BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF COLORADO

****

DOCKET NO. 25A-0044EG

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REPORTER'S TRANSCRIPT

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IN THE MATTER OF THE APPLICATION OF PUBLIC SERVICE COMPANY OF COLORADO FOR APPROVAL OF THE MOUNTAIN ENERGY PROJECT AND ASSOCIATED CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR SUPPLEMENTAL SUPPLY.

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Pursuant to notice to all parties of interest, the above entitled matter came on for Day 2 of a remote evidentiary hearing before **HEARING COMMISSIONER MEGAN GILMAN** commencing at 2:00 p.m. on Wednesday, August 13, 2025, said proceedings having been reported in shorthand by Tracy Boulais.

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Wednesday Afternoon Session

PROCEEDINGS

COMMISSIONER GILMAN: We are back on the record. I should give a proceeding number just to make things more official. We are back on the record in Proceeding 25A-0044EG, Public Service of Colorado's Mountain Energy Project filing.

So, Ms. Simard-Pacheco, Ms. Brama, unless you have any issues, I think our order of operations today would be me questioning the Company witnesses. It looks like, technologically speaking, we have mostly figured that out. And then we will not start any other witnesses until tomorrow morning.

So any other issues or concerns?

MS. SIMARD-PACHECO: No, I don't think so, Commissioner. I think, as we indicated yesterday, it would be helpful if we had a brief break after you are done with your questioning to coordinate redirect.

And we do have all our witnesses here. I would ask them all to come on camera, if they could. And then I didn't know how you wanted to handle preliminaries with Mr. Thompson and Mr. Mann given that they, first, haven't been sworn in as part of the hearing. And I didn't know if you wanted me to

walk through the things I would normally walk through or just swear them in.

So just a couple of items for your consideration.

COMMISSIONER GILMAN: Why don't we do like the brief preliminaries with them. And I think it is fine for everyone else to be on screen during that. No real issue. And then you all will be sworn in simultaneously as we move forward. So if that works, I think that's what we will do.

So I think Jordan Mann would be first and then Tanner Thompson, if that works, Ms. Pacheco.

MS. SIMARD-PACHECO: That's fine.

COMMISSIONER GILMAN: Excellent.

Mr. Mann, can you please raise your right hand?

JORDAN MANN,

having been first duly sworn, was examined and testified under oath as follows:

COMMISSIONER GILMAN: And are you alone as you testify today?

WITNESS MANN: I am.

COMMISSIONER GILMAN: And if that changes or if anyone communicates with you during your testimony, can you please stop and let me know?

WITNESS MANN: I will.

COMMISSIONER GILMAN: Excellent. Go ahead, Ms. Pacheco with Mr. Mann.

DIRECT EXAMINATION

BY MS. SIMARD-PACHECO:

Q. Good afternoon, Mr. Mann. Can you please state and spell your name for the record?

A. Yep. My name is Jordan Mann, J-O-R-D-A-N, M-A-N-N.

Q. And by whom are you employed and in what capacity?

A. I am employed by Apex Analytics as a project director.

Q. And could you please briefly summarize your background and experience?

A. Yep. I have an undergraduate degree in mechanical engineering and a master's degree in building systems engineering. I've been working in the energy efficiency and beneficial electrification space for 15 years now. And I've worked on a number of potential studies, both as a lead and as a technical lead.

Q. Thank you. During the course of this matter, did you submit Hearing Exhibit 115, your rebuttal testimony?

I'm sorry, I didn't hear you. If you

could say that again.

A. Yes.

Q. Thank you. I don't believe you have any corrections today to your testimony; is that correct?

A. That is correct.

MS. SIMARD-PACHECO: Okay, Commissioner Gilman, Mr. Mann is available for your questions, if you are ready.

COMMISSIONER GILMAN: Thank you so much. We will turn to Tanner Thompson.

Mr. Thompson, can you please raise your right hand?

TANNER THOMPSON,

having been first duly sworn, was examined and testified under oath as follows:

COMMISSIONER GILMAN: Are you alone as you testify today?

WITNESS THOMPSON: Yes.

COMMISSIONER GILMAN: And if that changes or if anyone communicates with you in any way during your testimony, can you please stop and let me know?

WITNESS THOMPSON: I will.

COMMISSIONER GILMAN: Back to you, Ms. Pacheco.

MS. SIMARD-PACHECO: Thank you.

DIRECT EXAMINATION

BY MS. SIMARD-PACHECO:

Q. Good afternoon, Mr. Thompson. Could you please state and spell your name for the record?

A. Tanner Thompson, T-A-N-N-E-R, T-H-O-M-P-S-O-N.

Q. And by whom are you employed and in what capacity?

A. I'm employed by Xcel Energy Services. I'm a senior engineer in the distribution system planning and strategy group.

Q. During the course of this matter, did you submit Hearing Exhibit 104, your direct testimony and attachment; Hearing Exhibit 109, your supplemental direct testimony; as well as Hearing Exhibit 113, your rebuttal testimony?

A. I did, yes.

Q. I don't believe you have any corrections today to these pieces of testimony; is that correct?

A. That is correct.

MS. SIMARD-PACHECO: Likewise, Commissioner Gilman, Mr. Thompson is available for your questions.

COMMISSIONER GILMAN: Thank you. And I would just like to remind the rest of you who were

sworn in yesterday that you are still under oath as we testify here today.

JASON PEUQUET,

LAURA ROBERTS,

KERRY KLEMM,

GRACE JONES,

all having been previously duly sworn, were examined and testified under oath as follows:

COMMISSIONER GILMAN: So thank you for joining us again. And as I mentioned, we will plan on this being an abbreviated day. We will spend around two hours and then plan to reconvene tomorrow at 9:00 a.m., just to be clear.

