didn't mention where that is located.

Q. Right here. Right here where the circle is.

A. So you've just made our 500-kV line, Segment 1, X-number of miles longer?

Q. Right. And I've shortened both your 345s.

A. But the distance is the same to Oquirrh. How did you shorten it?

Q. It's not the same. It's the three -- this isn't to geographic scale. We'll get to that with Mr. Smith when we get to his --

A. Okay, let's, let's talk about Mr. Smith.

Q. But assume for the sake of argument that I've shortened this segment and this segment. Which you've said both of which are better. And this -- and the Limber Substation has moved up here. This appears to be a superior design.

I mean, I'm not an electrical engineer. But based on the criteria you've laid out, this appears to be a better design; would you agree?

A. Well, I don't, because you're arbitrarily placing things on a map. I don't have distances to work with. Shorter is better --

Q. Well --

A. -- I would agree to that.

Q. We're, we're -- I thought your testimony was theoretical at this point. That it was conceptual. This is big-picture design. And that's all I'm asking

you to say, is big-picture design. I'll get to the specifics with Mr. Smith.

In big-picture design -- because obviously this isn't to scale. This isn't a straight shot from here. You've represented it as such, but this isn't a straight shot. This line goes and makes all sorts of bends to get over here.

A. But that has specific line miles assigned to it. We know how long that is.

Q. Okay.

A. I don't know how long the lines are that you're just arbitrarily putting on the map.

Q. Okay. Assume this is Lake Point. I mean, you don't have to do that, I'll do that with Mr. Smith. This is roughly the Lake Point area. If we made this triangle. We've got, we've got -- we've accomplished your big triangle.

In fact, we've made your big triangle better. If your big triangle actually gets 500 kV closer to the Wasatch Front. And now we've shortened Segment No. 3, we've shortened Segment No. 2. Would you agree that's a superior design, aside from the criteria that actually exists on the land? Just conceptually, would that be superior?

A. I don't believe it is, no.

Q. Could you explain why not?
A. Because I think it doesn't, it doesn't provide the service to Tooele. And it makes our 500-kV line the same distance as --
Q. How --
A. You're not taking line miles out --
Q. Hold on, hold on.
A. -- you're just moving a substation.
Q. Hold on. How does that not provide service to Tooele?
A. Well, the Limber Substation has been sited in the best geolo -- geographic location, I believe, to serve Tooele and to optimize the length of Line 2 and 3. That's why we put it where we put it, was to optimize the utilization of those circuits.
Q. If we find an equally-acceptable site for Limber Substation up where I -- this general area where the No. 3 is and we shorten both these other lines, how does Tooele not get service?
A. I believe Tooele would get service, I just don't think it's as efficient as what I've put up here.
Q. And how, how is that? We've shortened Segment No. 2. You said that's better. We've shortened Segment No. 3. You said that's better.

What is different with -- substation's gonna exist one place or the other. What is different?

A. You haven't talked about what happens to Segment No. 1.

Q. It's longer. Clearly it's longer.

A. That's correct.

Q. You said that's better. That's your big triangle. We're getting the 500 kV a little bit further north, and in fact even further east.

A. It's still more line miles than, it's still more line miles than what was proposed here.

Q. Total line miles?

A. Well, I don't know. I -- you -- we have not talked about Segment 1, and you're asking me to speculate --

Q. It's, it's clearly more line miles for Segment 1, but it's -- I think the Board can acknowledge and recognize it's clearly less line miles for Segments 2 and 3. So you're acquiring right-of-way in one place instead of two. That's got to be cheaper. You're building less line in total. That's got to be cheaper.

I heard yesterday -- I don't know if it was you or Mr. Smith -- or Monday, one of you testified that it's cheaper to build 500 kV than it is to build

the 345. Is that, is that true?

A. I disagree with your statement there's less line miles.

Q. I guess we'll have to divert to Mr. Smith for that question because you said you don't, you don't know how many miles it is.

A. I don't, I don't know which line route and which miles you're talking about.

Q. Okay.

A. You just put a pen up there between two points. I, I really don't know --

Q. I'm just -- was it a triangle?

A. On that map -- on that screen it was a triangle, yes.

Q. Okay.

A. Electrically, I --

Q. Thank you.

A. I'm not sure what you're proposing.

Q. Thank you.

MR. MOSCON: Can we have some redirect, your Honor? Or Mr. Chairman?

CHAIRMAN BOYER: We're gonna ask some questions first --

MR. MOSCON: Okay.

CHAIRMAN BOYER: -- and then you can do your

redirect.

Anything further, Mr. Hogan?

MR. HOGAN: Not, not at this point.

CHAIRMAN BOYER: All right. We're gonna see if the Board members have any questions for Mr. Gerrard first, and then we'll allow redirect. And we'll start to my left, with Mayor Johnson.

MAYOR JOHNSON: Thank you. I have -- I do have a question or two. One is, Mr. Gerrard, if we, if we take the line as suggested and move the Limber Substation up to approximately that 3 area. Last night we had a lot of discussion about the Superfund site.

So I guess my question is, if we turn it and go up over the mountain from somewhere, you know, wherever that 3 goes, is that gonna end up going back over the Superfund site regardless? Whether we go on the No. 2 line, or whether we come and go further north and then come back over the top?

Does that make sense? Because the Superfund site seemed to be of some concern/cost that hasn't really been looked at. So I'd like to -- because I'm not sure what happens if we, if we change the site, go from where it currently is up to No. 3, does that do anything with the Superfund site?

THE WITNESS: Yeah, and I guess what I'd like to do there, if I may, is let my colleague, Brandon Smith, and his maps cover that, because we can see exactly where it is.

MAYOR JOHNSON: Okay. Could you answer another question? On the -- if we extend the 500-k (sic) line longer, make that longer as we've said, does that, does -- do we lose efficiency? Is that what you're saying? Or do we lose, you know, do we lose heat?

Help me understand -- I'm not quite sure what happens if we extend that longer.

A. Well, anytime we make a line longer, of course, we have more line miles and more losses. The difference -- the only difference between the 345-kV lines in Segments 2 and 3 is really the voltage that we're operating at.

And it is true that a 500-kV system has less energy losses radiating out into the atmosphere for the same megawatt of transfer capability. That is true. That's why we --

MAYOR JOHNSON: So you would lose some, is that what you're saying?

THE WITNESS: Absolutely we would lose some, that's correct.

MAYOR JOHNSON: Okay. The other day in your testimony, I think, and last night there was some discussion about if we move the substation further to the north and northwest there was some question about the soil -- and maybe that's gonna go to another one. But the soil wasn't good to put it there.

Last night we heard that the soil could be good enough to put it there, just put it in a different spot. Has that been looked at? Do, do we know if that's?

THE WITNESS: Yeah, I think, I think Mr. Smith can --

MAYOR JOHNSON: Okay.

THE WITNESS: -- address the soil conditions and the design that's been looked at there on the project.

MAYOR JOHNSON: Chairman, I think I'll defer.

CHAIRMAN BOYER: Okay. Thank you, Mayor.

Commissioner Allen?

COMMISSIONER ALLEN: Thank you, Mr. Chair.

And I may have some of the same problems with getting to the right witness here, because I think both of you have some expertise that may cross a line.

THE WITNESS: I'll do the best I can.

COMMISSIONER ALLEN: Let's see where I'm at.

Some of these questions come from public testimony, especially the sworn testimony. I want to make sure I have clarity here from your position.

The -- in designing these lines and developing a need for these lines, when you look at things like Superfund sites, and specifically the Superfund site -- and this may be Mr. Smith's question too -- but do you anticipate that you can often cross those without setting paths into them?

Did you have that discussion at a high level how you could get through there or over it?

THE WITNESS: I'm aware the project teams talked about that. I think Brandon can, can cover that as well.

COMMISSIONER ALLEN: Oh, okay.

THE WITNESS: I know, I know we discussed it.

COMMISSIONER ALLEN: I know that we also have some sworn testimony that -- and I've seen it in some of the emails from the public that there are a number of people who are convinced that there's an energy corridor that's still coming in from the west along I-80.

And, you know, we get access to some of these maps. There's something from the DOE and from the NERC. Are you aware of anything that shows

specifically? I know you've already testified that -- but have you had a chance to go back and clarify what -- where this information may be coming from?

THE WITNESS: As far as you're referring to another transmission line coming from the west; is that the question?

COMMISSIONER ALLEN: Yeah, traversing Nevada, across I-80.

THE WITNESS: I'm -- the only project I'm aware of that's currently in play, and I'm involved in some of the analysis, is the SWIP Corridor. Which is a line from midpoint Idaho down through to Nevada. That's the closest project.

Matter of fact, our Gateway project that we're currently working on for Gateway West, we modeled that -- we're modeling that transmission line as part of the west-wide grid. There are no, there are no projects that I'm aware of in WECC or on the regional planning criteria that show that coming west into Limber, or even Mona for that matter. I'm not aware of any project.

COMMISSIONER ALLEN: Sometimes in attending energy planning meetings we get what we call "conceptual maps," where they'll draw big lines across states and boundaries.

Have you ever had people confuse a conceptual map, where -- you're talking about energy needs to move from east to west or north to south, and have you had conceptual maps confused for siting maps before? I'm not trying to make their case, I'm just -- I'm really curious.

THE WITNESS: Yeah, certainly. There's, there's a number of Power Point -- I call them "Power Point projects" out there with lines drawn on a map that just draw straight lines across, across the system.

There are a number of maps out there. I think there's thir -- don't quote me on this exact. I think there's 13 projects in the northwest that are in conceptual planning right now through regional planning.

COMMISSIONER ALLEN: But they're not siting maps, they're conceptual?

THE WITNESS: They're straight lines -- even the ones from Wyoming that are competing I guess with our Gateway project, you'll see they're straight lines on a map between somewhere in Wyoming and Las Vegas. They may take a jog here and there, but they're not siting maps.

COMMISSIONER ALLEN: Okay. That might be

helpful. Thanks. Okay, let's see. What else do I have here?

In developing the overall project, and as alternatives were presented to you from citizens' groups and from the City and County it occurs to me that there were -- we don't have, we don't have cost spreadsheets.

Is there a reason why the Company decided not to at least give us a few scenarios and give us some math as to why more specifically they wouldn't have cost more or less to move them, or? Is the Company just convinced that you've got such a, an apparent line here? I'm just curious about the lack of accounting support.

THE WITNESS: Are you referring to alternatives to Routes 2 and 3 when you say that? Is that --

COMMISSIONER ALLEN: Two and three, or moving the Limber Station. We're dealing with a lack of financial data here, it seems. Do you understand what kind of decision went into that, or is it an oversight, or?

THE WITNESS: No. I think as we, as we looked at our -- the routes that we had, we used conceptual estimates, and I mentioned some of those on

Monday, with certain amount of dollars per line mile, certain amount of dollars per substation.

And at a high level that's what we used to determine, you know, what might be the, the best alternatives at that point in time. So we do have some internal information that we use as block estimates.

For example, my planners, take a 500-kV transmission line, might use 2 million to 5 million dollars a mile as they're doing alternative looks at that at the high level. Once we figure out what the best solution is, then we would do a more-detailed estimate on that.

But we do have some estimates we've used internally. We call them "block estimates."

COMMISSIONER ALLEN: You just decided not to use them publicly, or --

THE WITNESS: And I would, I would, I would give you one other piece of information there, for example. The reason I placed Limber out here as a 500-to-345 substation was to keep from building two 500-kV substations, one at Terminal and one at Oquirrh.

So should we bring 500 kV up to Terminal, I still need to get some transmission down into Oquirrh.

So I didn't have to do a lot of estimating to know if I built one station instead of three, that's a better design. So some of the decisions are quite that simple.

COMMISSIONER ALLEN: Now, you're, you're fairly familiar with the system throughout Utah and the Western U.S., I imagine, where your main lines are at. I'm gonna ask a question and see if you can help me out with, with the ac -- with the -- how close it is to the Tooele "T," the high school logo on the side of the mountain.

Do we have -- there are a lot of high schools along the Wasatch Front. Do we have other areas where these lines cross these type of areas, these type of sites, that you are aware of?

THE WITNESS: You're referring to schools specifically?

COMMISSIONER ALLEN: Yes, schools and where they put their, they put their logo or their letter up on the mountain. And they have -- sometimes they have these fences we have -- we'd had testimony.

THE WITNESS: I can't think -- currently I can't think of where there's one that has a school symbol or a school emblem. I know we do have power lines in and around schools. Power lines themselves.

But I can't think of, offhand, where we've got a power line that crosses a symbol that would be up on a mountain. I may think of one here in a minute, but I can't tell you.

COMMISSIONER ALLEN: Okay. As far as you can remember it hasn't come up before when you're siting one?

THE WITNESS: I don't recall discussing that in my career, no.

COMMISSIONER ALLEN: Okay. Just give me a second.

THE WITNESS: If I have, I've forgotten.

COMMISSIONER ALLEN: I had one more, but it looks like it's disappeared here. Oh, you talked about energy losses.

THE WITNESS: Yes.

COMMISSIONER ALLEN: You said a line that's 60 percent longer is 60 percent greater. Having sat in a number of hearings myself where we have to discuss energy losses and how they're gonna be applied it's my understanding that line losses can range anywhere from 2 to 6 percent, depending on site, temperatures.

So am I clear that when you say you're gonna have 60 percent more line losses you're not gonna lose

60 percent of the energy, you're gonna have 60 percent greater. If it's 2, 3, 4 percent, then it's 60 percent greater than that?

THE WITNESS: Yes, that is correct.

COMMISSIONER ALLEN: Okay. Just wanted to make sure I was correct.

THE WITNESS: Absolutely correct.

COMMISSIONER ALLEN: Thank you.

CHAIRMAN BOYER: Ms. Hurtado, do you have any questions for the witness?

MS. HURTADO: I don't have any.

CHAIRMAN BOYER: Commissioner Campbell?

COMMISSIONER CAMPBELL: I guess I'm gonna reveal that both Commissioner Allen and I have accounting backgrounds because I'm troubled, too, about the lack of financial data. How do you, how do you define "efficiency"?

As we look at the statute -- and maybe this is a legal conclusion -- but do you completely exclude cost in the, in the definition of efficiency?

THE WITNESS: Absolutely not. And again, on the reliability side, our company is not about reliability at any cost either. So, but I would answer that, Commissioner, with -- from, from an engineering standpoint, efficiency for us is how much

energy loss the system has that the customers can't use. That's one measure.

And we deal with that in a number of ways. By conductor sizing. By transformer design. We actually account for, in our designs, how many -- how much energy loss is gonna occur on these new segments. And by example on that, on Segment 1 here, in the testimony we filed with FERC we picked a certain conductor and a certain conductor configuration that was a low-loss design.

We did that to try and reduce the energy losses on this segment as it goes into service. So that's one way of efficiency. On transformers, for example, we will order transformers and have manufacturers build transformers based on -- based partially on how much energy and how much heat they produce.

So we have, we have some standards we use for how efficient a transformer is. The other measure of efficiency for, for my engineering here, is the ability to utilize the full capability of the line. For example, my planning criteria for Segment 1 is 1,500 megawatts. And if I can't fully utilize that, that asset is less efficient than if I can fully utilize that.

So it's a, it's a matter of capacity usage. Those all come with cost, and we look at cost when we put those together. And --

COMMISSIONER CAMPBELL: Well, let's talk about cost a little more. Have you -- has the Company ever built a transmission over existing Superfund sites before?

THE WITNESS: To my knowledge, we have not.

COMMISSIONER CAMPBELL: So you don't have experience with, with what that would cost if there would be -- if the Company would be subject to significant remediation costs as it relates to building on a Superfund site?

THE WITNESS: I'm not aware that we've built on a Superfund site, and I would not know what the costs are to do that. I can't think that -- I can't think of a place where we've done that.

COMMISSIONER CAMPBELL: Well, perhaps you can respond then to the observation made and given to us last night that -- or let's just assume, for example, that there were significant costs to construct on a Superfund site because you're putting things into the atmosphere.

And we received in the record last night information as it relates to the type of remediation

that would take place on that Superfund site through the Tooele County Health Department, I believe, or.

And as you look at efficiency, I guess this Board -- I struggle trying to decide whether this is the most efficient route if there's $50 million related to building on that Superfund site versus another route.

How are we to make that decision with no cost information on this record?

THE WITNESS: Well, I would, I guess for the work that the siting group has done -- and Brandon Smith may be able to address. I know he's had some conversations about the feasibility of that in talking to the Superfund site owners.

So they've done some work on that. I'd have to defer to Brandon, unfortunately, for the detail. But to answer your question, I'm not aware that we've built over a Superfund site.

COMMISSIONER CAMPBELL: Let me ask you a question as it relates to timing and -- you talk about the need to get this additional power into the critical load area because the existing route is overloaded.

Is it, is it Oquirrh specific? Or is it possible for the Company to, maybe not to the same

extent, but to meet your absolute 2013 deadline of redundancy by building Line Segment 3 first and giving, and giving more time to look at the issues as it relates to Line Segment 2?

THE WITNESS: No, that's really not an option for me. And the reason I say that is the, the busy scatter diagrams I provided on Monday and the limit lines, I showed you two slides with limit lines. One slide with all of our system in service. The final slide was with one line out of service.

And this segment right here is the cause. That's our, that's our weak link. And by building up to Terminal up here, it doesn't give me support on this line right here. And again, because this distance up here, the power has to go all the way up to Terminal and back down to here before I can serve my load.