So I've tried my best to organize my questions, but there's been a lot of different things going on, so apologies if they are out of order, but trying to keep them topically together.

And really appreciate you all's willingness to do this as a panel. I did find kind of significant overlap in certain areas represented in multiple people's testimonies. So this appeared to be the most expedient way to go about this. And hopefully, it plays out that way.

So thank you and appreciate Ms. Brama and Ms. Pacheco for helping to enable this work.

EXAMINATION

BY COMMISSIONER GILMAN:

First, I wanted to ask a few questions just about CBA, cost-benefit analysis, methodology and assumptions. So the first set of questions will be pretty CBA-related.

And I'm sure you all can decide amongst yourselves who should answer. And just to keep it expedient, you know, please only elaborate if it's necessary or we need it just so we can keep moving as we go.

So, your rebuttal testimony talks about the CBA handbook that was evaluated as part of the 2024 miscellaneous docket on gas planning. I'll refer to that miscellaneous docket a few times. Is anyone unclear on the miscellaneous docket that I'm referring to as we discuss it?

WITNESS JONES: No. I think it is clear, thank you.

COMMISSIONER GILMAN: No worries. So my first question is: The CBAs that were provided as part of the Mountain Energy file, I'm curious if you can elaborate for me on if those were done in accordance with the directives from that miscellaneous docket and the decision at the

conclusion of that process.

WITNESS JONES: Yeah, thanks for the question. So to our regard, yes, they were done in accordance with the recommendations in the miscellaneous docket to the best of our ability.

The most notable change that you will see in the CBA analyses conducted by the Company is the addition of the net salvage value, which is really the most notable change.

COMMISSIONER GILMAN: Okay. And then with regard to the inclusion of incentives from state, federal -- understanding that is a moving landscape -- and other utility incentives as Sierra Club is suggesting in this proceeding, that was directed to be included in that GIP M docket, correct?

WITNESS JONES: That is correct.

COMMISSIONER GILMAN: Okay. And to the Company's -- is the Company's representation that those were included and deducted off of the cost expectation for different technologies and NPA strategies?

WITNESS JONES: So within the CBA tool, the tool itself has the capability for state, federal, and other incentives. When we conducted the

CBA analyses, the assumption was that those were zero. And that was just based on the volatility of incentives at the time and the input from the potential study being that our customers would likely need to see 100 percent incentive from the utility in order to move forward with a change in type of technology.

So, yes and no. They are in there, but they are currently assumed as zero.

COMMISSIONER GILMAN: And does that even include other utility incentives? For example, like the Company's beneficial electrification and clean heat incentives that would be applicable to people in the NPA areas already?

WITNESS JONES: Good question. So there is a line item in the CBA for utility incentive. It doesn't disaggregate whether or not that funding is from the DSM/BE Plan, the Clean Heat Plan, or otherwise.

And I think that was intentional given that the cost recovery mechanism is at issue in this case. It wasn't clear whether or not that would be, you know, in addition to what was already funded or where the mechanism would come from. So it was just lumped into the utility incentive category.

COMMISSIONER GILMAN: Okay. So, in essence, what the Company counts in the NPA CBA -- this is torture for someone who doesn't know these acronyms -- but what the Company assumes they are for the incentive given for the purpose of NPA, is the bulk incentive from the utility even if a portion of that would have been given, anyway, under the Clean Heat Plan regardless of the NPA or not?

WITNESS JONES: That is correct.

COMMISSIONER GILMAN: Okay. Let me see. Like I said, I wished to be more organized, but here we are.

The GIP M docket also directed the Company to apply appropriate discounting to the equipment costs based on the average age of existing equipment to properly acknowledge that customers inevitably have a cost to change out their equipment even if they don't electrify even just to get new gas equipment.

So I wanted to confirm if you are understanding the Company had done that in the CBA that they run.

WITNESS JONES: Yeah. So I recall the miscellaneous docket decision recommending that we consider adding that kind of benefit for gas

appliance replacements, I think is what you are mentioning.

And at this point, the Company still stands by including those, but not quantifying those. And the main reason for that is that we do not have proper information on what customer appliances are. Therefore, that type of discount would really be a guess, at best.

The one thing that I will say, though, is within the CBA tool, if you note, there is a different line item for different measures. We have one line item for early replacement and another line item for replace on burnout. And we are offering the lesser incentive for if it's a replace on burnout appliance.

So not exactly the same intention, but did kind of attempt to reconcile that discrepancy.

COMMISSIONER GILMAN: Okay. But as you characterize participant costs -- like cost to participants to, say, electrify, do you assume any discount for the inevitability that their equipment will have to be replaced at some point in time, anyway?

WITNESS JONES: Yeah. So to clarify, I think you mean participant cost as in like equipment

cost paid out of the pocket from the participant?

COMMISSIONER GILMAN: Correct.

WITNESS JONES: That was not discounted, that is correct.

COMMISSIONER GILMAN: And did you understand that to be a directive from the GIP M docket?

WITNESS JONES: I understood it to be a recommendation from the M docket, but one that the Company still believes is pretty skeptical at this point given that our lack of understanding on each individual appliance.

COMMISSIONER GILMAN: Okay. And then just quickly as to the electric impact that the Company assumes in the projections for basically electric capacity, whether distribution, generation, transmission.

As I understand it, the Company is essentially taking the estimated gas load at peak, converting it into kilowatt hours from Btus, and then applying a COP of one assuming, essentially, electric resistance level efficiency. Is that accurate as to how that is happening?

WITNESS JONES: That is correct.

COMMISSIONER GILMAN: And is that

happening at essentially the extrapolated level of use at negative 39 degrees Farenheit for that equipment?

WITNESS JONES: Yes.

COMMISSIONER GILMAN: Okay. For the marginal electric distribution capacity costs, the GIP M docket directed the Company to estimate the winter peak hour demand, convert it to electricity by accounting for some diversity of equipment operating at the peak hour, electric resistance backup, heat pumps, as well as some load control ability.

And further indicated that the costs should also consider the location of the NPA, equipment, capacity, temperature impacts depending on whether the peak hour is in the summer or winter, and the timing of the load related to that as well as the timing of the expense.

So I didn't see any acknowledgement of these considerations in the CBA methodology, but I just wanted to check if any of those considerations were inputted into the CBA methodology.

WITNESS JONES: Yeah, so this topic is discussed briefly in my supplemental direct testimony, but maybe just to reiterate what was said in there.

So for the Eastern Mountain Gas System, we currently have a winter peaking system, at least on the distribution side of the house. And that winter peak occurs in the evening as opposed to the gas peak in the morning. But it's pretty close.

So for the purposes of the CBA, we assumed that the heating peak would be 100 percent coincidental with the existing peak for the purposes of analysis.

COMMISSIONER GILMAN: But for the electrical equipment capacity, do you assume that that happens in the summer even though the peak is in the winter given that electrical equipment tends to have a higher capacity at lower temperature range?

WITNESS JONES: I'm not sure that I understand the question. Could you maybe rephrase it or restate it for me one more time?

COMMISSIONER GILMAN: Sure. To the extent -- and I think this was covered in the GIP M docket. But to the extent that the ambient temperature could impact a transformer or other distribution system equipment, and that lower temperatures may advantage having higher capacity available on those, has the Company assumed some of that in their assumptions for the impact on, say,

distribution system peaks, especially considering that those distribution system peaks are projected to happen at cold temperatures, not hot temperatures?

WITNESS JONES: For the purpose of CBA analysis, no. You might want to follow up with Company witness Thompson if that was considered at all as he evaluated what electric distribution system infrastructure upgrades may be required to support the Mountain Energy Project.

WITNESS THOMPSON: So I can follow up with that, Grace.

The capacity of the feeders that we use would essentially be the summer peaking system. One thing I will say is there is several different variables with it, right? You have elevation that you have to account for. You have to account for wind speed, ambient temperature.

So there is a lot of inputs that account for that capacity. And it is one thing that we are looking into in terms of capacity -- the available capacity of the feeders in the winter months.

COMMISSIONER GILMAN: As it is currently done, you are using the kind of weather expectations of the summer even on the portion of the system that is winter peaking and for the addition of these loads

that are adding to a winter peak rather than a summer peak?

WITNESS THOMPSON: From my understanding, yes, that's correct.

COMMISSIONER GILMAN: Okay. In the CBA, curious on the avoided gas commodity cost if the Company grossed that up at all to account for lost and unaccounted for gas as was directed in the GIP M docket.

WITNESS JONES: So for this application, that wouldn't necessarily be appropriate because the avoided gas commodity was from the baseline gas infrastructure project, which was also a supplemental supply facility. And so since it's all localized in the area, there is really no line loss associated with transportation of that gas.

COMMISSIONER GILMAN: Okay. Then the GIP M docket also directed the Company to utilize the actual revenue requirement associated with the infrastructure project -- understandably, this is a slightly different animal given that the infrastructure project is also a supplemental supply -- in order to appropriately capture the actual expected cost of the project is expected to be borne by ratepayers. So I'm curious if the Company

has made any adjustments to their CBAs in that regard.

WITNESS JONES: So I think this was discussed in the miscellaneous docket, but it is the Company's position that we could either look at revenue or net salvage. And the Company took the direction of including the net salvage value in order to appropriately quantify what the actual capital investment would be of any electric infrastructure or gas infrastructure.

COMMISSIONER GILMAN: Okay. Related to indoor air pollutants, the M docket also directed the Company to try to quantify indoor air pollutant impacts where possible. And I was just curious for an update if the Company has attempted to do so or included in any information in the CBA in that regard.

WITNESS JONES: The Company still does not believe that there is really a justifiable or quantifiable measure or method in order to determine those indoor air pollutants. So they were included but not quantified.

I will also say that it's my opinion that those would pretty much be de minimis in the overall look of net present value at this scale.

COMMISSIONER GILMAN: Okay. So just to clarify in my mind, is it the Company's position that there are no indoor impacts or -- indoor air quality impacts, or that you don't have a quantifiable number to use to represent the indoor air quality impacts?

WITNESS JONES: Thank you for clarifying. It is the latter, the quantification method.

COMMISSIONER GILMAN: Okay. So as part of the settlement, you know, it seems to me that the Company appears to be expecting that the CBA will, at least to some degree, be relitigated in the 2025 Gas Infrastructure Plan that was filed in May; and that the Company is essentially planning to use that CBA framework, whatever comes out of the 2025 GIP, in the December 2028 Mountain Energy filing. I don't know if you followed all that, but if you can confirm that is the plan.

WITNESS JONES: Yes. But I would also clarify that that language was really added as a method to like clarify that whatever the most recent planning tools are, those should be the tools used in 2028. So it goes a little bit without saying that we are going to use our most updated methodology.

But we wanted to make sure that there was a specific point within the settlement order to

recognize the fact that a lot of our planning methodologies, including the CBA tool, may evolve. And one of the ways that it may evolve is as an output from the 2025 Gas Infrastructure Plan.

But also, the Company reevaluates these on an annual basis. So whatever the most recent up-to-date tool is that the Company is advocating for should be that that is used in the 2028 Interim Regulatory Filing.

COMMISSIONER GILMAN: Okay, got it. And then, you know, there was a lot of testimony here from many parties with regard to forecasting methodology, planning assumptions, design day methodology, temperature values.