So that the energy tries to flow up this way, and it further overloads this segment right here. So the reason for the date and those limits is this is our weak link right here. We have another weak link over here, as I -- I think I mentioned this on Monday, but I'll cover it again.

Between Camp Williams and our 90th South, which is our other big load hub, we have the same

configuration as this one right here. And we're building a second line, which will be completed this year, over to 90th South.

So that, that weak link will be fixed by the end of the year. Again, this, this is the, this is the culprit. So building 3 to Terminal does not solve that problem.

COMMISSIONER CAMPBELL: Let me ask you a question to follow up on Mr. Hogan's line of questioning. And that is when you talk about distance, and impedence, and the way power flows, if the 500-kV substation were at Circle No. 3?

And then you draw your, your Line 2 down to Oquirrh. Is the, is the distance -- I mean, what would that do to -- I mean, clearly it's a longer distance. Is there compensation for the 500 kV going further north with a shorter 345, as it relates to the other route that's already in existence?

THE WITNESS: The -- let me answer that in two parts. The Segment 1 that we're building for Mona-Oquirrh is gonna be operated at 345 until around 2019. We don't, we don't need the 500 kV, so it will be operated at 345 till about 2019.

So in that case, Commissioner, the distance is the same. If you move Limber up here you just

extend Segment 1 to 3, and then you build back here to 2. So --

COMMISSIONER CAMPBELL: Which is a 345?

THE WITNESS: Which is a 345. Okay. The second part of the answer, to be fully correct. When we convert this to 500 kV in and around 2019, when Gateway South that I showed you ties into Mona, we will convert this to 500 kV.

At that point you do gain some, some, although it's small, some efficiencies by going to the higher voltages. You have less losses. And power flows a little easier.

The other reason we picked 500 kV, just to close all this, is that it's -- the 500-kV system is much more resilient to overloads. And the voltages, the voltages stay better because of the high voltage, so.

But we don't need to do the conversion for ten years. It saves, it saves our customers money. We don't need to do that.

COMMISSIONER CAMPBELL: As far, as far as the 1,500-foot separation issue, how does that affect your proposed Line 3? I mean, are you shooting yourself in the foot ten years from now by all this the record we're creating now that -- will you be able to have

the appropriate separation when you build Line 3?

Or will people come in and use this testimony saying, Well, you don't have the separation?

THE WITNESS: I'm, I'm not following your question exactly. Maybe I missed it. Line, Line 3, the way it's proposed here, we would, we would have -- there's no other lines to conflict with on the route that we've picked, I think.

COMMISSIONER CAMPBELL: So you do have a route that doesn't use the current corridor or the current lines running down --

THE WITNESS: Yeah.

COMMISSIONER CAMPBELL: -- I-80?

THE WITNESS: Brandon has the map, he can show that route. That, that's the Company's proposed route and the BLM's preferred route.

COMMISSIONER CAMPBELL: We had some testimony last night that someone wanted to make sure that you were staying with your route through Rush Valley that conforms with the EIS and that you're not following the SITLA proposal. Is that true?

THE WITNESS: I'll let Brandon answer that question. Yes.

COMMISSIONER CAMPBELL: Would the question related to transmission lines and the watershed also

go Mr. Smith?

THE WITNESS: That would be correct.

COMMISSIONER CAMPBELL: And access roads, those would go to Mr. Smith?

THE WITNESS: Correct.

COMMISSIONER CAMPBELL: Okay. All right, I'm finished. Thank you.

CHAIRMAN BOYER: Just a couple of questions. I want to, I want to follow up and make sure that we're clear. And this is a follow up to Commissioner Allen's question on line losses.

And I was a little confused as well, because at one point in your testimony this morning I think you said that because of the increased length of the line and the increased resistance or impedance --

THE WITNESS: Uh-huh.

CHAIRMAN BOYER: -- loss lines -- loss -- line losses would increase by 60 percent and you'd have to push 60 percent more energy through the lines.

That's, that's not actually correct, if I understood what you said. It's the resistance would increase by 60 percent. So if it's 1 percent line loss, the increased resistance would increase it to 1.6 percent --

THE WITNESS: One point six, that's correct.

CHAIRMAN BOYER: -- is that correct?

THE WITNESS: That's correct. Yeah, I did misspeak there. I apologize for that. Thank you for the correction.

CHAIRMAN BOYER: A question now arising out of Mr. Hogan's suggestion of moving the Limber Substation further North, maybe North and East, where it is shown on this map. So the 500-kV line would be longer. There would be more resistance because it's longer, I suppose?

THE WITNESS: Yes.

CHAIRMAN BOYER: Would that then affect the problem that you detailed earlier in forcing the electrons, which take the course of least resistance, would that exacerbate that problem? Would that -- if the -- if Segment 1 is longer, would that force more energy through the existing lines which are already overloaded?

THE WITNESS: That's correct, it does. It would, it would force more flow this way by making that line longer.

CHAIRMAN BOYER: And, well, give us some idea of the context of that kind of a problem. How big of a problem is that? What would that do? Would it trigger breakers?

THE WITNESS: Well --

CHAIRMAN BOYER: Would transformers go out? What would happen?

THE WITNESS: No, the standards make me take action before that happens. So I have to be preventative so that we don't take the system out of service. So what it -- what happens is when power doesn't want to flow this way, it flows this way. Okay? As I mentioned before.

And in doing that I will have to limit how much power I can flow up these lines right here. In other words, what doesn't flow over here has to flow over here. That will overload these lines. And so as a total -- again, I have to look at the sum of the parts.

As a total, this will become my limit. And I will not be able to fully utilize this segment over here, because this is limiting how much power flow actually goes across the entire path. Remember also that I'm putting Segment 1 in to backup segment -- this segment here.

This segment here also backs up that segment. So if I lose Segment 1, this has to perform. So this become -- this becomes my limit. I won't be able to fully utilize Segment 1.

CHAIRMAN BOYER: Okay, thank you. Now, I have another question which is probably a question for Mr. Smith, but I'd like to get your take on it as well because of your vast experience and 30 years in this business. Are 500-kV lines ever undergrounded? Large metropolitan areas, for example?

THE WITNESS: Not -- they are not. I'm aware of some 500 kV underground in Commonwealth Edison System in New York. I believe, I believe APS has one segment, one small segment. They're typically not, due to the cost of doing so.

CHAIRMAN BOYER: And the cost is involved in the excavation and then also cooling?

THE WITNESS: Yeah.

CHAIRMAN BOYER: You testified that would be a problem for Mr. Smith?

THE WITNESS: Cooling. Those are usually either nitrogen-cooled or oil-cooled cables, with large pumping systems and very-sophisticated cooling systems.

CHAIRMAN BOYER: But they might be undergrounded in, for example Manhattan, because of the population density? It's totally developed --

THE WITNESS: Correct. That's where, that's where the appli -- the alternatives in that case are

very expensive, so they make some sense there.

CHAIRMAN BOYER: Now, I live, I live in Cottonwood Heights. And Rocky Mountain Power's building a substation near the Old Mill facility and then will run 138-kV lines down 70th South, which is about three blocks from my house.

Cottonwood Heights asked Rocky Mountain Power how much it would cost to underground them -- those cables. And we were told at that time it would be a factor of seven. Seven times more expensive than overhead.

And -- but what we've been hearing around here is as high as ten percent -- ten times.

THE WITNESS: Yeah, I've used in my career 7 to 10, 10X, 10 times.

CHAIRMAN BOYER: Seven to ten?

THE WITNESS: That's, that's a very-well accepted number in the industry.

CHAIRMAN BOYER: And the rule, the rule of thumb that you use is that overhead, in green field, 2 to 5 million dollars a mile for overhead?

THE WITNESS: For 500 kV that's about right, yeah. And terrain has a big, a big variable, but that's correct.

CHAIRMAN BOYER: Okay.

COMMISSIONER ALLEN: Can I --

MAYOR JOHNSON: Chairman Boyer, can I ask one other question?

CHAIRMAN BOYER: Yes, certainly. You can play through, Mayor Johnson.

MAYOR JOHNSON: Thank you.

If I can, going back, Darrell, to the Superfund site. You say you don't have any experience about lines going over. But in fact when I went up there a week or so ago to look at this project -- unless I'm mistaken. I'm prob -- I probably am. I'm no export on lines.

But there are already two lines there, aren't there? Or there are at least one, I think. I'm not sure. But don't we have some lines -- don't you already have some lines -- at least as I stopped there and looked I thought there were lines going across. I mean, there's a power line underneath the "B" right now.

It's not the ones we're talking about. There's some lines -- or underneath the "T." The "B" is from Bountiful. The "T." It goes across, it went across, I thought, the Superfund site and I haven't followed it beyond that. Is that, is that not correct?

THE WITNESS: Yeah, those -- there are some lines up there. And I think Brandon can show those on the map or better describe them. When I answered my question I was answering from the standpoint of -- those are low-voltage 138 lines --

MAYOR JOHNSON: Right, they are 138's.

THE WITNESS: Relatively little poles in the ground.

MAYOR JOHNSON: Right.

THE WITNESS: And you're, you're absolutely correct. As I answered my question I was thinking about --

MAYOR JOHNSON: The larger --

THE WITNESS: -- massive towers, caissons.

MAYOR JOHNSON: Yeah.

THE WITNESS: These foundations are 28, 30 feet deep, and this wide across.

MAYOR JOHNSON: I just wanted to clarify.

THE WITNESS: On that I'm not aware we have.

MAYOR JOHNSON: Okay.

THE WITNESS: So. But you're correct in the smaller lines, we have those.

MAYOR JOHNSON: Thank you.

CHAIRMAN BOYER: Commissioner Allen has a question, and then Commissioner Campbell.

COMMISSIONER ALLEN: Questions help facilitate new questions.

THE WITNESS: Yes.

COMMISSIONER ALLEN: When speaking about the potential of buried line I think you may have some experience or knowledge in your field. If you were to, if you were to do something that sounds a little bit unusual and say bury a segment of the line because of viewscape or other things that we're dealing with here, would that, would that area where the line is buried, would that be accessible? Would people be allowed to walk over that, or would it create some sort of barrier? Would it create fences there?

THE WITNESS: No, in my experience it would not. Usually the ground would be reclaimed, and. We -- I'm not aware of anywhere that we've put barriers. Now, we do put signage and stuff up because people with backhoes and things like to dig us up. But I'm not aware of any barriers that would be put up, and I don't know why they would do that.

COMMISSIONER ALLEN: Okay. So hikers could still use the area and it would just be marked?

THE WITNESS: Certainly.

COMMISSIONER ALLEN: Thank you.

THE WITNESS: They have to for, for

excavation, yes.

CHAIRMAN BOYER: Commissioner Campbell?

COMMISSIONER CAMPBELL: Yeah, I too saw the 138-kV lines. They were at the Superfund site. I guess my question was in context of once a site -- and I don't know when those went in.

THE WITNESS: Yeah.

COMMISSIONER CAMPBELL: I mean, potentially they went in before the site was a Superfund site.

THE WITNESS: Correct.

COMMISSIONER CAMPBELL: And so you -- so your understanding to my question was is subsequent to a site being a Superfund site, have you built on that. And was that -- your answer was based on that context?

THE WITNESS: Yes, that's correct. Yes. And I did, I did go up there and look at the sites. And I've been up there with Brandon. I was thinking of the larger-voltage lines.

COMMISSIONER CAMPBELL: Can you, can you refer me -- and this question was kind of for Brandon. But what is the difference in the tower height between the 138s that we saw, so that we can make comparisons in our mind, versus the 345 or the 500 towers that you're gonna put there?

THE WITNESS: Let me recall. I think Brandon

has those in his testimony there. I'd rather have him give you the actual footage than me just speculate. I want to keep those consistent with what we have in our EIS application, so I will defer to Brandon on that.

CHAIRMAN BOYER: Okay. I see no further questions from the Board members.

Mr. Hogan, cross?

MR. HOGAN: I have one question I neglected to ask Mr. Gerrard.

CHAIRMAN BOYER: Mr. Gerrard? Well, we were gonna do redirect, but if you have one more question. We want to do a complete record, yeah.

MR. HOGAN: That may help us be faster in the long run.

CHAIRMAN BOYER: Yes.

FURTHER CROSS EXAMINATION

BY MR. HOGAN:

Q. I didn't talk to you about -- you talked about co-location and common corridor? The, the scenario that I proposed to you eliminated the need for co-location and common corridors. If we, if we assume the Limber Station's up here where No. 3 we don't, we don't have that. We don't have co-location, we don't have common corridors.

The other scenario that's been proposed is

that -- and that's been suggested by residents and local jurisdictions is that Limber Substation end up somewhere roughly out in this area. And that that would require some common corridor.

You, you mentioned that they -- you have guidelines and regulations. Some, some ordinances that you, you try to have to -- you have to accommodate for and you have to make sure your system's gonna work.

Could you define, what is a common corridor? How close is common corridor? What's, what's the definition of "common corridor"?

A. In the, in the WECC criteria a common -- adjacent circuits are considered in common corridor if they're closer than a span length apart, or 500 feet.

Q. So if we put the substation out here, where it's been suggested. If we get beyond the number of feet -- how many feet again?

A. It's the maximum span length of two adjacent circuits, whatever that might be.

Q. Okay. Do you know what they would be for this?

A. Not for that design, no. I know what they are for the preferred route, but not for that design. Because I haven't seen, I haven't seen a line route.

Q. Okay.
A. And the reason I'm saying that is, span length is dictated by where towers are placed and where they're built. So it could be -- it could vary depending on the terrain.
Q. So that, if I'm understanding you correctly, the closer the towers are together, the closer we can have them together? Or -- and the further the towers are apart, the further we need to keep the lines apart? Is that, is that correct?
A. That's what the criteria would say.
Q. Okay. So if the scenario is the Limber Substation out here, and if we can get further apart, then that -- the span length meets the critical span length, and come -- and, and what would be a parallel corridor but meeting that requirement, and when we get to about the No. 3 we achieve the exact same separation that your current plan is going to achieve, is that not a viable option?
A. It's really not. That doesn't meet the design criteria that I laid out for Energy Gateway, where we want diversely-routed high-capacity lines. And you're just fixating on one aspect of line separation, I also have to meet all those other requirements that I mentioned.

Q. And --
A. Loss of more than one. You got four circuits here.
Q. And how, and how do you meet those other criteria?
A. I meet those criteria by having wide separation, and separating those lines, so they can't be affected by a common event.
Q. Who determines that, who figures out how to meet that criteria?
A. That's my responsibility with my design.
Q. Okay. And who passes that information about meeting that design criteria to the BLM? Is that you?
A. I pass it to the -- I pass my requirements to the project team.
Q. Okay.
A. And they do the permitting process.
Q. The Company determines -- in other words, the Company determines how to meet the criteria?
A. I think I showed a moment ago, with the codes that I quoted, the responsibility to make this reliable lies with our company.
Q. I don't, I don't dispute that that criteria exists.
A. All right.

Q. I'm talking about how to achieve what that criteria lays out. I believe you just said the Company determines how to achieve that; is that correct?

A. In, in accordance with the guidelines that I'm given in these standards it's up to the Company to make sure that the reliability is there, that's correct.

Q. Okay. You also mentioned with, Segment No. 1, that to lengthen Segment No. 1 is problematic because of the resistance the Chairman spoke to you about; is that correct?

A. Yeah, it's resistance to the circuit, that's correct.

Q. Okay. And this might be a brand new question, tell me if it is. Do you know how many miles west you go from Mona on this line to ultimately end up in the North-South corridor that you're in? Do you know how many wile -- miles west you go?

A. I could -- I'll have Brandon answer that. He has the exact number on the -- it's on the map, so.

Q. Assume --

A. I don't have those committed to memory, but.

Q. Assume it's ten, or more than ten. Does it seem odd to you that you're perfectly okay to get a

great number of miles west to accommodate these other criteria, but once we get to this point, by gol, we can't get another few feet.

We can't get another mile. We can't, we can't squeeze out a couple more miles on this end, but we can get many, many miles west down at this end. Does that, does that seem odd?

A. It doesn't to me.

Q. Okay.

A. From some --

MR. HOGAN: That, that's all I need. That's all I need. Thank you.

CHAIRMAN BOYER: Okay, thank you.

Mr. Moscon, redirect?

MR. MOSCON: Thank you. The Board actually did a good chunk of my redirect, so I appreciate the Chair's recommendation I wait and go at the end.

REDIRECT EXAMINATION

BY MR. MOSCON:

Q. Darrell, I want to talk to you first to clarify what I think's now kind of become a little bit of a confused issue on the line length. You were asked repeatedly about moving the substation up here to No. 3 and then connecting a triangle down here. And the supposition is we make that one leg longer and

then we have a smaller triangle there.

I don't know off the top of my head what these lines are, but just assume for purposes of this that this is 100 miles and each of those is 50 miles. Because, as a lawyer, I can only deal in round numbers anyway.

If you moved this up here, lengthening this to say 125 miles, it would in fact shorten that to let's say 25. And isn't it correct though that you would then equally lengthen that span so at the end of the day the system is still just as many miles? Am I understanding that correctly?

A. Yes. And I think I answered the gentleman's question. I didn't see as what he was proposing shortened the line miles at all. I didn't see how that was being accomplished.

Q. All right. One of the questions that you were asked had to do with, again, maybe there's some kind of energy corridor here and, you know, we heard the concerns that what's really going on is Limber's gonna be used to connect in to Nevada. And if that's the case, let's put it up here by I-80 and not have those lines coming across.