And while the Company has some plans to, you know, test kind of minimally a few of those points in the 2028 filing, many of those things, you know, don't come to kind of a definitive resolution, I would say, with the Settlement Agreement.

So does the Company believe that the 2025 GIP is also a venue to be analyzing and litigating those issues, or do you see that happening elsewhere as an outcome of this proceeding?

WITNESS JONES: I would answer that two ways.

So first, I think that they are, you know, planning assumptions that were presented in the 2025 Gas Infrastructure Plan. So certainly, there is an opportunity to, you know, consider them within the constructs of litigation of that plan.

Also, I would say the same thing I said kind of about the CBA analysis, which is that as part of the annual design day planning, the Company is evaluating our -- all of our planning assumptions. So as we continue to evolve, which I think we expect to do, we will be using the most up-to-date assumptions regarding our planning in the 2028 Interim Regulatory Filing.

COMMISSIONER GILMAN: Okay. I wanted to move on to a slightly different area from CBA --

WITNESS JONES: Okay.

COMMISSIONER GILMAN: To some of the system hydraulics and the connection between portions of the system.

It may be helpful, Ms. Federico, to pull up Hearing Exhibit 102. GKJ-2 has a map that just might be helpful for us to look at. I was thinking of going to page 20, which has figure 4.6 -- 4-6, I guess.

(The electronic document was displayed.)

COMMISSIONER GILMAN: Maybe we can blow this up to kind of focus primarily on the green and pink area to really like understand the confluence of these areas hydraulically.

Thanks. I think that will work, but I thought it might be nice to have a graphic up.

So the first question is just in a broad sense, can you help me understand -- as I understand it, Leadville is kind of where we see that Y shape take place, right, in the orange. And then the one leg is blue.

And so to my understanding, that kind of delineates to the east is the Eastern Mountain, to the west is the Western Mountain, to the south is the Southern Mountain. And that is kind of the hub of the three meeting there.

Help me understand the hydraulic connection of the three and kind of the limitations in flow that moves regularly and in certain circumstances between those three areas.

WITNESS JONES: Would you prefer I start with design day conditions or the rest of the year? Because they are slightly different.

COMMISSIONER GILMAN: Go with normal, and then take me to design day, if you can.

WITNESS JONES: Okay, perfect. So you are correct. So the Western Mountain Gas System is the part from Rifle all the way over through that Y -- that orange y, right? And so that flows from left to right.

And what happens during normal operating conditions as well as design day conditions, for that matter, is a certain amount of the gas supply from the Western Mountain Gas System is fed down that lateral. I'm pointing at it, and I'm realizing you can't see it. But down the orange lateral.

So depending on the temperature, it will go the direction where the most demand is. So typically, during like very cold winters, it will flow up the blue lateral and then into the Eastern Mountain Gas System. If it is warmer, there is a potential that it also flows down into the Southern, but it kind of goes through that Y point.

The Southern System is pretty self-contained during the majority -- during the winter, but does flow up into the Eastern during normal operating conditions. So that's right outside of Durango, Colorado.

You can't see it on the screen right now, and I think that is fine. But it flows all the way

up to, again, that Leadville area. And if it's very cold, design day conditions, it will null right there. So there is not a whole lot of gas that comes from Southern to Eastern during design day conditions, but it can flow up into that area during other times of the year.

The -- pause me at any time if you have questions, too.

COMMISSIONER GILMAN: No, go ahead.

WITNESS JONES: Okay. So then Eastern is really going to be from that Marshall compressor station, which is on the right-hand side of the screen, obviously flowing down into the Y.

This one is a little bit more complicated because, as I discussed, during normal conditions, so kind of year-round, it can receive gas from the West. It could potentially receive gas from the South. But it also receives -- pretty much the primary amount of gas comes from the Northern System and the Denver System.

And that's because the Northern and Denver System is where we actually have the supply interconnections with our interstate pipelines. So the supply physically has to go through the North, through Denver, to Marshall in order to be able to be

transported down into the Eastern Mountain Gas System.

COMMISSIONER GILMAN: Okay. Help me understand, what do the colors of the pipes like more or less represent here?

WITNESS JONES: They represent different pipe sizes, but the size itself is confidential.

COMMISSIONER GILMAN: Okay, got it. Is blue bigger than orange, or orange is bigger than blue?

WITNESS JONES: That is a wonderful question that I actually do not recall off the top of my head.

COMMISSIONER GILMAN: Okay.

WITNESS JONES: Apologies for that.

COMMISSIONER GILMAN: Just curious. Trying to figure out -- do you know what the pink dotted represents there between, you know, roughly Meadow Mountain and Edwards?

WITNESS JONES: Could you scroll down? I think there might be a legend. If there is not. . . Over on the right. Maybe it's redacted. Let me look at my version. We should be looking at the same thing. It looks like it was gone. It was in a black box. Interesting.

COMMISSIONER GILMAN: Yeah, I don't think I've seen it. Different types than I've seen anywhere else. I'm trying to figure out what it is.

WITNESS JONES: I think it is a different pipe size. I'm not entirely clear why it is dotted. Yeah, apologies for that. I'm not entirely clear, but I think it is just a different pipe size.

COMMISSIONER GILMAN: Yeah, no worries.

So then, Ms. Federico, if we can go to page 23. Table 4-6 here shows essentially -- yeah, if you can go to 4-6 for me. Oh, is this like a revised version?

LEGAL ASSISTANT: This is the one on the spreadsheet from 116. Doesn't look like it is a Revision 1.

COMMISSIONER GILMAN: Okay. There is something that is called Table 4-6, Ratio of Peak Hour Reduction to Capacity Delivered, is what I'm trying to look at.