Can you describe generally, what, what's the purpose of a transmission line? It connects what to

what?

A. Well, our -- for purposes here, it connects large resource centers with large load centers.

Q. Okay. And so you've, you've looked at the Western system. Are there large resources available out here in Nevada to import in?

A. The close -- the closest resources are in Nevada, in Las Vegas.

Q. And assuming for argument's sake that Las Vegas actually had excess resource. Again, you've got a lot of experience in this system. Do you think they'd be sending that up to our critical load area, or where would they be sending that resource?

A. I think Nevada is sending their resources to their loads, as they're building their resources near their loads. I have a 10-year and a 20-year Integrated Resource Plan from our company generation business unit that shows the energy to serve Utah specifically does not come from the West.

It comes from the Southern part of the state down here, either through purchases at Nevada -- at Four Corners, or purchases at Harry Allen Substation. Or, after 2017, there's more resources coming out of Wyoming.

There's no, no there's no plan for Nevada.

Q. Okay. Just hypothetically, just make believe that there are excess resources out here in Nevada just waiting to come onto our system. Or vice versa, you had excess generation that you wanted to ship off to Nevada.

You mentioned on Monday that Mona is a hub, whereas Limber is a substation. Can you just remind the Board what, what implication that has on where any interconnection would be?

A. I think the difference here is Limber is really a load hub. In other words, that's where we'll have large amounts of load going forward. Mona is -- there isn't a lot of -- if you've been to Mona, there isn't a lot of load around Mona.

It's a resource hub, where a lot of generation comes into play. So those two are very different in that way. If I was a merchant generation developer on the West side I would be wanting to go to Mona so I can get to L.A. through the DC line.

Or I can get to the Desert Southwest, where the highest-priced energy -- where the people are willing to pay higher prices for energy. As a merchant that's where I would look, is at Mona.

MR. MOSCON: Okay. Thank you, Darrell.

CHAIRMAN BOYER: Thank you, Mr. Gerrard. You

may step down.

I think before we hear from Mr. Smith again we'll take a ten-minute recess and rest ourselves. Thank you.

(A recess was taken from 10:22 to 10:40 a.m.)

CHAIRMAN BOYER: Let's go back on the record and hear now from Mr. Smith again. Mr. Moscon, you're up.

MR. MOSCON: Thank you.

BRANDON SMITH,

called as a witness, having been duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. MOSCON:

Q. Brandon, welcome back. You recall you're still under oath. As you heard with Darrell, Brandon, the purpose of today is to clarify some testimony that's previously been given or answer any questions that have come up.

So I'm going to direct your attention to certain specific categories of topics for you to answer, rather than chronologically going through your testimony again.

The first thing I want to ask is, there were some questions that came up during Mr. Gerrard's

testimony about cost information, and whether the Company has provided the Board with the costs for all of the different alternative routes.

Do you know whether that information has been provided to the Board?

A. Yes, I believe so. In -- on page 4-91 in the Final Environmental Impact Statement there are costs associated with each of the alternatives that we have developed, based on the line routes that they represent.

Q. And separately -- so obviously the Company gave that information to the BLM for it to appear in the FEIS?

A. Correct.

Q. Did the Company separately ever provide alternative cost data to Tooele?

A. Yes, we did. When we were working through the routing scenarios for going -- moving Limber up North around the Grantsville area we had put together cost estimates for Limber Substation and both of the locations that I discussed yesterday.

Those costs included both substation and transmission line costs associated with those reroutes.

Q. Okay. Brandon, I want to talk to you about

what we've called the Northern route. So the Grantsville routes, whatever you want to call them. Moving both the lines into a common corridor up in the I-80 Corridor, okay?

Now Brandon, we all just heard Darrell's testimony about, from his point of view as a system planner why, you know, from his electrical engineering background why he would not design a route with two lines up there.

I want to clarify what I'm gonna ask you does not rely or depend on Darrell's information. I want you to focus from your standpoint. You're a civil engineer, environmental engineering background, you're going to oversee construction.

Can you describe for the Board the concerns that you would have to engineer or construct a route in that Northern corridor, where you've got both lines co-located in the Northern corridor. What obstacles would you have to overcome?

A. Okay. Like we've discussed, we've spent the past three years reviewing alternatives to get from Mona up to Tooele Valley, and ultimately over to Oquirrh and Terminal. Evaluating a large number of criteria, including Darrell's criteria for the planning purposes, environmental impacts, and other

hazards and criteria.

The issue -- issues we deal with outside of Darrell's criteria up around the Northern edge are, you know, we have, we have several. We have the airport in that area. Siting one line through there is, is not as big of a challenge as siting two.

I mean, it is -- there's a 20,000-foot radius around the airport where you have to evaluate your situation and ensure that you're gonna meet the FAA's guidelines to go through there. Running two lines through there creates just another, another obstacle to go around.

We also have the soils that we've talked about. Placing a substation in a -- in soils like that is not a prudent thing to do as far as the ability to construct it, perhaps operation and maintenance of the facility, and the impact to the, the structure and safety of going through those areas.

Those soils apply to both the substation and the transmission lines themselves. We do build through areas like that periodically. However, putting two lines in a location up there increases the impacts on the project by twice as much.

We've also got -- looking at line routing through there, we talked about impacts to communities.

There are at least 11 to 15 homes along Bermister Road alone that would be within a quarter mile of a route going through there, as was suggested by Mr. Hogan yesterday.

We also have another large development, a community, Stansbury Park, where there's a large number of homes that would be impacted. Possibly between 170 to 200 homes would be within a quarter mile of the second line. Compared to the 13 we have now in the Final Environmental Impact Statement on the proposed route.

We have, we have access. We talked yesterday about the differences in access between the mountain areas and along I-80. It appears that access would be more suitable through there; however, we are going through a large area of wetlands. And we, we will not be allowed, the Company, to maintain permanent access roads to each one of our facilities through the wetland areas.

So we discussed fire, if a fire was to occur out there, difficulty getting to those areas may be as difficult as getting to the areas up in the mountain ranges. There are no access roads out through the wetlands. So those are some issues.

We also have timing. We've spent a

considerable amount of time on this, evaluating every alternative that was presented and analyzed in the EIS. To go back through that is -- the timing is just not there to make a change and meet what we need to.

Q. On that, on that point, Brandon, assume that, notwithstanding everything you and Darrell have told the Board, that again ultimately they came back and said, Yes, sorry Rocky Mountain Power, we, we want you to build that, that line up there. Put your line in that corridor.

Can you describe the steps that the Company would have to go through in order to permit and build any of those other routes?

A. Yes. Like I said, we've been through three years of analysis on these, on these routes. The -- to make a significant change like this. To have to go through a supplemental EIS, where you go back and perform the same type of analysis on this second route as you did on the first ones, there's a significant delay in that.

This change would have to go through the North Oquirrh Management Area, as we've shown on the map in this area. That does affect BLM on this change. We also have significant reviews that have to go on by multiple parties who have already given

approval and accepted these.

We have PLPCO, the Public Lands Policy Coordination Office. We have the Governor's review that we have to go through. SITLA, the reroute would impact the State Institutional Trust Lands property. We would have another review by them.

We have submitted FAA applications for our proposed route to ensure that we meet the minimum guidelines to go through there. Those would have to be resubmitted.

We have been working with the property owners, the EPA, and the Division of Wildlife Resources for the Carr Fork Superfund site. We have established a proposed alternative through there. Those negotiations would have to fall back and restart.

The alternate to move Limber up North would still impact Carr Fork, going through this area right here. It's just a, it's a point that Carr Fork takes up that entire area. We have the North Oquirrh Management Area where we have to pass below. So that alternative also does impact the Carr Fork area.

I need to add one another thing that -- aside that is included in the EIS process but under separate jurisdiction is Section 106, called Consultation For

Cultural Resources.

That involves the State Historic Preservation Office, who we -- the BLM will go out and conduct these cultural resource surveys. The BLM then reviews the results. It goes to the State Historic Preservation Office before we can identify any impacts to cultural resources.

Q. And Brandon, you may have said this already. You mentioned earlier, you were talking about access. That because there's all the wetlands and marshes in this area you talked about the limitation for access.

Is there an additional review or permitting process that you would have to go through to construct those routes as well?

A. Correct. We have also submitted applications to the Army Corps of Engineers for a nationwide permit as far as the Section 404 requirements for wetlands. That would have to be revisited, re-analyzed, reviewed, and resubmitted to the Army Corps of Engineers.

So that is, again, another process that we would have to go through that's already been conducted.

Q. Now Brandon, you've been involved in this process. You've worked through the EIS with the BLM.

Based upon your experience and background, is there any reasonable or feasible hope that the Company could do all of those things that you just said -- the wetlands permit, the FAA review, all the things you did -- then permit and build that route in time to meet Darrell's June 2013 deadline?

A. Based on, based on what we've gone through to this point as far as the analysis and the EIS. The EIS includes multiple agencies. Multiple entities. A large amount of people who reviewed this, provide comments, give impact -- input.

Ultimately a preferred route is chosen by the BLM and, and the proponent, the Company in my situation. It takes a significant amount of time and effort to do this.

I don't, I don't, I don't see how going back through this process again, and obtaining the approvals reviews, and determining if it is in fact less impactful -- which we don't think it is -- I don't see how we can make that date by having to do all that.

Q. Since there's already been an EIS issued, the Final Environmental Impact Statement has come out, why would you need to do that, why would you need to do that again? Why is there further review if you were

to build the Northern lines?

A. Well, the, the Environmental Impact Statement process, NEPA process, applies to both public and private lands, no matter where the project is. So when you change a route you, you determine the impact of the variance to the EIS. And you have to review those impacts.

This would be considered a significant impact. It does impact BLM property in an area that has not been analyzed before. So a supplemental EIS type of situation is highly likely.

Q. All right. Brandon, I'm trying to think of how to ask this. You know, human engineering, the Egyptians built the pyramids, Romans built aqueducts.

Are you telling the Board that there is no way that you could engineer and construct a route with two sets of power lines running through that corridor? That that's simply an impossibility?

A. No, no, that's not what I'm saying. You know, we -- there's, there's no doubt that we can build two lines through there. I mean, there is room to put lines next to each other to get through that area.

Engineering, engineering-wise, it is possible. However, it will not meet Mr. Gerrard's

purpose for the project. And the other obstacles are just an addition to the challenges to get through there.

Q. And again, even assuming that you could do it somehow to meet the design needs of Mr. Gerrard's project, with the steps you've outlined is there any way you could design and do that and have it operational before Mr. Gerrard's cutoff?

A. No, I don't, I don't see how we can make that.

Q. All right. I want to change your focus now to additional costs. In your, in your cross examination on Monday you referenced that moving the Limber Substation up into this location in here was going to, you know, have this huge incremental cost. If I recall, the number was around 40 million-ish.

And I think there was some surprise about how could it possibly cost 40 million extra just to move a substation up into that area. Or -- and again, you know, at the public hearing there was some suggestion, Well fine, scoot it back a little bit and then you'll save that extra 40 million.

Could you describe for the Board -- maybe the way to start is, how much does it cost to build the substation down here where you want to build it, and

then from there explain the incremental costs to them.

A. We have currently estimated ultimate construction for Limber Substation -- that is the 500, the 345, and 138 yards -- to be just over $220 million. We're talking, again, 150 acres of a site that has to be developed.

You have to establish a good base for the substations. There are over 200 foundations in one of these substations. So it is, it is an extraordinary effort to build one of these substations.

To, to say that it's an additional 40 million to build Limber Substation up in north of Grantsville, compared to the overall cost of, you know, it's -- that's about 18 percent increase, I guess, for that substation in that location.

So based on the overall cost, it is an impact. However, it's only 18 percent. But we're building a substation that's in an unsuitable area.

Q. And I know you touched on this on Monday, but again, I think this was raised in the public comments and I think some of the Commissioners had questions. You know, you're saying that the soils are bad there. Can you scoot that thing over just a little bit and avoid all of that problem?

A. Well, like, like we discussed, it's 150 acres

we're looking at. All the soils in this area are similar soils. Surface -- on the surface, some may look better than others. But, but in the end, it's all lake-bottom soils.

It's the same, same situation wherever you go. So shifting it just, you know, a few hundred yards isn't going to do the substation justice as far as building in a good location.

Q. Okay. You recall your testimony on Monday you talked about, Okay, instead of building the substation up here in the bad-soils area let's go ahead and take a look at what it would be if we dropped the substation down here.

And this is by, I think you called it the Wal-Mart site; is that right?

A. Correct.

Q. If I recall your testimony, this is where you said that you have to have a moat because of drainage. The question that I have that I'd like you to clarify for the Board is, if you did that, if you moved the substation down here to get off the bad soils, would you still have that same 40 million, you know, extra cost? You know, because you're down here on good soils now, aren't you?

A. No, we would not have those significant

increases in cost. I mean, it's an area that has significant more slope on the area that we would have to deal with, and drainage issues. But construction costs as far as a substation goes up there would not be as significant as down below. Somewhat comparable to where we have Limber proposed right now.

Q. If you did that, though, what would the cost be to the amount of line you would need to run from there to there? So the line-length difference, what would that do to cost?

A. Yeah, the additional cost for this site was around 30, 35 million dollars additional cost. Thirty-five or 36. And the reason is is for the additional miles.

You, you can see by the map that we do have to, in this situation and the ones up here, we have to loop around this entire valley -- Grantsville, Stansbury, Tooele City, Army Depot -- to come back down to this area. That's where the additional line miles come into play.

Q. Brandon, you actually kind of raised a point I wanted to get to later, but let's do it now. You recall the cross examination of Darrell a minute ago and there was some suggestion about, Gee, shorter is better. Let's just put a substation here, and draw a

straight line here and a straight line there.

So from here why don't you do it straight across there? What would you run into?

A. I guess if you could clarify, straight across where? I wasn't.

Q. What would prevent you from taking a line and going straight right through there. I'm sorry, my light's shaking. I'm trying to go straight across there.

A. I thought I was nervous.

Q. Fair enough. I'll use this hand, how's that?

A. We have -- we discussed earlier all the impacts going through this area. I mean, we have, we have Grantsville City right now where we're outside the city limits. We go through here. We have residences.

We have the airport. We can't go through this area right here due to the airport. And we have Stansbury out here, which is a huge development. There's just a lot more impacts through this area right here than there are on our and BLM's proposed route.

Q. If you drop the substation up here, wherever Point No. 3 was on Darrell's drawing, to just draw a straight triangle why can't you just go straight --

you know, put the substation there, go straight there and straight there?

A. To say -- it's hard to say -- the exact location wasn't given, so we say an area around here. You still have to go down through this, this area of development. We have Stansbury here. We have impacts all along Highway 136 through this area that we have to go through.

And you have large developments that are, that are planned. I mean, Tooele City to a point somewhat would be involved. And we still have this, this area down here we have large lots that people are developing.

Q. And one of the things you mentioned was an obstacle, the airport? Can you highlight for the Board where the airport is?

A. The airport's right here. This, this is, this is the air strip that you can see that I'm pointing to.

Q. And how far -- remind us, how far out from the landing strip do you have to keep your towers?

A. The area you're required to analyze is an area that's 20,000 feet from this point out this way. So the actual 20,000-foot area extends out to about like what I'm doing with my highlighter.

Now, the requirements that you're -- one of the issues you're supposed to look at is glide slope ratio. So for every foot -- every 100 feet you extend beyond the airport you can have a structure that's a foot tall.

Our structures right here have been minimized as low as they can go in order to meet the guidelines for FAA in that location.

Q. Okay. So again, Brandon, forget about whether Darrell says it meets his system need. Just from an engineer dealing with the realities of FAA, whatever. The cultural resource centers, the wetlands. Could you get a line straight through there if the substation were dropped off up above?

A. Again, you can, you can possibly get a line. However, the impacts would be greater. And the ability for Limber to be functional, as it is proposed to be down here, is questionable.

Q. All right. I want to draw your attention now to a different topic. I want to talk about community outreach. First, one of the criticisms, if I might, that I've noticed levied at you during the public comments and implied during your cross examination is, You're kind of a tricky guy and you don't put these substations where we're telling you. It's kind of

implied that, you know, you're trying to put them in the worst-possible place.

At any time during this process did Tooele ever come forward and give you a map and say, Put your substation here, and put a place where they wanted it?

A. No. No, I never received anything like that.

Q. So when they say, You didn't put it where we wanted, what, what did they tell you?

A. They had suggested moving Limber somewhere to the Northwest area. Up around the Grantsville area. Initial, initial indications from, from the group was to move it somewhere up in this area.

The, you know, as it was provided it was suggested put it in this area right here. And come somewhere over here around Adobe Rock area, and come down this area, and tie it back into your, your route. That -- those are the general parameters that we were given for an alternate.

Q. All right. On that front, talking about how you interacted with the community, you'll recall from your cross examination the line of questioning that said, You're just like the guy that I had that bid $79,000 to do a bathroom. You just didn't want to do it. On paper you gave us something, but you didn't want to do it.

Can you describe for the Board the steps that the Company went through to try and reach a consensus on where this line would go?

A. Well, I mean, I'll move to the next -- where's it at?

This area right here. This, this, this outlines the, the involvement that the public and other agencies are involved in during the development of the EIS.

On the left-hand side you can see the BLM's typical approach for involving folks during the Environmental Impact Statement. You know, we had discussed when the BLM had approached other agencies to be cooperating agencies. They introduced the projects to different agencies along the project.