LEGAL ASSISTANT: Yes.

COMMISSIONER GILMAN: Okay, perfect, thank you for finding that. Was I wrong on the page?

Okay. So looking at this, this, as I understand it, would represent kind of the hydraulic connection associated with if we took action, had an

NPA in a certain area, how impactful is that to Breckenridge, Keystone, and upper Grand Lake as like a ratio, basically? Is that fair?

WITNESS JONES: Yeah, that is correct. So we looked at design day conditions for this table. And we looked at based on different areas how a reduction in the design day peak hour would impact the pressure -- insufficient pressure in that area.

And so this kind of shows the closer you are to the constraint or the insufficient pressure point, the higher the ratio, meaning that it has more direct impact on the pressure. And we use this as a tool in the potential analysis, but also to determine where it was appropriate and kind of the best bang for our buck to implement NPA measures and technologies.

COMMISSIONER GILMAN: Okay, got it. And how were these amounts arrived upon? This is, again, output of hydraulic modeling? Or how do you come to these?

WITNESS JONES: So this took quite a bit of hydraulic modeling. So we used the Synergi Gas hydraulic model. And we pulled it up as is and kind of did polygons that you saw on that map. And what we did is we reduced the load by 10 percent in those

areas, and then saw the residual reduction in the pressure. And we did that for each of the areas in order to determine what the highest percentage was. So if it was one-to-one or if it was a different value.

COMMISSIONER GILMAN: Okay. And as I understand -- maybe we can go back to that map, which was page 20, Ms. Federico.

So in the supplemental direct, I understood that the Eastern Mountain Gas System, and I think as you said today, receives a limited amount of supply from the Western System. And that's limited by potentially two things; the supply that is contracted in the west at Rifle, and then the actual capacity from Rifle to its destination? Are those the two fair restrictions?

WITNESS JONES: I would maybe -- the second part, it is the Rifle pipeline. But even more specifically, on the map right there, there is a dot called Meadow Mountain. That is actually a regulator station that controls the amount of supply that we can get down that lateral into the East.

And I would say that it's the capacity of that pipeline downstream of Meadow Mountain that kind of limits the amount of supply that we are able to

move from the West to the East.

COMMISSIONER GILMAN: Okay. That gets to part of my question is like what is the key limiting factor here? So it sounds like the key limiting factor is more that regulator station rather than necessarily like the pipe capacity from, say, Minturn to Leadville?

WITNESS JONES: Well, you would have to fix a couple things, right? So the first limiting factor is that little lateral downstream of Meadow Mountain.

So say that that has no limit whatsoever. The next limiting factor is going to be that kind of black and pink pipeline because it also has a capacity limit. It's just higher than the blue and orange line. Hopefully, I'm making sense.

But pretend that is not an issue now. Now it's a matter of, do we have enough contracted supply?

COMMISSIONER GILMAN: Okay. Okay.

WITNESS JONES: Does that make sense? You have to fix all the problems.

COMMISSIONER GILMAN: Is that like the order in which they are technical barriers here for that?

WITNESS JONES: Correct, correct.

COMMISSIONER GILMAN: So now, Meadow Mountain generally is to the west -- northwest of Minturn. But I know the Company revised their testimony to then exclude Minturn even though it was in the direct testimony. So what like technical condition led the Company to understand that Minturn was actually not an NPA area?

WITNESS JONES: Yeah. So if you are looking at the map right now, it looks like Minturn is downstream of Meadow Mountain and should be in the area, right? So that was our initial conclusion when we were looking at this map.

However, after digging a little bit more into the as-builts, what we found is there is actually a piece of pipe -- and it is going to be really hard for me to show you this -- upstream of Meadow Mountain that goes up and around and down to Minturn. But it is a distribution piece of pipe. That is why you are not seeing it on this map. So it is actually technically fed from the high pressure upstream of the Mountain Meadow regulator station.

COMMISSIONER GILMAN: So even though Meadow Mountain is physically located further away than Minturn, Minturn is fed by a dogleg that comes

off from somewhere else?

WITNESS JONES: Correct. You are thinking about it exactly correct.

COMMISSIONER GILMAN: Okay, okay. Curious, especially just given the issues we are seeing, obviously, on the Eastern Mountain Gas System and where we are now, how much spare capacity is coming into the Western area in terms of capacity for additional growth to these knowns from the west even? Especially if we do count on some flow coming from the west, that essentially presumes that there is still some spare capacity.

So I'm not at all clear on how much spare capacity we can count on in the forecasting coming from the west and how close that is getting from a capacity standpoint.

WITNESS JONES: Yeah. So I can't give you the exact number of capacity, so this is what I will tell you instead. So we just recently ran our annual design day planning process for all of our systems. It is presented in the GIP.

But what we determined is even under the high forecast, which is pretty high, there is no capacity constraints in the Western Mountain Gas System, nor is that limited amount of supply that

goes from west to east at risk at all within the ten-year planning horizon.

COMMISSIONER GILMAN: Just a quick question. Because there is some quite large towns just past that Meadow Mountain regulator station that could be of some significance in terms of NPAs.

Did the Company evaluate any measures at that regulator station that would allow more flow through, especially in the case that you could get up-valley reduction through NPAs in like the Vail/Avon area?

WITNESS JONES: We did not. And the reason why is it is not just a regulator station, but also the size of the pipe. And while it looks like kind of a short piece of pipe on this map, it is like 20 miles. And so replacing that pipe to a larger size in order to facilitate more flow from the Western Mountain Gas System was considered cost prohibitive as part of the Mountain Energy Project.

COMMISSIONER GILMAN: Okay. So thank you for that. I have a better understanding now. I was trying to make sense of that myself, but this is much more helpful.

So in your direct testimony, Ms. Jones, on page 4, you talk about the growth that you've seen,

especially from 2019 to 2023, that kind of really brought to a head the need for this project.

And the Company indicates that growth in Grand Lake, Summit, and Eagle Counties caused the Eastern Mountain Gas System to experience an average customer increase of 1.7 percent annually between those years. But it sounds like Eagle and Lake County are, in definition sense, not in the Eastern Mountain Gas System, and hydraulically somewhat limited in their actual impact.

So do you have any idea what the actual growth was in Grand and Summit Counties? Because it just seems a little odd saying Eagle County and Lake County are limited in their hydraulic connection, but kind of lumping their growth in with the need for the project.

WITNESS JONES: So the Eastern Mountain Gas System includes all of -- I'm sure you already know this, but just so I have my head screwed on straight -- all of Summit County, all of Grand County, a portion of Lake, and then a portion of Eagle. We are aligned on that, right?

COMMISSIONER GILMAN: I understood Leadville -- where does Leadville technically fall in terms of which mountain system? It's like the hub

here.

WITNESS JONES: It's kind of in both. But even that little orange part from Leadville up, that's a portion of Lake County as well.

COMMISSIONER GILMAN: Yeah. So I generally understood Leadville to be in the Southern System, unless I'm wrong and it is in the Eastern. So to the extent Leadville is in the Southern System, it would be little, if any, portion of Lake County, at least where there is any development, and Eagle County.

WITNESS JONES: Leadville is right where the null point is. And so this is going to be unsatisfying, but it is almost like you could draw a line down Leadville, and half of it is in Eastern and half of it is in Southern. That's what is happening within the Leadville area.

COMMISSIONER GILMAN: But it sounds like none of Eagle County is in the Eastern.

WITNESS JONES: There is some of Eagle -- I wish we had an overlay, but there is a portion of Eagle that is also in it. And it could be that area that's like the Red Cliff area.

COMMISSIONER GILMAN: Okay. Red Cliff is a very small town, but yeah.

WITNESS JONES: And appreciate that for sure.

COMMISSIONER GILMAN: Okay. But I don't think Red Cliff represented significant growth in the last couple years.

WITNESS JONES: No.

COMMISSIONER GILMAN: So that is just my point is that it is a little difficult to decipher because you include counties that I don't doubt have significant growth, but are not meaningfully part of the Eastern Mountain Gas System, which is a little difficult.

Let me see. Let me get to my next question here.

I wanted to get to -- so talking now about some past performance. In your direct testimony, also at page 46, Ms. Jones, you indicated that the Company compared data to as-is modeling and stated that the results of this verification show that the system hydraulic model is aligned with the gas pressure observed in the field and, therefore, is accurate.

(The electronic document was displayed.)

COMMISSIONER GILMAN: And so I did issue a follow-up question in supplemental direct asking for

you to provide the heating validation model to show performance at cold temperatures on the system. And you did so as GKJ-15C. Does this all ring a bell?

WITNESS JONES: Yep.

COMMISSIONER GILMAN: So I just wanted to confirm a few things. So it looks like what you had provided in GKJ-15C -- and it is confidential. We don't need to pull it up. But it looks like what you provided was one hydraulic model for the entire mountains, which would be like the complements of all of those. I think the mountains technically is all three of these things we have painfully been through -- their connection. So is that accurate?

WITNESS JONES: That is correct.

COMMISSIONER GILMAN: Okay. Is there any more granular validation that the Company has done specific to the Eastern Mountain Gas System rather than the entire mountain system at large?

WITNESS JONES: No. So we modeled those three systems because of the interplay between them. That null point can shift as demand grows on our system. And because we are physically receiving gas from the west, it makes for a more comprehensive model if we evaluate them all together.

That being said, so the results of what we

showed, showed that the percent variation was less than 5 percent, which is incredibly good. The other thing that we do is we look at every single major pressure point to also validate that, which is done within the model, kind of. We have like a reference and a pressure within the model. So it's not a work paper, necessarily. But also, to confirm that there isn't any large variance at any point.

So all of that to say you can infer that a good model match on the entire mountains also included a really detailed modeled match on every single point within that system including the Eastern Mountain Gas System.

COMMISSIONER GILMAN: How many points are there like within the Eastern Mountain Gas System that would kind of -- I got kind of conflicting information on this in the past. I mean, how many actual points are there where you have granular flow data that you can reference then to validate?

WITNESS JONES: That's a great question. I do not have the number off the top of my head. But if I had to guess, I would think doing some mental math --

COMMISSIONER GILMAN: Is it once? Is it dozens? Is it hundreds?

WITNESS JONES: Dozens, yeah.

COMMISSIONER GILMAN: So we are in the ballpark. I just want to understand like the scale of what you can actually validate.

And then within that GKJ-15C validation that you provided, the temperatures that were used for that validation, both from 2023, were at negative 7 degrees Farenheit and negative 15 degrees Farenheit. Does that sound right?

WITNESS JONES: That sounds correct.

COMMISSIONER GILMAN: Do you know where that temperature was modeled or was observed?

WITNESS JONES: That would have correlated to the Dillon station, which correlates to the station that is used as part of our design day methodology.

COMMISSIONER GILMAN: Okay. And is there any recording as to the temperatures in other portions of the mountains, or it's just a single point temperature?

WITNESS JONES: There may be other recordings in SCADA. But the reason we use a Dillon temperature as kind of like our honing in temperature is because that is what we calibrate the model to for our negative 39 design day temperature.

So it is important speaking apples-to-apples so that when we scale it to a design day temperature, it is still accurate

COMMISSIONER GILMAN: And then curious, do you have any data for validation that's closer to the design day temperature? I mean, clearly negative 7 and negative 15 degrees Farenheit are kind of a world apart from negative 39 degrees Farenheit to like understand if the behavior is still predictable.