We had the scoping period. Release of the Draft Environmental Impact Statement. A comment period, which was 90 days, on the Draft EIS. Then the Final EIS, and eventually comments on that. These are the areas where the public and agencies are involved in the process through here.

So you can see the public is really involved during the initial scoping period when the project is initiated. Then again at the release of the Draft EIS. And again at the release of the Final

Environmental Impact Statement.

On the right-hand side you can see what Rocky Mountain Power has done in addition to those efforts of the BLM on the Environmental Impact Statement. We start out identifying and updating all of the communities -- leaders in the communities of the project that we've got proposed.

We move down, we form a community working group. So just, just as an explanation on the community working group. We invite large stakeholders in that will be affected by the project to participate in it to give them periodic updates on the project.

Members of the community working group included Tooele City, Tooele County, Salt Lake City, Salt Lake County, West Jordan City, South Jordan City. We have Kennecott Copper, Kennecott Lands. Those folks were included in the community working group.

An invitation was extended to Grantsville at the time, but they had declined to participate in the community working group. We had a series of those meetings, four to be exact, to keep those members apprised of what the project is going through.

Potential substation sites and locations were presented to those folks to get some impact -- feedback. But none of the -- they weren't the

decision-making group; however, it was an opportunity to obtain information and take that back to the BLM, who was also present at all four of those meetings. So comments addressed during those meetings are included in the EIS process.

Additional efforts, we talked about landowner meetings. We sent out over 10,000 letters to affected parties within a two-mile-wide corridor. We held landowner meetings, in addition to the scoping meetings that the BLM conducted, to address concerns of the public.

We also established, as we talked about, the conflict resolution meetings, where we had three of those. To give an idea of the conflict resolution meetings, you know, for instance on August 24th -- we, we included, as was discussed Monday and yesterday, the group was asked to provide representatives from their different areas.

We had a group of concerned citizens from Tooele that participated. We had Tooele City, Tooele County, Grantsville representatives, citizens from Grantsville participated. We also had entities such as Utah Industrial Depot, Tooele Army Depot, Utah State University, and, and a few others maybe.

But the idea was to get together to try to

find some sort of a resolution consensus route to get through these, these areas. And, you know, we discussed yesterday the conflict resolution of the routes that were looked at.

So if I, if I go back to this map here. All of these routes in the con -- the Silcox Canyon route was addressed early on, before the establishment of the conflict resolution meetings. This was a route that was proposed, proposed to us by some concerned citizens and the County to look at.

We evaluated that. Did an analysis. Came back with the -- what I had discussed on Monday about it not being a suitable route for the Company or the BLM.

The other routes that you can see on here are the railroad routes and the Army Depot routes. These are all alternatives that were discussed during the conflict resolution meetings. The idea of using a Railroad route to get up to the city and over back towards the east side of town to get back to our proposed route.

These were alternatives that were discussed. They're not, by any means, preferred, after being reviewed in the EIS, as far as the Railroad route was concerned. But we did make an extended effort to find

a route through there that we would be willing to build.

And, and we discussed all these orange routes. Came back to present what we had found. We had, like I had identified before, we had identified a church that would basically be on our doorstep. We have a junior high school. We have a helipad. We have the FAA requirements.

Issues that, that we brought up to the conflict resolution folks. And the same issue with the Army Depot route this way. We, we discussed with Army Depot to go into their property to minimize impact to the residences in Grantsville again to get to Grantsville City.

These are routes that we looked at in detail that we were -- the full intention was to find a route that we would be willing to build. We analyzed this route in the EIS, to build up the Railroad route. That was one that was analyzed. And, and we had seriously considered that. We, we approached the conflict resolution teams to discuss these.

And when I go back to the slide it was, it was on this conflict resolution number -- meeting number three where we had accumulated all that information on those routes through the Tooele City

area.

And when we got through there we had almost gotten done when it was indicated to us that we would not be able to obtain a Conditional Use Permit through Tooele City limits for any routes through the city limits.

So at this time we had gone through the extended effort to try to find a route that would appease the concerned folks, and what the Company's purpose and need would be, and the BLM's impact on the environment.

And at that time, when we say we're not gonna get a permit, we had ceased and quit the analysis to those areas which we were told we weren't gonna need a permit for.

Q. Brandon, let me toggle back to that picture with the map. I just want to clarify what you were just telling us. Back at the time that you were in the middle of that -- you said meeting number three.

If back then if the City and the County came to you and said, Okay, we choose this route. We'll give you a permit for a Railroad route. In fact, specifically come up here and, like that lower line, take that route.

If back then the City had given you that,

would the Company have been willing to build that route?

A. Right. We were, we were specific on that we had been -- we had a narrow window of opportunity to find some way to get around the conflict area that we're discussing down here. This, this three miles.

We had identified the impacts to that route. And, you know, we -- given the time frame, if, if it was an early enough decision, we were. But we were denied that opportunity.

Q. Again, I -- just to clarify, I want to make sure I understand what you're saying. You say you were, but you were denied. So back at the time this was proposed, if back then they had said, Yes, we'll give it to you, yes or no would the Company have built that route?

A. Yes. We took that analysis very seriously through there. If we were able to make the time frame.

Q. Brandon, one of the things that's come up, come up today, it came up yesterday -- or excuse me, Monday, was this topic of undergrounding.

Actually, you know what? One thing. I apologize. Go back to your -- the bubble chart. I just thought of one thing I want to clarify for myself

and for the Board.

On the left, this chart? This is stuff that the BLM heads up, right?

A. Correct.

Q. This is stuff that the Company did in addition to what the BLM did?

A. Correct.

Q. Is the Company required to do this? Does the BLM or does any of those other groups that you went through that, you know, you have your checklist, do they require you to do this?

A. No, they do not. This is, this is a significant effort of -- one of the largest efforts the Company has gone through as far as involving the public in this project.

Q. All right, thanks. Now Brandon, as I started saying, I want to talk about undergrounding for a minute. There have been some questions about whether or not maybe undergrounding is a way to relieve concerns about impacts to view, or add some line separation.

First, can you clarify for the Board whether the Final Environmental Impact Statement addresses undergrounding?

A. Yes, it does.

Q. And just so they have it in their notes, can you tell the Board where? Where in the FEIS will they find the discussion of undergrounding?

A. On -- in Section 2, page 2-24, it discusses the underground as an option to the project for construction purposes.

Q. And what did the BLM conclude about undergrounding in the FEIS?

A. The BLM had concluded that undergrounding these areas would be a larger impact to the environment. There's operation and maintenance concerns, and the additional costs that would be associated with undergrounding the lines.

Q. Ultimately did the BLM conclude that undergrounding was viable or not viable?

A. They concluded it was not a viable option.

Q. Assume that, notwithstanding the BLM's view of things, assume that the Board were to say, Hey, that's fine, the BLM can think that. We want you to underground anyway.

And I -- let's now talk specifically about the section on the bench behind Tooele, although it would apply anywhere. Can you describe for the Board the process? What would happen, what the impacts would be, if the Company were to try and underground

that section there on the bench behind Tooele?

A. The disturbance for undergrounding is, is quite extensive for a line this size. Up on the screen I've got a cross-section diagram that was produced as part of a requirement of Salt Lake County.

They require, as part of their ordinance, to provide them an option for undergrounding. Which would give a brief explanation of, of the process and what undergrounding consists of, as long as a -- as well as a cost estimate.

As you can see on the screen, this represents both circuits of the double-circuit tower -- or line that we are proposing. This is one circuit, this is another circuit. It's hard to see the numbers on here, but this, this construction, the undergrounding would require about 72-foot-wide width of clearing to get these duct banks in the ground.

You would have to go approximately six feet deep in order to get these duct banks in the ground. You can see that there's a series of conduits at the very bottom of here. These conduits are what the electrical wire runs through. So we have a series of those.

There are, there are -- there's a set of con -- conductors for each phase to get through that

area. So there's, there's several conductors that have to go through there.

In addition, as far as reclamation goes, this, this -- you would not be able to allow the, the higher-growing vegetation, the trees or shrubs, to grow in this area as far as re-vegetation. It's limited to a grass vegetation to minimize the impact of those vegetation getting down into that area.

So it's about a 72-foot-wide swath we would have to take.

Q. So Brandon, what has the greater impact on the environment, or even the greater visual impact: A transmission line, with its needed access, or undergrounding? Again, assuming after you've, you know, reburied and re-vegetated. What would have the greater impact?

A. Undergrounding would, by far, have a greater impact. It's similar to a pipeline-type of construction. And this is an example of that type of construction. This is, this is approximately 70-feet wide to get through this area.

And in order to do this you have to clear all vegetation, whereas on an over -- overhead line the vegetation management is selective through the area. So the overall visual impact is much greater with

undergrounding.

Q. You -- when you had the slide up showing the trenches and the boxing? Is that cement that lines those, or what are those boxes made out of?

A. Right. This is a, this is a concrete duct bank for protection of the, of the conductor. And you need to put special fill material around the outside to allow the heat dissipation off the conductors.

Q. And so I take it that means you would have to be able to get cement trucks, and pump trucks, and all that stuff up into the mountain range in order to do that?

A. Correct. There's also a series of vaults. You can't just run a three-mile stretch of underground wire without having to have periodic sections of vaults where you have to splice your conductor together, and to provide access to those areas.

If you have a, if you have a section of conductor in undergrounding that goes out, the ability to go find that fault is much more difficult with undergrounding. And once you do find that area you have to get down in there and repair it, so you have to have a series of vaults to provide access into those areas.

Q. All right. You -- when I asked you, you

know, which would have the greater impact to the terrain, transmission line and its access or this, you said, Oh, definitely this. This is like an underground pipeline. Implying it's much worse.

Why? Why -- assume, again -- think out two, three, four years, whatever -- things have been re-vegetated. Why would this scar look worse than anything that's gonna happen with the transmission lines? Why would you say that that pipeline-type scar is worse than transmission lines?

A. In order for this type of construction you have to clear all vegetation in the area to get down to a point where you can install the system. Installing an overhead transmission line system, that's not a requirement.

We do not require the removal of all vegetation for the entire width of the transmission line. Easement will be obtained.

Q. Will the Company allow shrubs and whatnot to regrow underneath the transmission lines?

A. Yes, yes. We do have a vegetation management plan, and allow certain types of shrubs to grow in the area. We're more focussed on the higher-growing trees and whatnot.

Q. Contrast that to a pipeline situation. What

kind of vegetation is allowed to regrow on top of a pipeline scar?

A. You're, you're, you're restricted to grasses to go back on there. You don't want to have deep-rooting vegetation on top of there impacting the stability and infrastructure that you've put in for the undergrounding system.

Q. All right. Now, Brandon, on Monday you were asked by some of the Board to estimate costs. I know Darrell was also asked today of estimating rough numbers of costs for undergrounding.

You indicated that as part of Salt Lake's analysis of this specific project they asked the Company for some information. Did the Company provide any actual cost data to Salt Lake County to underground this line that we're talking about?

A. The estimate that we've put together, it has not been submitted to Salt Lake County as of yet. We're in the processes of finalizing it. You can see the date on the map was a few months ago. So we're working through it. But the estimate is complete.

Again, an estimate like this is, you know, we, we hold back to about a plus-or-minus 30 percent, based on the assumptions that have to be made. So in a, in a very good, straightforward environment, in

good terrain, the estimate for undergrounding this type of a line, a double-circuit 345, is around $4,500 per foot.

Q. And so on the bench we've talked about there's this three-mile stretch that's controversial. Again, assuming -- with all the variables you've talked about, but assuming that same cost analysis, how much would it cost to underground this line just in that three-mile corridor?

A. For three miles and just over $4,500 a foot it comes out to be approximately $72 million.

Q. All right. Brandon, another topic that's come up today, it came up with the public hearing, was the issue of the Superfund. The Superfund site. So I'd like to draw your attention to that topic. Was the issue of -- let me back up.

We -- the Company's proposed route was the BLM's preferred route; is that right?

A. That's correct.

Q. So did the BLM address in the Final Environmental Impact Statement, did they acknowledge that you're crossing the Superfund site?

A. Yes, it is acknowledged in the FEIS that we cross the Superfund site.

Q. What did the BLM conclude about that in their

analysis and coming up with the determination that somehow this was still the environmentally-preferred route?

A. Well, the BLM concluded in the EIS that we were to comply with all of the regulations that were applicable to running a line through such a site.

Q. Is there a difference at a Superfund, if I use the term "capped" area versus "not capped," does that distinction mean anything to you?

A. Yes, it does.

Q. Okay. And is it correct that the capped area is where the more highly concentrated -- the larger concern is the capped area?

A. Yes, it is. On a, on a Superfund site when you identify contamination on an area there, there's, there's two reasons to cap it. You either cap contamination in place that -- it seems more reasonable and feasible to leave it in place, cap it, and control the impacts on that area.

And that, that was, that was explained good yesterday in the public meeting. So the capped areas are areas of higher concentration. And they are capped with an impermeable layer most of the time, or some sort of a clay layer to minimize infiltration through those areas.

Q. Okay. My question then is, does the Company's proposed route take anything through the capped area of the Superfund site?

A. No, it does not. We, we have worked with the landowner, with the engineering company who manages the facility, along with the Division of Wildlife Resources and the EPA, to make certain that we are not placing any structures in the capped areas.

And we have developed access road plans to minimize going through that area to not impact the capped areas.

Q. Can you -- you indicated you worked with the property owner, the EPA, I think you said DWR, someone else. Can you describe for the Board some of the specific requirements for work on this site that has come out of those meetings?

In other words, I assume the EPA and the owner have given you some guidelines and said, We'll let you put the towers through here if you do one, two, three. Can you describe for the Board what those one, two, three things are that the Company's agreed to do?

A. In discussions with those, with those parties we have, we have identified the, the capped areas. We have looked at alternatives as far as going through

the Superfund site. We looked at alternatives that moved it further to the South, farther up on the hillside, to avoid it.

It would require steeper cuts into the hillside, which would be more visible. We looked at alternatives. We got notification back from the landowner that they would prefer our alignment to follow our existing lines that go through the property.

So we, we have, we've discussed access road plans. The access road plan that is in the Conditional Use Permit is being modified by RMP, in talking with those landowners, to help minimize impact.

So that the extent of the access roads will not be as great as what was shown in the Conditional Use Permit application. So we are working through that.

We've also identified that going through the area we'll initially go through and do an environmental sampling procedure. Where we go sample where the access roads would go and where each structure would go to identify the level of contamination that are out there, if there are any.

Again, when you say it's a Superfund site,

the extent of contamination is not consistent through the entire site. This area is what has been identified as "residual." It did not require cleanup. They left it in place.

And anytime you disturb it you need to sample it and decide what to do with that. If it is required that we need to remove soil, there is an on-site depository that's been identified by the landowners and the EPA. It's a depository that was used during the cleanup process. And the soils will be hauled to that location and covered and capped, as the ones that are there now. So that has been worked out.

We've also identified some training. All the training requirements that would be required for the workers that go through this site. Again, we have approximately 11 structures that will be going to this site. So those workers that will be working through there will be trained to work on a Superfund site.

And in addition to that, we do have wildlife restrictions as -- seasonal restrictions as far as construction in the Environmental Impact Statement. So the impact on the wildlife is mitigated, through the EIS, by enforcing those seasonal restrictions as far as construction goes.

Q. Did you look at alternatives to crossing the

Superfund site?

A. Yes, we did. We looked at, we looked at options of moving further to the south, away from the line. There is a -- I may be able to go back. It's difficult to see, I apologize.

In this area right here, this is the Carr Fork area. It extends all the way down in towards Tooele City, and along each hillside. We tried to look at an alternative that spanned across a certain portion along the hillside up here.

It would require more extensive access roads to do that, which we figured would be more visible from a distance away going up there. And the effort we have gone through to minimize the disturbance right now, the alignment right now was preferred as proposed.

Q. If, again notwithstanding all of the protestations of the Company to the contrary, and notwithstanding Darrell's opinion the Company probably wouldn't build it anyway. If the Board said, Take the Northern routes. We don't like some of the concerns, including the Superfund site. Would taking the Northern routes still impact the Superfund site?

A. Yes, it would. We would still have to come down toward -- along the East side of the valley here

to get back down to the BLM and Company's proposed route. The Carr Fork area is just here south of the North Oquirrh Management Area, so it would impact that site.

Q. So no matter what -- whether you build North or keep your alignment, you're gonna cross the Superfund site either way?

A. Correct.

Q. All right. Brandon, I want to draw your attention now to the topic of the watershed. There was some questions raised about the water. Can you describe for the Board how this route was engineered to minimize impacts to Tooele's watershed?

A. I can. The Environmental Impact Statement included the review of wells and springs within 600 feet of the line. That is addressed in the EIS. In addition to that, the Company went forth on their own and did an investigation and review of wells and springs that are located throughout that entire area.

This is information that's available through the USGS. The Department of Environmental Quality reviewed those areas, and the proposed location for the line minimizes impact to those. We are, we are below several of the stream -- all of the springs that have been identified that we would be impacting.

The transmission line is below those, which minimizes impact. If we were higher than those then there would be more concern as far as impacting the springs.

Q. So before you move on, I just want to clarify. So if you were to actually draw the line farther up in here, like this route, that actually makes the impact worse on the watershed?

A. Yeah, you're, you're moving the line higher up into the watershed area.

Q. Let me just -- maybe this is the way to put a fine point on it. Are transmission lines considered a toxin for a watershed?

A. No. Utah Rule 309 establishes the, the protection, the protection zones for drinking water wells. And the transmission lines and access roads are not considered a point source of contamination as far as the standards go.

So no, there, there's nothing as far as construction of the transmission line that can't be mitigated as far as impacts to water sources.

Q. Has the Company developed any plan to deal with storm water, spills, other things besides the towers that could somehow get into the watershed?

A. Right. The Environmental Impact Statement,

we have a -- there's a re-vegetation program -- or sorry, a re-vegetation plan included in the EIS that accounts for how to re-vegetate to minimize erosion of soils after construction.

During construction the contractor and the Company are required to obtain a storm water pollution prevention plan from the Department of Environmental Quality. That is a requirement for all construction projects impacting over an acre of disturbance.

There will be one of those in place at all times that will minimize erosion, keep drainage under control, and minimize impacts to any water sources around.

I heard a concern about the spill of fuel during construction. In construction the contractors also are required to have a spill prevention plan in place that minimizes the possibility of having such spills as far as containment of their storage. Fuel storage. Having materials on their equipment and able to clean up if there is a spill. And establishing distances away from wells and springs that are safe as far as fuel goes.

Q. What about vegetation killers, herbicides? I recall some public comment or concern about, Okay, it's not gonna be your lines, it's not gonna be your

trucks. But you guys are gonna need to clear out the brush, and that's gonna poison the wells and ruin the watershed. Has the Company addressed that in its plans?

A. The Company has, as well as the BLM and the EIS. The BLM has recognized the use of herbicides as an important role in operating and maintaining a line. The Company does use herbicides. It's -- we use a selective use on herbicides to target specific species. Like I mentioned earlier, the higher growing. And we, we are cautious of wells and springs as far as the use of herbicides.

Q. Brandon, I want to draw your attention now to the topic of, you know, recreation. And whether allowing the Company to go forward with this project is going to limit or unduly burden the residents' ability to, you know, get out, and enjoy, and recreate in the foothills.

Are recreational uses compatible with these overhead transmission lines?

A. Yes, they are. The Company gets approached quite often by entities or jurisdictions that we place transmission lines through to find out what type of uses are acceptable. For instance, trailheads. There are, there are parks that are constructed near and

under power lines for the sidewalk use.

There are acceptable uses that we work with the communities so that area is useable. It -- the idea that the area underneath these lines is unusable is, it's, I guess it's farfetched. We -- you can still utilize that area underneath the transmission lines.

Q. One of the comments I recall hearing is, Hey, this is gonna be so bad, you know. Students are all gonna have to take safety seminars and wear, you know, protective clothing whenever they go up to the "T." Whatever.

Can you speak to that topic of, you know -- or is that -- is it really gonna come to that? Are the students gonna have to be drilled in safety in order to get up to the "T"?

A. No. The idea of a safety presentation was offered up by Rocky Mountain Power during the Conditional Use Permit process. We, we offered to come provide seminars for those who wanted knowledge of the impacts of the transmission line, concerns, the hazards associated with it.

So it wasn't a mandatory, it was an offering on the part of Rocky Mountain Power. There are no concerns with folks going underneath the line to get

up to the "T."

The towers that we're talking about are designed to be unclimbable. I mean, even if a crew member was to go out and work on that line, they would not be able to climb that tower without a specific ladder fixture that they have to carry on their trucks that they have to hook on there to climb up to it.

So there -- that is taken into consideration during the design of the towers.

Q. Brandon, not in Tooele but on this side of the Oquirrhs, in the Salt Lake Valley, are there these kinds of transmission lines now that are currently running in, around, or over parks, or golf courses, or other recreation areas?

A. Yes, there, there are several areas where that happens. In fact, we're constructing one right now that's going over a golf course.

Q. Do you have trails underneath those lines and allow citizens in those communities to walk and do things under those lines?

A. Yes. Yes, we do.

Q. Brandon, last night there was a very concerned father who I believe very sincerely described to the Board his concerns about his daughter. She has a pacemaker and, you know, these

lines are gonna pose a serious risk to her.

He claimed that he submitted comments to the BLM and the EIS, and that his comments were ignored. First, do you know, does the Final Environmental Impact Statement actually address those specific concerns that that father raised?

A. Yes, they do. The final EIS addresses those concerns in Section 4, pages 89 and 90.

Q. And can you describe for the Board, what lengths did the BLM go to to ascertain whether or not this was a risk?

A. The Company actually pursued the manufacturer of the pacemaker, who provided us with the minimum requirements as far as impact on the pacemakers from the -- from EMF. And after reviewing that data it was determined that the levels underneath the line above the family's home are not above the minimum limits as far as impacts on the pacemaker.

Q. Did the EIS -- or did the BLM in the EIS address whether the levels of EMF even directly underneath the conductors would be at a level that would pose a risk to this little girl?

A. They addressed it, and considered the levels acceptable. They would not be an impact to the pacemaker.

Q. And they received that information from the actual manufacturer of her pacemaker or just from some manufacturer; do you know?

A. From the actual manufacturer of the pacemaker.

Q. One of the Board members earlier today raised a question with Darrell talking about other areas where we have lines like this. And the "T" I think was the question.

Do you know the answer to that? Are there -- can you give examples? Does the Company have these kinds of lines by, you know, some other school's letter or, you know, in a similar setting?

A. Yeah, we, we have, we have a few areas that I'm aware of, that I've been told about. We have down in Nephi there's the letter "J" for Juab County. We have a line that's -- I don't know the exact distance, but it is similar to the situation we have here.

Recently there's a line being constructed up in Box Elder County. There's a "BR" up in the Tremonton area, we have a line that is below that. I'm not certain of the distance on that.

And there, there's some other ones, lower-voltage lines we -- that -- beneath the "U" up near the University of Utah we have a 138 line that is

a filum galvanized structure, so. Those are visible. So we do have areas where we have situations where we have lines below those areas.

MR. MOSCON: Thank you, Brandon.

We're happy to turn the witness over to the Board, or to Tooele for cross examination.

CHAIRMAN BOYER: Okay, thank you. I think we'll proceed in the same manner. We'll --

How do you expect to proceed, Mr. Hogan? How much cross examination do you have?

MR. HOGAN: If you'll allow me a thirty-second bathroom break, I will promise to be done before noon.

CHAIRMAN BOYER: That's a deal.

(A recess was taken from 11:43 to 11:48 a.m.)

CHAIRMAN BOYER: Okay, we are back on the record.

Mr. Hogan, cross examination?

MR. HOGAN: Okay.

CROSS EXAMINATION

BY MR. HOGAN:

Q. Brandon, I'm gonna, I'm gonna talk about, as we go through the line of questioning I would like to pursue, two different scenarios: One is a single line in the I-80 Corridor, one is a dual line in the I-80

Corridor. Okay?

So as I ask questions if I, if I don't clarify or if you're uncertain, please make sure in your answers that either you alert me to the fact of what you're giving, single line or dual line. Or you make me ask the question again, I'm happy to do that.

A. Okay.

Q. Okay? If we look at the -- I'd like to draw your attention to the map, the slide you've got up now, where you've got the black substation. That's the furthest-north location for the proposed Limber, correct?

If you go due west from that location, and even north -- as far north as the blue line or the aqua-colored line, the highest, the highest line you have drawn on there as a proposed transmission line, do the soil conditions change?

A. I'll use my pointer.

Q. Yes.

A. So are you talking up in this area?

Q. Yes. Straight, straight west of the black substation, and then you can increase the latitude and go north as far as you'd like. Do the soil conditions change when you go west and north?

A. I'll use Highway 138 as the boundary, because

everything, everything this side of Highway 138, north and east, are similar soils through here. They're all lake-bottom soils, similar.

If you go on the west side of Highway 138 it increases in elevation and the soils do change up in that area.

Q. With the increased elevation would that provide favorable soil conditions for constructing a substation?

A. Um.

Q. Or -- let me, let me rephrase that. Would the soil conditions be similar to the, to the aqua-colored substation, to the yellow substation, to the green substation?

A. They would be similar to the substations over here on the west side. This color. It is a rock, more of a rock material up in that area.

Q. Okay.

A. Compared to the sandy down there by the Great Salt Lake.

Q. Okay. Now, if we assume a substation in that location. Find a location that's got suitable soil. So west of 138, if that's the delineation line. We're west of there and we've got a suitable substation location.

Now, if we think about a single line. We go from, we go from that point, no substation -- well, actually in this scenario we don't even need to assume there's a substation. In the single-line scenario I'm gonna give you we don't worry about a substation over here. That's, that's if the Company wanted to do it.

A single line. If we came all the way along the I-80 Corridor -- in fact, following the environmentally-preferred route identified by the BLM for your Limber-to-Terminal route.

If we follow that line with a single line do we have any of the complications that Mr. Gerrard worried about with the corridors too close together, or not being able to co-locate anything? If we have a single line?

A. You have increased line miles, which is a concern with Mr. Gerrard's testimony.

Q. Right. We've increased 500-kV line miles; is that right? Or potential 500, because he also said that they're only gonna energize it to 345. So we've increased that line if we don't have a substation over there and we've got a single line?

A. If you're assuming the substation will be up here you have increased mileage for the 500 line, yes.

Q. Okay. Or even without a substation. Let's

put the substation -- I'll show you.

Anywhere in this vicinity. If we put the substation anywhere in that general vicinity we've increased the 500-kV mileage, correct? Line miles of 500 kV is greater, right?

A. Assuming that's where the substation location is, yes.

Q. Right. And we've reduced, we've reduced the line miles of the 345; is that correct?

MR. MOSCON: Can we clarify, are you talking about for just going to Terminal, or going down to Oquirrh?

MR. HOGAN: Both.

Q. (By Mr. Hogan) Is it a shorter line from Lake Point to Terminal and Oquirrh than it is from directly north of Grantsville?

A. Yes, it is.

Q. Okay, thank you. The, the loss, the line loss that occurs when you lengthen the 500-kV line, is that -- when you compare that to the increased efficiencies of shorter 345-kV lines, does that -- is that a wash, or is it a net gain for the system?

A. I, I can't speak to the efficiencies. That's Mr. Gerrard's testimony and his expertise. I can speak to the difference in miles of the different

scenarios that we've discussed.

Q. Okay. How, how much, how much shorter are the 345-kV lines if they start in Lake Point and going to -- in this case -- because you've only applied for the one line.

If we go from Lake Point to Oquirrh, rather than from any of your proposed substations -- you can specify the one if you want to get the exact difference. But how much shorter is it from Lake Point to Oquirrh than any of the other three substations?

A. I don't know the distance from this point to Oquirrh. In fact, we just found out about this this morning.

Q. Do you know the width of the Valley?

A. Do I know the width of the Valley?

Q. Yeah. I mean, that looks like --

A. I don't know the entire width of the valley.

Q. Well, rough width of the valley, from Grantsville to Lake Point?

A. I know it is approximately 31 miles from this substation to this substation.

Q. Okay. Do you know how far it is from Grantsville to Tooele?

A. I would say five miles.

Q. Okay. And would you agree that, just for the sake of talking about this, that it would be approximately at least five miles shorter?

A. I, I can't, I can't estimate the miles on here just looking at a map on the screen. I mean, there, there are other things you need to look at besides running a straight line from here to here. There are obstacles along this way. It's not just a straight line. So, so.

Q. Let's, let's talk about some of those obstacles. You mentioned that the straight line, I believe the straight line that's drawn right now would still get into the EPA Superfund site; is that correct?

A. That is correct.

Q. Is it possible to modify that line and take it out of the EPA Superfund area?

A. That would require the line to go either through Tooele City limits or --

Q. Certainly we wouldn't propose that.

A. Or, or through the North Oquirrh Management Area.

Q. And what's sacred about NOMA? Why would we not consider having that line cross over the edge of the North Oquirrh Management Area?

A. The EIS explains the reasoning for -- as we talked about before, the BLM, their preferred alternative goes this way. Our initial proposed alternative went through the NOMA. It addresses the concerns.

Q. So that it's actually the Company's preference to go through NOMA, but the author of the EIS preferred that you did not; is that correct?

A. Yeah. The -- correct. The BLM, their environmentally-preferred route went south of the NOMA. The Company's proposed route went through the NOMA.

Q. And the BLM is responsible for managing NOMA; is that correct?

A. That's correct.

Q. Do you think it's accurate to describe their, their zeal and zest for managing the NOMA area as, as to a very high degree, or is it a very low degree?

A. I don't think that I should comment on that.

Q. Okay.

A. They're, they're the professionals for managing their own property.

Q. Okay. You made a statement earlier about the northern routes, just speaking generally. Regardless of whether we're talking about a single line or a dual

line. And your statement was thus: That it was completely possible to engineer even a dual line in the I-80 Corridor, except for the fact that it didn't meet Mr. Gerrard's criteria; is that correct?

A. Correct. It also encountered additional impacts to the environment.

Q. Okay. And I, and I believe when you described the engineering challenge -- now, correct me if I'm wrong, because that, you know, I don't want to misconstrue the way that you characterized the challenges that would be encountered.

I, I get great pleasure out of watching a program I see on TV -- I don't know if it's on History or National Geographic -- it's called Modern Marvels. They do a lot of engineering stuff. You probably and Mr. Gerrard probably would like this program, because they take big projects that are very challenging and they go through and explain the hurdles that have to be overcome.

Would you -- I mean, examples of things I've seen on there are the Chunnel, the Supercollider. Some incredible construction. But roads in, in Alaska where it's frozen all the time. Things of that nature.

Would you, would you think that they would be

interested in doing a program on the challenges that Rocky Mountain Power would have in getting these lines --

MR. MOSCON: I thought we had a moratorium on the kind of badgering-type questions.

CHAIRMAN BOYER: Well, he's not badgering, but I think he's asking something that probably Mr. Smith can't answer. I mean, you're asking what would the BLM --

MR. HOGAN: No. I mean, I'm asking from an engineer's standpoint does he think that the challenges that would be encountered in trying to run these lines along the I-80 Corridor, is that something so challenging that other engineers would be interested in watching how that actually happened.

They would actually tune in to a TV show to see how in the world Rocky Mountain was able to overcome that challenge.

MR. MOSCON: And I guess my point is, he's asking Mr. Smith do the producers of a TV show want to watch that. And how does he know that?

CHAIRMAN BOYER: Well, let's do this. Let's ask Mr. Smith if he knows first. And then if he knows, he can answer it.

THE WITNESS: I do not know the interests of

folks comparing a television show and permitting and constructing a line through this situation.

Q. (By Mr. Hogan) Okay. Do you think, in your -- from an engineer's standpoint, is it a bigger deal to impact the Superfund site, or to, or to get on the edge of NOMA? Which is a bigger deal from an engineering standpoint?

A. Considerations have been taken into both as far as the EIS is concerned.

Q. I'm asking your opinion.

A. You have terrain on one side. And as far as constructability through the Superfund site, constructability has no issues right now.

Q. So it's your opinion that it's a less big deal to go into the Superfund site than it would be to get on the edge of NOMA?

A. I didn't say it was a less big deal. I said constructability-wise it is less of a big deal through the Superfund site. I didn't say that it's -- I guess I'm not clear on your question.

Q. Which is a bigger deal, as an engineer, going through the Superfund site or impacting NOMA?

A. There are --

MR. MOSCON: And I guess what he's saying is -- the question is not clear to me. From a

constructability standpoint, or an environmental standpoint, or impact-to-the-system standpoint?

Q. (By Mr. Hogan) Take all three in order.

A. You have to take all three of those and analyze them in detail. You don't just -- you have to take a summary of all the risks, and alternatives, and impacts before you choose which one is better than the other.

Q. Would the scope of the present EIS account for single-line construction along the I-80 Corridor right now? If we were to move forward with the permit -- if this Board were to order the Company to do a single line along the Interstate 80 Corridor would the scope of the EIS that's presently been done account for that?

A. The EIS that has been done includes one single line along the I-80 Corridor and one single line along the Southeast Bench. It is a connected action as far as the Environmental Impact Statement is concerned.

Q. Okay. So I guess the answer is yes. If this Board said, We're not gonna have you build two lines -- we're not gonna -- first off, we're not gonna have you do the Southeast Bench route.

And we're gonna have you do just a single

line along I-80 to about Lake Point, put a substation there, and then draw a much-smaller triangle -- one of these magic triangles, it's gonna be much smaller -- would the present EIS account for that scheme?

A. No, it would not.

Q. Why wouldn't, why wouldn't it?

A. Because that is not, that is not the -- that is not what the EIS is establishing. It's establishing the project as a whole. A line from Mona to Limber, Limber to Oquirrh, Limber to Terminal, as a connected action. It has only been analyzed to have one route go to the north of Grantsville, not both.

Q. So the paradigm, the information, the project scope that, that Mr. Gerrard and your company gave to the BLM is the only paradigm that BLM has analyzed; is that correct?

A. We have given them what the Company needs as far as the Mona-to-Oquirrh project.

Q. Okay. So the, the EIS was limited by the information provided by the Company to the BLM?

A. The information provided by the Company is a piece of the information in the Environmental Impact Statement.

Q. Okay.

A. It's a large -- larger view than that.

Q. Okay.

MR. HOGAN: I have no, I have no further questions at this time for Mr. Smith.

CHAIRMAN BOYER: Okay. Thank you, Mr. Hogan.

Let's see if the Board has -- I'm trying to figure out a logical time to break because there will be, I assume, some redirect, Mr. Moscon?

MR. MOSCON: Again, depending on what the Board does. You took most of my redirect from me before, so I, I don't anticipate a lengthy redirect.