So just wanted to understand what you have for validation that might be closer to the design temperature.

WITNESS JONES: So typically when we pick a temperature, it has to be a temperature that occurred, obviously, because we are comparing it to observed field data. So for that particular year, it is my recollection that the coldest temperature was that negative 7 -- am I saying the right number?

COMMISSIONER GILMAN: Negative 7 and negative 15, I think.

WITNESS JONES: Thank you. So negative 15 was the coldest temperature that occurred at that Dillon station in that year. That being said, it's done every single year. So the next heating season would have been what is the coldest temperature that

occurred that heating season.

COMMISSIONER GILMAN: Okay, okay. And I think Mr. Skluzak pointed to an occurrence that is negative 26 degrees Farenheit? I think we heard that yesterday. So I was wondering if the Company has any comparative SCADA data and actual hydraulic performance for that event.

WITNESS JONES: We are actually in the middle of model verification. As you know, it is annual. And since that happened last heating season, we are currently doing our model verification for the mountain system. So nothing to report today. But I believe in the Settlement Agreement, we agreed to provide updated hydraulic results every single year, and so that's certainly something that's reasonable to provide as part of that.

COMMISSIONER GILMAN: Okay. I think that would be very helpful to kind of continue to get updates here, especially as we like progress this discussion.

You are probably aware, a lot of the critiques that came in during answer testimony are not around the negative 7 degree temperature range. It is around the, you know, colder than negative 13, colder than negative 15, is it still linear

performance?

And so hard to say with data that is still in like a pretty normal cold range, honestly. But understood you have to see the temperature, but the whole argument for negative 39 is you have seen the temperature, right? So, ideally --

WITNESS JONES: Right. That temperature definitely was observed. That is a probability that it could occur again. And I'm sure we have a whole other line of questions on design day methodology, so maybe I'll save my comments there.

COMMISSIONER GILMAN: We will get to that.

So just curious, like in the recent past, understanding -- so for 2023, it seems like the coldest you had was negative 7, negative 15. But in the rest of kind of the recent past, what is the closest you've got on model validation that would bring us far closer to the design temperature to really deal with some of these critiques that we could see atypical growth or performance in the use of gas past some of these certain somewhat reasonable -- once we get into very unreasonable cold temperatures?

WITNESS JONES: I think the reason Mr. Skluzak -- well, I can't speak for him -- but

points out that negative 26 number is it's a pretty cold temperature and one of the coldest that we have experienced in the recent heating season.

So like I said, I don't have the model validation in front of me today, but I do think that we are -- not excited, but we are looking forward to seeing the results of that negative 26 because, like you said, it is much closer to negative 39 than, say, negative 15 was. So we should have model results on that soon.

COMMISSIONER GILMAN: Okay. Excellent. So for snow melt loads -- and just to be clear, I just want to make sure, does everyone understand what we are talking about when we talk about snow melt?

WITNESS JONES: Yes.

COMMISSIONER GILMAN: Okay. Boiler, tubes underground, like how it would heat your house, but there is no house.

WITNESS JONES: Right.

COMMISSIONER GILMAN: So for snow melt, Mr. Takahashi indicated that the building codes in many cases actually require a cold weather cutoff to stop snow melt from running at such extreme temperatures due to the potential for kind of like immediate cause of brand new ice.

And I was just curious if the Company has any further insights or modeling validation into the performance of that like as a specific end use?

WITNESS JONES: We don't have any modeling for snow melt. And I might invite either witness Klemm or Mann to help me with the second part of this question.

But as part of the potential study, we did do a disaggregation of end use, which was in that GKJ-2 that was just pulled up. And I believe that it was determined that the design day peak hour gas demand impact of snow melt is pretty low, which would, you know, support that it is not necessarily a major end use during design day conditions.

COMMISSIONER GILMAN: And can I just ask you -- and that was largely based upon the survey of the mountain -- of what was called the mountains, which is different than the Eastern Mountain Gas System?

WITNESS JONES: Maybe -- Jordan, would you mind just confirming for me that that was based on the survey results, or was it something else?

WITNESS MANN: Yeah. So there is a few pieces. One is the survey that we conducted. And we found that for residential customers, very few have

snow melt systems based on our survey results. The commercial sector did have more snow melt than residential as a percent of our survey respondents.

But given the concerns around refreeze both in codes and manufacturer specifications in snow melt systems, they tend to not operate at very low temperatures. And so they were screened out as a measure that had potential.

We did consider that something that could be explored from a demand response perspective for commercial customers. But given the low amount of potential reduction, it's not a measure that we did a deep analysis on to include in the NPA measure set.

COMMISSIONER GILMAN: So you are saying you screened them out as a measure because the presumption, especially from kind of building code argument and your understanding of the control system, is that they already lock out, at least in some part, at these extreme cold temperatures?

WITNESS MANN: That's correct.

COMMISSIONER GILMAN: There may not be like an incremental reduction. But wouldn't that mean -- you know, given the Company's methodology or understanding that essentially load just continues -- or I should say demand just continues to increase

linearly as the ambient temperature decreases, if you believe that the controls and temperature cutout is a fairly prevalent thing, wouldn't that mean that those particular loads actually do not continue to increase linearly as the ambient temperature decreases but actually fall away to zero at some point?

WITNESS MANN: My understanding based on looking at manufacturer specifications is that the lockout temperature is around zero degrees Farenheit. So there should be some data available below that temperature.

Additionally, the majority -- vast majority of the load that is observed for the peak hour conditions comes from space heating. And so there might be some component of it that is nonlinear, but the vast majority of the consumption is going to be coming from the heating of space and not sidewalks.