CHAIRMAN BOYER: All right. Well, let's hear from the Board members first. And then perhaps we can excuse this witness, break for lunch, and then come back and hear the oral arguments.

Let's begin with Mayor Johnson, any questions for this witness?

MAYOR JOHNSON: I just have one, please.

Just for clarification -- and I -- maybe I'm missing a little bit here. But if we take the line different than what we have. I was interested that Grantsville didn't come to -- or refused to come to one of the meetings or something. I don't know what that was about.

But I'm surprised, because what we're talking about -- and I'm talking now as a City official,

understanding problems through cities and counties than I am the three Commissioners. But I'm a little concerned about -- or help me understand. Are we not impacting more going to the northwest and around and then back over, versus coming on the proposed route?

Now, I guess that's what I'm asking. I'm having a little bit of -- we're turning the line, or we're proposing -- or you're proposing to turn the line to go another direction because we're trying to minimize the homes on the southeast side of Tooele. That's what I think I'm understanding in this process.

Yet when we turn the line it seems we impact Grantsville -- again, I'm not that overly familiar with these communities. Grantsville, and Erda, and Lake Point, and Stansbury. I think those are the towns that I'm thinking about.

So can somebody help me, are we impacting more there than we are the other route? I guess that's my question really, Brandon. I don't -- is that true or not?

THE WITNESS: As far as the impacts and review of the alternatives, in order to meet Mr. Gerrard's requirements for the efficiency and adequacy of the system there will be a larger impact to run both lines in this area. A larger impact to

homes, larger impact to wetlands.

You do have folks in the Stansbury area, the Erda area who have not been formally addressed in the EIS, as an alternative was not proposed. So as far as the overall impact, those are the impacts we see that are greater up North compared to this three-mile section we have right here that we're discussing.

MAYOR JOHNSON: And am I to understand -- just thank you for that. The last question is, is it true that Tooele City absolutely would not give a Conditional Use Permit through their city, period? That was eliminated?

THE WITNESS: That's what, that's what we were told in the third conflict resolution meeting that we conducted.

MAYOR JOHNSON: Okay.

MR. HOGAN: If I may, to help clarify?

Did the, did the Company ever formally apply for a permit through Tooele City, or is the permit we're here on today the only permit that the Company actually applied for?

THE WITNESS: We did not apply for a Conditional Use Permit through Tooele City. However, during the conflict resolution meetings when we presented the alternatives through that area we were

told that it didn't matter, because we would not get a line permitted through Tooele City limits.

MAYOR JOHNSON: Thank you.

CHAIRMAN BOYER: Commissioner Allen?

COMMISSIONER ALLEN: Thank you. Just a couple quick questions.

You know, I've read the EIS and I've read all the testimony, but -- I know I've come across this, but I've got a couple thousand pages of data bouncing around in my head right now.

So just to be clear, going back to the "T," how -- what's the closest point where the lines will come to the "T"? How close -- how far away will they actually be? Couple hundred feet, couple thousand feet?

THE WITNESS: Right now we are 600 feet away from the "T," at a minimum.

COMMISSIONER ALLEN: And how far above the ground are the lines at the closest point?

THE WITNESS: The, the base of our proposed structure, the closest structure, is 300 feet in elevation below the bottom point of the "T."

COMMISSIONER ALLEN: Okay. And how far above, in altitude, are the lines above the ground? I know I've read this one.

THE WITNESS: Through that area, approximately 150 feet.

COMMISSIONER ALLEN: Thank you.

CHAIRMAN BOYER: Ms. Hurtado?

MS. HURTADO: I have no questions.

CHAIRMAN BOYER: Commissioner Campbell?

COMMISSIONER CAMPBELL: Looking at the cost estimates on 4-91? Did the BLM modify your cost estimates at all, or are these precisely as you submitted them?

THE WITNESS: From what I understand, those are the cost estimates that we gave the BLM.

COMMISSIONER CAMPBELL: So they didn't adjust these at all? Did you, did you, when you crossed the Superfund site, do you have your standard miles -- or dollars per mile? Or did you have any sort of adder that -- for any remediation that might have to take place on that site?

THE WITNESS: I don't, I don't have a specific number as far as what it would require to go through the Superfund site incurring any cleanup costs. But the costs that are included in the EIS do, do include our ability to minimize the impact to the site.

I, I have an environmental engineering

background. I've worked on three Superfund sites cleaning these sites up. It will not be a site cleanup, as was indicated yesterday. There are areas out there that will be sampled. There is no specific indication of what every square inch the contamination is.

We are minimizing it by minimizing access roads to go through that area. We've minimized it by producing -- putting as minimal amount of structures as we can in that area to minimize cost. So the costs include our ability to minimize impacts to that area.

COMMISSIONER CAMPBELL: My final question is, you rely quite heavily on the EIS and this third-party review. Yet it appears in this three-mile stretch that is under dispute is the area where you actually leave the BLM's preferred route and don't follow it.

Could you explain why that is? It's kind of the Section 198, where they go -- it looks like they go a lot further south, further away from the reservoir and so forth. It looks like further away from where the homes are and everything.

THE WITNESS: In the Draft Environmental Impact Statement the environmentally-preferred, BLM-preferred, and the -- our proposed route were the same. Going through the public comment period and the

Conditional Use Permit process, concerns were raised about Settlement Canyon Reservoir and the line crossing over the top of it.

As part of the Conditional Use Permit the Company shifted the line to the south to get off of the reservoir, and that was about 400 feet, and another thousand feet behind the homes up on the ridge we moved the line to the south.

At the release of the Final Environmental Impact Statement the BLM had, as one of their suggested mitigations, would be to shift the line further to the south. This again is a, is an example where we had made an adjustment based on the feedback that we had gotten, but we were not aware of the environmentally-preferred route before it came out in the final EIS.

So they have suggested as a mitigation to move it further to the south along Settlement Canyon, however that we would still daylight in the same area up just south of the homes.

COMMISSIONER CAMPBELL: And is the Company considering following that preferred route in the final EIS?

THE WITNESS: We had identified, as part of the Conditional Use Permit process, to mitigate around

Settlement Canyon. We had, we had raised issues about a scout camp that is further to the south. There's a picnic area. And raised those concerns, and suggested that we would work with the County to find an alignment through there.

We just wanted to make sure everyone was aware of those impacts. So shifting the line in that area we do take into consideration those impacts, including impacts to additional property owners that aren't impacted right now.

MS. HURTADO: I do have a question.

CHAIRMAN BOYER: Ms. Hurtado has a question.

MS. HURTADO: When you did your application to the Planning Commission did you say that it would be based on the final determinations of the EIS?

THE WITNESS: We, we -- if I recall, one of the conditions was that upon the release of the Final EIS that the Company would work with the County to, to mitigate that difference in a route in that situation.

MS. HURTADO: Thanks.

COMMISSIONER CAMPBELL: I'm asking a question in an area I'm not familiar with. But it's, it's my understanding that you were asked to mitigate in a certain number of areas. And I think in your reply response you list how, how you would mitigate a number

of areas of concern.

At the hearing last night I think a member of the Planning and Zoning Commission was unconvinced that that would mitigate. How does that ever get resolved? I mean, is this, is this all before the fact?

Obviously you don't mitigate until you start construction. So you say, Well, this is what we're gonna do, it'll mitigate it.

And they say, Well, we don't think it will.

How does that ever get resolved?

THE WITNESS: It is a point where, you know, a County or City who implements conditions on a permit, from my understanding those conditions need to be reasonable and, and not produce any situation where it cannot be mitigated. Ask for something that cannot be mitigated.

Those situations need to be reasonable. The Company will look at those. And the mitigations and those conditions need to be met before the construction starts.

Now, we, we recently had a C.U.P. where we had 31 conditions. And we've met all 31 of those for that project, so. But it is a situation where you need to mitigate those conditions, before construction

begins, in a reasonable fashion.

COMMISSIONER CAMPBELL: So if you propose a certain method to mitigate, the County doesn't agree with that, does that end up in court? Whether those are reasonable or whether your, your approach is a reasonable mitigation?

THE WITNESS: I would defer that to the legal folks as far as where that would go. I shouldn't answer that.

COMMISSIONER CAMPBELL: That's fair.

CHAIRMAN BOYER: I just have one, one line of questioning. And hopefully you'll be able to answer this, even though you're not an electrical engineer. Neither am I.

But you referred several times to the requirements set by Mr. Gerrard in terms of operation of the system. And you will probably recall him testifying that one of the concerns with moving the substation north would be the increased length of the 500-kV line, thereby creating more resistance or impedance and increasing line losses by 60 percent.

Can't those line losses be minimized by -- either technologically or by using a different size conductor? The bigger the wire, the less resistance?

THE WITNESS: You are correct, that's beyond

my ability. What I do want to make clear, if I can, the additional mileage is a -- is based on the -- the ability to get to Oquirrh from this location -- this route right here -- compared to moving it up into this area and getting to Oquirrh this way is an additional 16 miles.

That's, that's where the 60 percent is coming from. It's roughly 60 percent of the distance to get from here. So moving Limber up there and still getting to Oquirrh still adds 16 miles on to the alignment to actually get to Oquirrh Substation.

CHAIRMAN BOYER: Okay, thank you.

Redirect, Mr. Moscon?

MR. MOSCON: No further questions.

CHAIRMAN BOYER: Okay. Then what we would envision doing, we're gonna take a lunch break now. But what we -- and we'll take an hour and-a-half break.

We would envision then hearing legal arguments from both sides. And just to alert you, I have a commitment. I've been summoned up to meet with the Lieutenant Governor this afternoon, so we probably need to wrap it up around 3:00 or so if we could.

So if we take an hour and-a-half now we'll be back here at quarter to 2, would that be correct?

It's 1:15, quarter to 2. And that will give an hour something-plus for legal arguments. That should be sufficient, shouldn't it?

MR. MOSCON: So it's 50 minutes for me, 10 minutes for Doug?

CHAIRMAN BOYER: Something like that, yeah. Or maybe something more like half and half.

MR. MOSCON: Yeah.

MR. HOGAN: Thank you.

CHAIRMAN BOYER: All right. We'll be in recess, then, until that time, quarter to two. Thank you.

(A luncheon recess was taken from 12:16 to 1:50 p.m.)

CHAIRMAN BOYER: We are back on the record. What we'd like to do at this point is hear legal arguments from the attorneys for the parties. And if it's agreeable to you, we thought we'd give each of you 30 minutes. If you want to take less, we will not be offended in the least.

The moving party, if you wish to split yours 20/10, 15/15, or 25/5, whatever you want to do, we'll cede to your request on that. So we'll begin, Mr. Moscon, with you.

Oh, by the way, we were talking about the

timing of the issuance of our order?

MR. MOSCON: Yes. Mr. Chairman, we, you know, we both discussed some potential ambiguities in the statute and timing. Whatever the number of days is or whenever it would start, the parties have stipulated that the Board should be allowed to have through June 21st to conduct its review and issue its decision, whatever number of days that is.

That's agreeable to both parties. And Doug can confirm if that's correct.

MR. HOGAN: That's correct.

CHAIRMAN BOYER: Okay, thank you. We've chatted about that as well. And accommodating, you know, the other things that we've got going on in the other hearings and cases that we have, and then the Mayor and Ms. Hurtado have scheduled as well, we can work within that time frame. So we will issue the order by the 21st, if not before that. So thank you for that.

Mr. Moscon?

MR. MOSCON: Thank you. And I would like to reserve just a couple of minutes to respond to any comments or questions that may come up following the closing of Tooele.

Mr. Chairman and members of the Board, first

let me thank you for your time. We are very mindful of the fact that you each have day jobs. We're mindful of the vast amount of information that's been provided.

And we recognize that when Doug and I finish here now, your work is really just beginning. And we thank you in advance for the just tremendous effort that you've all shown in this matter. Your questions show that you've been prepared and attentive, and I thank you for that.

As I begin I'd like to remind the Board that this process of siting this line started for my client back in 2005. This project represents a vital link in the Energy Gateway architecture, which is the backbone of the Company's entire power system.

It's a huge investment of my client's ratepayers. It's a $400 million project. The Company has spent $14 million to plan and prepare for the project up to this point in time. They have tried very, very hard to design this system in the way that it would best serve its customers across this State, and in fact across the Region.

When completed the project will consist of approximately 146 miles of line. A hundred and forty-three miles of line are uncontroversial. The

local concerns about the views of approximately 3 miles of line is now risking this entire project, which is desperately needed for electric consumers across the State and for the economic development of Tooele itself.

Nevertheless, my client became aware of the concerns of this group. It did not, as suggested by Tooele, simply ignore these concerns and proceed ahead with the predetermined route. I'd like to remind the Board of this chart that Mr. Smith went through in his testimony which shows the many, many meetings that my client held.

And again, the bubble on the left are the meetings that are required. And the bubble on the right are meetings that are not required, but represent an extra effort by my client to try and reach a consensus with the different concerned citizen groups in the Tooele Valley.

We also saw the many different routes that were analyzed crisscrossing the Valley to try and connect the points. And in each time, as my client through its witnesses discussed, it was open to these things. It would have been open, had time permitted, to do the Railroad route or the Army Depot route.

There were some routes that it simply said,

We can't do that, for engineering reasons. But even though that's not our preferred route, we will do it. And the reason that's important for the Board to remember is, notwithstanding arguments you may have heard from some upset citizens, this is not a case of Rocky Mountain Power simply saying, We are unwilling to compromise.

The record is in fact, as we've said, that they compromised for more than half of the line. For 80 miles of this 140-something-mile line they have already adjusted that line. So my client has been very conscientious about trying to work with the citizens of Tooele.

Obviously, because we're here, notwithstanding the efforts of my client, there are still some concerns. And I'd like the Board to focus on that for a minute. Tooele has always relied on other communities to deal with the impact of transmission lines.

Tooele has grown. If you recall the first slide that Mr. Gerrard had, it had the red bubble of the critical load area. Showed all the transmission line corridors. Tooele is the only part of that map that does not have transmission lines in it now.

It's part of the critical load area, but it's

the only part of the critical load area that does not already have transmission line corridors in its boundaries. So this is the first time that Tooele's had to ever deal with this, so we understand they've got concerns and questions.

The nature of transmission lines is that they run to population centers. That's what they do. Their purpose is to bring energy from remote resource centers and bring it in to population centers. There's a lot of questions about what people would have done if this was a county seat in a big population center.

And the point made is correct, Tooele has become a population center. And the fact remains that in this day and age you cannot live in a major population center without being impacted and without seeing transmission lines. That's a part of modern life.

There is no place these lines can be put that would have no impact. Someone would object to these lines wherever they got put. What that means is the Company had the obligation of finding the best route for these lines.

And that's the same obligation that the Board has now. There is no magic route that this Board can

pick and select and have happy people across the board. Some group, people in Grantsville, Erda, Tooele, Stansbury, someone will be impacted and someone will be upset.

What that means is the Board can't base its decision by trying to look at the popularity, or who speaks the loudest, or who objects the loudest. The Board has to focus on what is the best route for the State as a whole.

One of the points that Mayor Johnson made today I think is important. And that is that, although there were public meetings held around the Conditional Use Permit that my client applied for that talked about this South Bench route, there were not these public hearings about routing this line around Grantsville, or if they were to cut across Stansbury, or to go through Erda.

What about the citizens of those towns? What about the people that live on Bermister Road or Sheep Lane? The point is, there may be hundreds and hundreds of people that are opposed to this route. And taking our lumps we have to concede, that's a mighty big handful.

But there are 58,000 residents of Tooele County. And how many of those 58,000 would be opposed

to the Northern route around Grantsville, or be opposed to the Army Depot route, or opposed to the routes running through Downtown Tooele along the railroad corridors? I would suggest to you probably just as many.

Again, the Board cannot base its decision on the popularity or the lack of popularity, or by concerns expressed by those nearest to the lines. The mandate of the Act that created this Board tells this Board that it has to look at the best interests of the Utility as a whole.

And "best interest" is defined for the Board. The best route is the route that provides the most reliable, safe, adequate, and efficient supply of electricity to customers across the State. Now, that's important because the Act's told this Board that it has to focus on the State.

Not for Tooele City, not Tooele County, not even just the critical load area. But this body, this Board was created by the State Legislature. And in the enabling Act it says this is a matter of statewide concern. And we can't have what one local government does having an adverse impact on the rest of the State.

There's been a lot of misinformation about

this project. And I don't believe that it's been malicious or intentional, but it's nevertheless misinformation. And the Board has to be careful now to stop and make sure it's considering the actual facts. Not something that a concerned citizen has heard but is not true, but actual evidence.

So let's consider the evidence the Board has heard. The first witness that Rocky Mountain Power called was Mr. Gerrard. Mr. Gerrard told this Board that Energy Gateway is the Company's comprehensive transmission plan. That it's absolutely needed. That it will provide an additional 1,500 megawatts of incremental capacity into the critical load area, and reduce transmission constraints.

He described how this Energy Gateway is designed around what he called the "triangle of reliability." That it's based on the idea of diverse line routing. That that is a fundamental principle for the design of the larger project.

He told you that the Mona-to-Oquirrh project, the smaller piece of Gateway, is also designed on this triangle of reliability. And that if you remove that triangle, if you remove that reliability, it defeats the purpose of the entire design.

The current transmission system in Utah has

limited capability, and is incapable of delivering more power into the critical load area. We know that by 2013 the Company will be unable to serve its existing customers within the critical load area.

The load in the critical load area is expected to double in the next 25 years. In designing Mona to Oquirrh it was critical to create a diverse transmission line route between Moca -- between Mona and that critical load area in order to improve the reliability of the State's overall transmission system.

Mr. Gerrard told you that he needs at least 1 to 5 miles of separation between all segments of this route, except for the very first few lengths of line coming in and out of the substation or hub. Failure to maintain that separation between lengths can result in a common-mode or multiple-line failures, and the Company has indeed experienced these in the past.

It's important to note, this isn't just hypothetical talk. We saw the pictures of the lines down with the frozen lake. We saw the pictures of where a plane crashes into the lines. We saw the pictures of the mudslide that would take out two lines. We saw the pictures of the fires that would

take out multiple lines.

The important point is, this is not just a hypothetical risk. His testimony that's been previously submitted included examples of eight such incidents that Rocky Mountain Power has experienced here in Utah of these dual-line, common-corridor collapses. It is something that does happen. And it is something that cannot be ignored in the design of this system.

The Northern route proposed by Tooele County will not provide for adequate separation and does not meet the Company's system and siting criteria. Mr. Gerrard told you there are five criteria he must plan to, and the Northern route does not meet any of those criteria.

He further told the Board today that he cannot fully utilize the existing system if he has to compromise it in that Northern route. He talked about these inefficiencies. And that's important because what that means is, he told you, if he had to build the line the way that Tooele wants it? The only way to fix the system or to optimize the abilities of the system is to get another line.

We've all seen how difficult it is for a community to have transmission lines introduced. What

he's telling you is, if you take what Tooele is asking you to do now, the Company will be right back here in the very near future saying, Well, now we need another line crisscrossing in a diverse path somewhere else in the Valley.

We heard from Brandon Smith. Brandon discussed at length the process of siting this. The feasibility studies, the Environmental Impact Statement. How the BLM was design -- designated the lead agency.

It was interesting to me that -- how he described that the BLM invited Tooele County to participate in the EIS process, but Tooele declined that invitation.

Upon completion of these initial studies the BLM identified a preferred route on Federal lands and an environmentally-preferred route on private lands. The Company's proposed route follows the BLM's route.

I will note in the final issue of the EIS, the Final EIS that came out in the midst of these proceedings only a couple of weeks ago, there's one slight adjustment that the Company is willing to make. So I, I now say it follows 99 percent of the, of the line, and it's an adjustment the Company is willing to make. That happened just, again, within the last

couple of weeks.

But the company adopted the BLM's preferred route as its proposed route, and that is the route we had asked Tooele County to permit. Both the BLM and the Company agreed, after extensive independent analysis, that the proposed route is the best transmission alignment for this system.

It's best for the environment, it's best for human life, it's best for system engineering, it's best for reliability, and it's best for efficiency. There is not any of the criteria in which the routes that Tooele County is asking you to consider are better.

They imply that it's better for impacts to the environment. They imply and say it's gonna ruin the mountainside to go on the Southeast Bench. But the BLM, who studied the environment, said no, the route the Company wants is actually better and has fewer impacts to the environment than the route that Tooele is now suggesting that you adopt.

Brandon went through and described all the efforts the Company went through to try and gain consensus. How we had meeting, after meeting, after meeting. And this was not something that the Company simply was going to force through no matter what the

citizens wanted.

And again, he described all of the efforts the Company went through, all the permitting. And importantly, he told you that the Company would be unable to repeat that process in time to get this system operational by 2013 if the Company had to go somewhere else.

So with all those impacts, and all the FAA, and wetlands, and other permits the Company would have to go through it would not be able to have this system operational by 2013. If this Board believes Mr. Gerrard's uncontroverted testimony that the system needs to be operational by 2013, then that alone should dictate the outcome of this case.

In my opening statement I reminded the Board that there was also testimony from the BLM in the form of the Final Environmental Impact Statement. And that that testimony was also critical. But what has it told you? It told you that the BLM analyzed not one but 14 routes. Routes on Federal land and private land.

It solicited, received, and considered public input. It considered impacts to the watershed, to the environment, to the viewshed, to wildlife, to cultural impacts, to impacts to human life. All of the things

that the concerned citizens told you that they were worried about are things that, as you read that in your deliberations, you'll see the BLM addressed.

And it considered claims about EMF, impacts to pacemakers, all of these things it addressed. It told you it spent three years independently evaluating this project. And it did so not based on what the Applicant said was desirable, but at what it independently concluded was the most reasonable, feasible, and practical.

Most importantly it told you that, notwithstanding the Parade of Horribles that Tooele claims would follow this project, this project is actually the preferred alignment that would have the least impacts on all environments, including human environment.

In summary, the engineers from Rocky Mountain Power have given this Board uncontradicted testimony that its route provides the best system from an engineering standpoint. It provides the best reliability. The best efficiency.

The BLM has given this Board uncontradicted testimony that that route would be the best for the environment. It would have the fewest environmental impacts. This testimony is uncontroverted.

Now let's compare that to the evidence adduced by Tooele. As the Board knows, there was none. Tooele could have called an engineer to try and argue that Mr. Gerrard's analysis for the need of the system was wrong, or that line separation is not important, but they didn't.

They could have called an engineer to tell you that Brandon's analysis of obstacles of building the Northern route was wrong, but they didn't. They could have put a witness on to tell you that we don't need the system by 2013, but they didn't.

But why? I'll suggest to the Board it's because Tooele can't meaningfully argue that this system isn't needed, or that these obstacles don't exist, or that the Northern route isn't inferior.

Furthermore, to do so would have required Tooele to officially pick a route. You will notice at no time in these proceedings has Tooele ever put a line on the map and said, We condition the C.U.P. on you building -- on the Company building their line here.

You would think that if Tooele really thought their watersheds and wildlife would be decimated by this proposed route they would have done so. What this suggests is that Tooele County is actually not

concerned so much with engineering as they are politics.

And when I say that I don't mean to be speaking in a derogatory fashion. I recognize that as elected officials they didn't go looking for this project, this project came to them. And I recognize they had hundreds of very vocal, angry citizens telling them that they could not accept this route.

I understand the dilemma that that put the elected officials in. So I understand from the point of view why they would want to punt this decision and not pick a route. There's a saying among litigators that the Supreme Court is not last because they're right, they're right because they're last. What that means is The Buck Stops There. And that's the view I have of this Board now.

Tooele County's political body had the opportunity to push off to this Board this very tough decision. But this Board now does not have that luxury. It has to make the decision. It has to. It has to ask itself what evidence it has heard to support the decision that Tooele wants it to make.

The evidence put on by Mr. Smith is that in fact the Northern routes would impact 10 times more residences. Mr. Gerrard told you it would be

60 percent less efficient. We heard that the cost, depending on where you put the line, would be between 40 to 60 million dollars more, for an inferior route that has greater environmental impacts and impacts on more residents.

The Board has also heard public comment. The Board saw there's a lot of emotion. But what facts did the Board hear from the residents that contradict what the Company's engineers said? What facts did the Board hear that would call into question the independence of the BLM's EIS? And I would indicate none.

So now in this situation what is the Board to do? There are a few statutes. I'm gonna have written copies provided to the Board as well, and I'll have them on the projector.

The, the Board has a very difficult decision to make. I'd like to look and -- look at just a few of the statutes applicable to this Board. By the way, I hope the Board will all take the time to read the Facility Review Board Act.

It's only a few pages. And notwithstanding the fact that there are mis -- you know, mistyped citations therein, I think it does make clear the overall purpose of this Board. And the purpose of

this Board is to not allow a decision by a local government, for a local benefit, to impact the greater good of the State or the system as a whole.

Let's look at the options this statute gives us. This Section 54-14-201 says that:

> "A local government may require or condition the construction of a facility in any manner if:
>
> "Number 1, the requirements or conditions do not impair the ability of the public utility to provide safe, reliable, and adequate service to its customers."

Now that's very important, because what it tells you right here is Tooele can only come forward to this Board and tell this Board it wants the Utility to do something differently if the local government can first prove that what it wants the Utility to do does not impair reliability.

Now, we have had uncontroverted testimony, by two engineers, telling this Board that building any of the Northern routes are going to impair severely the reliability of the system. To the point that Mr. Gerrard said that he cannot recommend that the Company even build the system.

The statute says right there that this Board can only entertain a local government changing a utility's facility if, first, they can prove that their requirements or conditions don't impair reliability.

What evidence has been put on by Tooele that the Northern route that they want to condition the Power Company on will not impair reliability? There has been none.

By the way, one of the questions brought up was cost. As you can see, the statute goes on to say that the local government, if it doesn't change reliability, can go ahead and make the system cost more. But if they do, either they have to pay for it themselves or it's gonna go to the public utility. And we see down here, if it goes to the public utility, it goes to the ratepayers.

And that's really what Tooele is betting on. They're saying, Look, give them the Northern route. It's gonna cost 40 to 60 million dollars more. We don't have the money to pay for that. Put that on the ratepayers.

The Board needs to ask itself, What benefit will a small business in Cedar City, or a family in Tremonton, or someone else across the State, what

benefit would they gain from this system the way Tooele wants it to be?

We already know it's a less reliable system. We know it's a less efficient system. We know that there's gonna be more power dissipated. What benefit will they get? Absolutely none. If you read the Act it is very clear that if the only benefit is local, that the cost cannot be passed on to the ratepayers. It has to be borne by the local government.

Tooele has already told you in their papers that they can't pay for this. They have no intention of paying for this. The Act goes on to state that in that case, if the local government won't pay, that their conditions are waived.

Let's talk quickly about your requirement. This Board must issue a written decision. We've talked about the fact that it has all the way until June 21st to do so. Which is not a lot of time.

One of the things that the Board must do in this written decision is, if the Board determines that a facility that a local government has been prohibited should be constructed -- so in other words if you just say, Okay, we need this project. Let's forget about the fact of where it goes, but we need this. We need Mona to Oquirrh.

Once you make that determination this Board shall -- so it's not optional -- shall issue a written decision that must specify any general parameters required to provide safe, reliable, adequate, and efficient service to the customers of the public utility.

Now, what that means is basically that the decision is going to almost have to engineer or to guarantee reliability, safety, efficiency, so on, and so forth. The decision must, it shall, it's mandatory, it's affirmative language, specify those parameters required to provide all those things.

The Board has heard testimony from engineers saying, If you send this up north, it won't work. If you send it through Silcox, it won't work. If you send it through these other places, it won't work. On what evidence or testimony would the Board be able to issue a decision that puts in all the parameters that would be necessary to ensure safety, reliability, adequacy, and efficiency, and reliability for the ratepayers across the State?

There is none. There has been no such evidence put forward. The only evidence put on to this Board has been that of the engineers of the Company, stating that their route is the only route

that will provide all of those things.

By the way, Subsection 5 is also important because it specifies that what gets left to the local government are those issues that don't affect safe, reliable, adequate, or efficient service. So again, it's not like they can't do anything, or they can't impact reliability.

CHAIRMAN BOYER: You've got a couple of minutes total, so if you want to reserve some you better wind her up.

MR. MOSCON: I'll end with this slide right here, and then I'll reserve my one minute. If the Board decides that a facility should be built it shall order the local government to issue the permit. The Board should not hesitate to require Tooele to issue the permit.

It's not equivocal. It's something that the Board must and should do. Thank you for your time, and I'll reserve my last minute, or half, or two minutes. Thank you.

CHAIRMAN BOYER: Thank you, Mr. Moscon.

Mr. Hogan?

MR. HOGAN: Thank you, Chairman. I, I, like Mr. Moscon and Rocky Mountain Power, Tooele County, through me and on behalf of all of its residents,

appreciate the time you're taking to consider this issue and to study it out. It's greatly appreciated.

There are several things that Tooele County agrees with Rocky Mountain Power about. And I'm gonna talk about those right at the front so we don't waste any time in deliberations considering those issues.

Tooele County agrees that there's a need for the project. Tooele County agrees that the corridor should be in Tooele County. Tooele County agrees that the number of customers in the critical need area, as defined by Rocky Mountain Power, has increased. And that Tooele is part of that critical need area.

Tooele County also agrees that Rocky Mountain Power's customers within that area are consuming more and more power. We absolutely agree that we need more power. We love it. We love our air conditioners in the summer. We love our computers. We love all of our special electronic devices.

We love all of those things. And we want, we want them to work. We want them to -- we don't want brownouts. We want things to work reliably and efficiently. And we want to pay very little for our electrical bill. We agree on all those things.

The dispute in this matter relies entirely with how to get the -- how to get more power to the

people who need it. How does Rocky Mountain Power solve this problem? What exactly is Tooele County's role in determining the placement of this line?

Let's take a closer look to see what Rocky Mountain Power has done to solve this problem, and what actions have been taken by Tooele County. You heard Mr. Gerrard talk about high-level planning that's been done to address the complete architectural needs of the delivery system for all Rocky Mountain Power's customers.

In this case the focus is on getting more power to the critical load area. And getting from a remote location, which is Mona. The Board heard testimony from Mr. Gerrard about triangles. And the Board clearly understands that he likes his triangles better than my triangles. Okay?

Mr. Gerrard testified that the Mona-to-Oquirrh line is a critical part of a 500-kV triangle that's needed for the Company for all of its customers. The Mona-to-Oquirrh line is just one side of the 500-kV triangle that's needed to provide safe, adequate, reliable, and efficient power delivery.

Although, interestingly, Mr. Gerrard testified -- and I'm sure this Board noted -- that the particular triangle that he's drawn isn't really a

triangle at all. It's an almost-500-kV triangle. In fact, it's really close to being a 500-kV triangle, but just not quite.

And he, and he doesn't like the suggestion that we should make it more like a 500-kV triangle. And although he testified that's what they need, that's not what they intend to build. Rocky Mountain Power has actually proposed building the almost-500-kV triangle, and then having a local 345-kV triangle. And the 345-kV triangle isn't really a triangle either.

I mean, I put a proposal on the, on the slide that showed you how you could do one, but that's not what's been applied for right now. All they've applied for is one leg of that line.

And in fact I specifically asked Mr. Gerrard about the long-term plans. He had a slide. The very first, the very first label on his slide said "Long-Term, greater than ten years." I pointed out the fact that the Terminal line did not exist on that slide. Why is that? Was that a mistake? Do I not understand your slide? What's going on?

He said, No, it's not a mistake. It's not in, it's not in the long-term plan.

Well, if they need the triangle I would think

it's in the long-term plan. They're asking us to plan. They're asking for the most controversial segment of that triangle first. And then, if we need it, sometime beyond their long-term plan, we'll complete the triangle.

Does that make sense? Tooele County lacks the ability to shift that paradigm with the Company. That's part of the reason we're here.

If the Limber-to-Terminal line is not going to be built within, within what Rocky Mountain Power has defined as its long-term plan, which is greater than ten years, the problem of co-locating transmission lines along the I-80 Corridor does not exist. There's not a co-location problem.

We're not even talking about minimum separation of lines at this point because we don't really have the 345-kV triangle in play. The only thing that Rocky Mountain Power has testified that they plan to build in their short-term or long-term plan is the almost-500-kV triangle and the partial, the partial 345-kV triangle.

If you remember, when I -- there was some controversy, it didn't make Mr. Gerrard very happy when I tried to make my triangle on the slide. If you remember, if you remember that triangle and that route

that we've talked about?

If that substation were moved to where the No. 3 was and we shortened the 345-kV line? I'm telling this Board right now on the record, right now as of today, the County would issue a permit for that plan. But that's not what's been asked for.

Rocky Mountain Power knew almost a year ago that the Southeast Bench route would be very controversial. In fact, you heard testimony on this from their own consultant yesterday, Mr. Lee Brown. He testified that he told his client that they were gonna get substantial push back on this route.

Rocky Mountain Power has always known it's the most controversial route, but they pressed forward with what I can only describe as supreme confidence in their engineering and design.

You heard testimony from Mr. Smith, who stated that Rocky Mountain Power attended many meetings. And I don't dispute that. He said he attended meetings to try to resolve siting concerns for this project.

And he indicated that Rocky Mountain Power reviewed numerous suggested alternatives. However -- and this is very important -- Mr. Smith stated that Rocky Mountain Power was very confident that they were

correct on this route.

I'm telling you, that confidence came through in every one of those meetings. How much change do you think is really possible, regardless of the number of conflict resolution meetings that are held, if Rocky Mountain Power has supreme confidence that the route they've chosen is the best? I'm telling you there's very little change that's gonna happen.

That's why this Board heard testimony from Mayor Dunlavy, Councilman Wardle, Brad Pratt, and others that each, each of them individually perceived very early on that there would be no, no change whatsoever in terms of route by Rocky Mountain Power.

I want to be, I want to be clear on, on this point as well. I do believe that they came to those meetings and they wanted to talk. I believe that they engaged in discussions about the suggestions that were put forward. I believe they actually went back and did additional engineering on certain suggestions.

I believe they did all that. But they were very confident that they were right. And I, I hinted at this -- and Matt picked up on this earlier -- I hinted that there was maybe some, some gaming going on. That's exactly what the people of Tooele County feel like.

They feel like that they, they pacified residents and their concerns by acting like they were being reviewed, knowing full well that it wasn't as good as what they've already thought of. They were not gonna take constructive criticism on the plan. On what Mr. Gerrard had decided was correct.

And the County does not employ any electrical transmission engineers. We have none. It's not what we do. We review the Conditional Use Permit. That doesn't generally require, in any other situation, that we have those type of expertise. We lack those.

We acknowledge that in our pleadings. We acknowledge that we lack the expertise to site this route. We can make suggestions. We did that to the point that we probably bothered them greatly with our suggestions. But we're not capable of following through on those and doing what it is they would like us to do.

Ultimately, Rocky Mountain Power moved forward and applied for the Conditional Use Permit for the Southeast Bench route. This required the public be given notice of the route applied for, and a public hearing be held on the C.U.P.

It's during this stage of the proceedings that Rocky Mountain Power is critical of the action

taken by Tooele County. More specifically, the lack of action taken by Tooele County. Particularly our Planning and Zoning Commission. Rocky Mountain Power contends that the Tooele County Planning and Zoning Commission, if unwilling to approve the Southeast Bench route that was applied for, should have approved an alternative route.

The County Planning and Zoning Commission did not have unbridled discretion in its consideration of the C.U.P. The Planning and Zoning Commission could approve the permit as requested, they can approve it with conditions, or they can deny it.

Rocky Mountain Power would have this Board believe that the Planning and Zoning Commission could have approved an entirely different alternate route if it chose to do so. They could not. The Planning and Zoning Commission could require minor alterations to the route. The types of alterations that the Company has been willing to make in certain instances, and in fact in many instances.

But the Planning Commission recognized that the approval of alternate routes was completely beyond its authority. Anything beyond a minor alteration, one or two poles here and there, would create notice and due process issues for property owners that would

be impacted by the approval of, of an, a route that was anything but the Southeast Bench route.

Imagine the outrage of property owners who find out simultaneously that a transmission line is gonna be on their property, and the County has already issued the permit. Legally this could not be done. Approval of an alternate route that the public had not been given notice of and the public had not been given an opportunity to address in a public hearing would have violated the due process rights of every citizen impacted by that route.

This argument is really an attempt to shift the siting burden from Rocky Mountain Power to Tooele County. Our role in this process is to review the C.U.P., it's not to site their route.

Rocky Mountain Power has now attempted to bolster the selection of the Southeast Bench route with the BLM's FEIS by claiming that it is, in fact, an independent review by skilled environmental professionals who have selected the Southeast Bench route as the preferred route for the project.

This Board has received testimony from Rocky Mountain Power, both Mr. Gerrard and Mr. Smith, that should cause the Board to completely discount any notion that the FEIS is an independent validation of

the Southeast Bench route. It is not.

Rocky Mountain Power, through Mr. Gerrard and Mr. Smith, testified that they provided the BLM with all the technical requirements of the project. The scope and purpose of the project. Those technical aspects were provided by the Company to the BLM.

The BLM does not have electrical transmission engineers that work for it. They accept, face value, the technical requirements of the project as provided by Mr. Gerrard. You heard him say that. And he determined, he determined the scope and purpose of the project.

He determined that it would be the belt-and-suspenders approach that I referred to before. That minimum separation wasn't good enough. That in certain instances that they were going to achieve maximum separation, maximum protection, maximum risk aversion.

I asked him and he answered that this system is not foolproof. It's not designed to prevent power outages anytime, anywhere, under any condition. Failure is a part of the system. Deciding how much failure is worth the risk of failure, and deciding how much risk we're gonna tolerate is within Mr. Gerrard's purview.

There are, there are codes, and they've cited them, he's presented them today, that help guide company decisions in this respect. But he testified that it's up to him to figure out how to meet those guidelines. And that's what he's done. And he has not budged. He's not wavered one bit.

It was interesting when this Commission asked Mr. Gerrard about other lines that were co-located in other locations. Do you recall his answer on that? On why the Company did that in other locations, on other projects, but was unwilling to do it here? His response was, I wasn't with the Company then.

If Mr. Gerrard has a different standard and a different way to meet criteria than his predecessor, it seems like that's a moving target. What will the standard be when Mr. Gerrard is no longer with the Company? Would Tooele County's request be approved if it was someone other than Mr. Gerrard in his position?

For this project Rocky Mountain Power determined that they would, they would achieve maximum risk aversion on the co-location issue and on common-cause outages. Rocky Mountain Power provided all the specs for the project, and then the BLM prepared the EIS.

I don't fault the BLM for what they did.

They were given, they were given certain criteria, and they analyzed it based upon that criteria. They were not allowed to change the paradigm. And important to note in this respect, they weren't asked to compare the Southeast Bench to the I-80 Corridor. There was no comparison back and forth between the two.

They were asked for both. The Company asked for both, and they looked at routes for both, with the presumption being that both routes were going to be utilized at some point in time. And they found that, yeah, there is a way to go by the I-80 Corridor. That EIS points out that you can use the I-80 Corridor.

As I said in my opening statement, an EIS is not the multi-million-dollar document that tells the project proponent the project cannot be built. An EIS is the multi-million-dollar document that tells the project proponent what's gonna be required to get it built the way you want it.

That's what we got in this EIS. We've got the instructions on how to build this project the way Rocky Mountain Power wants to build it.

I think there are many people involved in this issue that don't have a completely good understanding of elect -- electrical transmission system engineering. Certainly not to the level that

Mr. Gerrard does. So I'm gonna talk about this in terms that I understand, and I think that most of the people in my county understand.

I'm gonna talk about this, I'm gonna use a sports analogy. If you'll bear with me on this. I want to be Greg Miller today, and I want to own the Jazz. And I was at the last -- I was at that last playoff game, and I think we've got some needs.

There's somebody that I want to sign. I'm looking for a free agent for next year. And I'm gonna talk to Kevin O'Connor right here and I'm gonna give him the criteria. He's like the BLM. I'm like Rocky Mountain Power. I'm gonna give him the criteria of the guy that I'm looking for that I think is gonna make my team better. And I'm gonna, I'm gonna win. I'm gonna get a championship.

I want, I want Kevin, I want you to go find a free agent that's gonna be a free agent this next year. So there's one constraint, his contract's gotta be up. I need somebody that's a free agent. I want him to be six-foot-eight. I want him to be 250 pounds. I want him to be able to play any position on the floor. I want him to be incredibly athletic. In fact, I want him to have the nickname "The King," okay?

And I'll go further. In fact, I want his first name to be LeBron. I don't care what his last name is. Surprise me. Go out Kevin, see what you can find. You take that criteria I've given you, and we're gonna meet back in a week and I want you to give me a list of every possible free agent that meets that description that I've just given you.

Who's he gonna come back with? That meets all that criteria? There's one person. It's LeBron James. I know that when I give him the criteria. I'm not implying that there's gaming going on here with the, with the EIS, I'm flat out stating it. I believe that.

Under the criteria, with the constraints provided by Mr. Gerrard, there is no other route that works. It's as simple as that. And if this Board accepts the paradigm that he's presented that that is the best way to go, and that is the appropriate way to go, you're gonna order Tooele County to build the Southeast Bench route.

Tooele County completely lacks the financial resources and ability to compete, expert to expert, with Rocky Mountain Power. We can't do that. I don't believe the statute contemplates that we have an obligation to do that. This statute covers any local

entity, from as large as Salt Lake County down to as small as Ophir, Utah, if a permit were to be required.

I don't think this Board would expect Ophir, or Vernon, or Daggett County -- and in this case I'm saying Tooele County, we're somewhere in that continuum -- to be able to come here and go toe to toe, expert for expert, punch for punch, and jab for jab with Rocky Mountain Power on this issue.

We lack that ability. We're not gonna convince them to change their paradigm. We could not change the criteria they gave the BLM. And now they're wanting to use the BLM's documents to say that, See, we're right. Is that fair? Do you, do you think that's, do you think that's a good system?

Let me, let me use a math analogy to make sure I'm completely, completely clear, because there may be some people that don't follow my LeBron analogy.

If the BLM was given a math equation, 5 plus X equals 10, now go solve for X. Tell us what the route is. There's no opportunity for them to say, Well, how about 2X? How about .5X? It's 5 plus X equals 10.

If they give them the criteria, if, if the Power Company controls the parameters and the

criteria, they can dictate the outcome. The only answer to that equation is 5. There is no other answer that the BLM can come up with.

And they're gonna tell them how to build the route in location 5, and what they're gonna need to do to mitigate the impacts. That's what they'll do. And I believe they did a good job with that. I don't fault them.

If we change that formula, which we've been unable to do, there is a different outcome. I'm gonna, for the purpose of argument and for the sake of argument -- which is exactly what I'm doing, I'm trying to convince this Board -- I, I want to change, I want to change some of the criteria.

Let's compare the Southeast Bench to I-80. Steepness of terrain. You'd have to put a checkmark under the Southeast Bench for that. Elevation, difficulties associated with elevation. Southeast Bench is more difficult in that area.

Difficult construction of access roads. Impact to wildlife and vegetation because of access roads. I would think that there are higher impacts with the, with the Southeast Bench route on that one.

More wildlife, more vegetation, more people, more viewshed, more recreation. The ones I just

listed, the, the final EIS actually outlines all of those as having long-term significant impacts for the Southeast Bench route. Those same things are not noted about the I-80 Corridor when they analyze the Limber-to-Terminal route.

That's evidence this Board has before it. That's not controverted. The cultural significance of the route, aesthetic impact, fire hazard. This Board has evidence from local, local fire -- assistant fire chief. I believe your, your Board has a member that has extensive firefighting experience.

Although Mr. Smith was unwilling to say where he thought it would be more difficult to fight a fire, I think this Board has a good idea where it's more difficult. Where, where's the fuel at? Where's the wildfire gonna actually go? Where do we have historic wildfires every year? Not along I-80.

The only factor that I can come up with that actually, when you compare the two routes -- which I remind you again, the EIS did not compare Southeast Bench versus I-80. It compared them independently and came up with a good route for both.

The only factor that weighs in favor of the Southeast Bench is construction cost. That's it. The criteria this Board is supposed to look at is not cost

only. There are the four factors that Rocky Mountain's talked about.

And I'll reference another statute, that Rocky Mountain Power did in talking about their duty and purpose. And that is Rocky Mountain Power has a duty -- an affirmative duty to furnish, provide, and maintain services, instrumentalities, equipment, and facilities as will promote the safety, health, comfort, and convenience of its patrons, employees, and the public, and as will be in all respects adequate, efficient, just, and reasonable.

Thinking about the criteria that I've just laid out, thinking about what you've heard from the public about the Southeast Bench route and their opposition to it, what is just and reasonable about forcing the Southeast Bench route on Tooele when compared to the I-80 route?

What is just and reasonable about that? And it isn't simply just about local benefit. That's like saying that Zions Canyon only has local benefit to the people that live in Southern Utah.

To say that Middle Canyon and the benefits of Middle Canyon and Quarter Canyon only accrue to Tooele City and its residents is no different than saying that all of the other great canyons in this State have

no benefit other than to the closest municipality located to that, to that particular feature.

That's not, that's not accurate. There are benefits that accrue to all the ratepayers. All the ratepayers with Rocky Mountain Power.

I had a statistics class at the University of Utah. I don't remember anything about the formulas I was taught in that class, but I remember something that the instructor said day one when it comes to looking at data, when it comes to looking at numbers, and in particular when it comes to looking at costs and statistics. Which Rocky Mountain Power has presented a lot of those.

This instructor -- and I'm gonna apologize if anyone thinks this is crude. I'm gonna apologize in advance, but I think it's important. She said statistics are like a bikini. Stats and numbers are like a bikini because what they reveal is very interesting, but it's what they conceal that's essential.

That's what I'm arguing now today. The numbers have been skewed. I don't believe intentionally. I really believe Rocky Mountain Power is trying to get the lowest-cost route. But from a public policy standpoint this Board is the arbiter of

routes that are in dispute.

If you allow them to come in with the lowest-cost route, all of the other factors be dammed, you're never gonna see a route built in this State other than the lowest-cost route. Local jurisdictions do not have the money.

Let's talk about cost. The statute is very clear. And there's a reason while Tooele County didn't draw a line. There's a reason why Grantsville didn't intervene. There's a reason why Tooele City hasn't intervened in this process. They're petrified of the cost factor.

Had we, had we early on approved a route different than what the Company had asked for, this Board would be absolutely proper in, in coming back to the County and saying, You're responsible for the excess cost. You've required this.

That's why we haven't drawn a route and required it. We've suggested it till we're blue in the face, hoping that they would see the merits and the benefits of our suggestions. But the Company is absolutely right, we didn't do it because we don't have the money. We're not gonna have the money. We wished we did. We wished we did.

If we had the money, if Mr. Brad Pratt, who

was identified initially at the hearing last night as Mr., as Mr. Brad Pitt, if he was in fact Brad Pitt I'm sure that he would have, he would have offered to buy Rocky Mountain Power a right-of-way in Skull Valley. He'd pay for it himself. Tweak the numbers such that the Company could not, could not walk away from that route.

He's not Brad, he's not Brad Pitt. He's Brad Pratt. All of Tooele County, we wish we had the money to do that. We don't. We're asking this Board to look at all of the criteria, to balance it in a way that they think is just and appropriate, and to make a decision.

And we thank you for your time and your consideration. And we, and we appreciate the effort you'll put into this decision. Thank you.

CHAIRMAN BOYER: Thank you, Mr. Hogan.

Mr. Moscon?

MR. MOSCON: What I've handed, what I've handed the Board is the list of conditions that the Tooele County Planner recommended to the Planning Commission be adopted to go along with the Conditional Use Permit. It is those standards that you've been told Rocky Mountain Power said, We voluntarily agree we will abide by those conditions.

You've been told you have to issue an order protecting Tooele and protecting the reliability of this system. What evidence have you been given? Issue an order granting Rocky Mountain Power the corridor it has asked for.

And put in the order that, not voluntarily, but it will be mandatory that they follow those conditions. Not that they came up with, but that Tooele County's own planner came up with. And that will satisfy the obligations of the Board on both sides of the line.

In essence what the Board has just been told is, We haven't hired an expert. We haven't hired an engineer. We don't know as much as Mr. Gerrard knows. We don't know as much as Mr. Smith knows. But the fact that they still think they're right today and they didn't compromise and accept our line makes us suspicious of them, because they didn't change their mind after we talked to them.

I know that as attorneys neither Doug or I understand -- or at least I didn't before I got involved in this -- that a double-circuit 345 has equivalent output as a single-circuit 500. So he might ask questions to Darrell, not realizing that there's a reason behind this design.

And even though Darrell doesn't back off of that design doesn't just mean Darrell's stubborn, it might mean Darrell's right. And we don't understand it. And they admit they don't understand it. And they admit they don't have any evidence to the contrary.

Tooele County just read you a statute and said Rocky Mountain Power has all these obligations, the bottom line of which was to be reasonable. Is it reasonable for Rocky Mountain Power to pay, or have its ratepayers pay, 40 to 60 million dollars for a route that every engineer, and the BLM, and everyone else that's analyzed this route says would be inferior, to the extent Mr. Gerrard says it wouldn't even work?

Is that reasonable? Of course it's not. The standard he's given you is right. Do what is reasonable. What is reasonable is to have Tooele recognize it has grown. It is a population center now. And as such, it has to understand and have the impacts the other population centers in the State have had.

It can't go on in life without being able to see a transmission line. And we recognize that is an impact. We've done it in a way that is gonna provide

the least impacts. The BLM backs us up and supports that.

And even though some in Tooele are suspicious and skeptical of that, again, there's been no evidence put on by anyone that says that they're wrong. That says how there's more impact anywhere else. It's simply been, We don't understand the numbers and they're not changing their mind, therefore we're suspicious of them.

But that is not enough evidence to give this Board -- for this Board to rule otherwise. My client can't get it either way. You just heard a complaint that we went to all these meetings and we wouldn't change our mind. We stuck with our plan. And we're trying to shift the burden to them for them to pick the route. We're getting in trouble either way, for asking them to pick the route or for sticking to our guns.

Going back to the Jazz analogy, and the pick, and the, you know, we want LeBron and that's all. That would have meant something if my client had not gone to those meetings and said, Fine, we'll give you the Railroad route, we'll give you the Army Depot route. And they got shot down. Nope, not gonna give you that route. Nope, not gonna give you that route.

So if my client has to fight for a route -- it doesn't want to. But if it has to, what route is it gonna fight for? The route that it knows is best. If it could avoid being here, it would do so. It doesn't want to be in this situation.

But it's been forced. And if it has to fight it needs to ask you to give it the route that is best for all ratepayers across the State, including the ratepayers in Tooele County. Thank you very much for your time.

CHAIRMAN BOYER: Thank you, Mr. Moscon.

And may I compliment all counsel here for the professional manner in which you've conducted yourself.

We appreciate the participation of members from the public. We hope that the public hearing last evening was appreciated. It was certainly useful for us.

We will now conclude this hearing. And we will issue our order by June 21st, if not sooner. We will work with all dispatch on it. Thank you all very much.

(The hearing was concluded at 2:48 p.m.)

C E R T I F I C A T E

STATE OF UTAH)
) ss.
COUNTY OF SALT LAKE)

This is to certify that the foregoing proceedings were taken before me, KELLY L. WILBURN, a Certified Shorthand Reporter and Registered Professional Reporter in and for the State of Utah.

That the proceedings were reported by me in stenotype and thereafter caused by me to be transcribed into typewriting. And that a full, true, and correct transcription of said proceedings so taken and transcribed is set forth in the foregoing pages, numbered 208 through 391, inclusive.

I further certify that I am not of kin or otherwise associated with any of the parties to said cause of action, and that I am not interested in the event thereof.

SIGNED ON THIS 17th DAY OF May, 2010.

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Kelly L. Wilburn, CSR, RPR
Utah CSR No. 109582-7801

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