COMMISSIONER GILMAN: In a broader sense, according to your survey results -- if the proportion of snow melt in your survey results is accurate, right?

WITNESS MANN: Yep, that's fair.

COMMISSIONER GILMAN: Okay. And then did you do any -- I think the answer is no, but I just

want to confirm. Given especially that Breckenridge is kind of the most acute shortage and issue to find, do you think that the amount of snow melt found in aggregate in the rest of the mountains is representative of the proportion that would be found in Breckenridge, specifically?

WITNESS MANN: We did not specifically disaggregate Breckenridge from the rest of the group. The number was low enough -- I think it was less than 2 percent on the residential side -- that even if the number were higher in Breckenridge by a factor of 2, it may still not be consequential. But we did not do a follow-up separate analysis or survey for Breckenridge specifically, no.

COMMISSIONER GILMAN: Okay. Are you familiar with some of the statements from the Mountain Community Coalition that they believe snow melt is significantly more prevalent, especially in Breckenridge, than what is represented?

WITNESS MANN: I believe --

COMMISSIONER GILMAN: Amongst residential.

WITNESS MANN: I am familiar with those comments. I believe that they also did acknowledge the lockout temperature issue that might result in annual savings being available, but peak hour gas

saving potentially not being available.

COMMISSIONER GILMAN: Okay. I went on a snow melt tangent.

WITNESS MANN: No worries.

COMMISSIONER GILMAN: A couple questions on LDCs and kind of the relationship.

So based on your supplemental direct response, as I understand it, there are just two LDC receipt points in the Eastern Mountain Gas System, Tungsten -- did I say that right? Tungsten, Dory Hill, and Blue River, both of which serve Colorado Natural Gas; is that accurate?

WITNESS JONES: Correct.

COMMISSIONER GILMAN: And the Company responded -- because I think I had requested sales and design day peak hour demand growth over the five-year period that is kind of being referred to as the growth period that caused the need for the project. And the Company responded that it does not have sales and design day peak hour demand growth for that period, or I think at all. Is that accurate?

WITNESS JONES: Right, we did not approve any MDQ, which is the contractual amount, during that five-year previous period

COMMISSIONER GILMAN: So the contracted

maximum daily quantity has remained constant over that time; is that correct?

WITNESS JONES: That is correct.

COMMISSIONER GILMAN: Okay. I think it was a little confusing to me because it seemed, in part, in the direct case like part of the reasoning was some growth in LDC load, but it sounds like there was no requested growth in the LDC load over that time period. Is that fair?

WITNESS JONES: So I can clarify. So we did not approve any incremental maximum daily quantity values for LDCs in the previous five years.

In our hydraulic analysis, we did assume some incremental LDC growth. And the reason that we did that is because, while we didn't approve it, we did recognize that there could be a future need for LDCs to increase their maximum daily quantity. And we wanted to understand how that would impact the overall Mountain Energy Project.

That being said, in my rebuttal testimony, we ultimately removed that load because we haven't heard from any LDC customers that they are interested in MDQ increases at this time. So I thought to, you know, do a thorough analysis, we would remove it from rebuttal.

COMMISSIONER GILMAN: Okay. That was my next question. Have you heard from any of them if they want more? No.

Do you have any knowledge as to their actual infrastructure, if they could accept more, if it is that simple, or if they have actual infrastructure upgrades that would have to be made to even accept more quantity?

WITNESS JONES: I don't have any information about their infrastructure. I think it was more like a nod that we appreciate the fact that the backbone of our system is the only way that they have currently to transport gas to their system. And so there is a future in which they could potentially need additional MDQ in order to serve their customers.

COMMISSIONER GILMAN: Okay. And so it sounds like with the settlement, the concept of charging LDCs served by the system for increases in contract capacity on a going forward basis is still alive.

That is still the rough plan, right, is that if an LDC served off the Eastern Mountain Gas System were to come and ask for an increase in their capacity, then they would be charged a portion of

project costs to do so? Is that accurate with regard to the settlement?

WITNESS PEUQUET: Yes. I can chime in on this one, Commissioner Gilman.

That's correct. The Settlement Agreement still keeps that provision in the Company's direct and rebuttal cases alive that if there is a request, then it's -- as we proposed in our filed testimony, it would be a portion of project costs, just less the electric infrastructure costs, which we think we are getting a little bit far afield of directly serving an LDC, to essentially take the whole project cost divided by the shortfall to create kind of a dollar per mscfh that would be applied to their request.

COMMISSIONER GILMAN: Okay. So, yeah, that is my next question. I think in Mr. Matley's direct, which is now you, Mr. Peuquet, I think it was indicated it would be $220,225 per mscfh. And that was on page 46 of his direct, although I don't think we need to pull it up, but just for your reference.

WITNESS PEUQUET: Yes.

COMMISSIONER GILMAN: Is that still your understanding? I don't think the settlement delineated like a unit cost. So is it still your understanding that the settlement reference would be

to that value from the direct testimony?

WITNESS PEUQUET: That's correct. That didn't change in the settlement. The process is still there.

COMMISSIONER GILMAN: Okay. And to your understanding and agreement in the Settlement Agreement, would that value be updated to reflect the actual cost of the portfolio?

So, for example, we have some kind of slight immediate reductions in supplemental supply. But, of course, we are still working with a potential plus 100 percent on the supplement supply value. So there seems a wide range of what this actually costs at this point.

So is that number intended to be adjusted to reflect the actual?

WITNESS PEUQUET: Yes. I believe we described it in direct testimony. We might have to pull it up just to be sure. I think we intended that to be actual costs of the project, in which case, right, is supplemental supply costs. We talked about that a bit yesterday, right? But there is estimates that -- sorry, there is ranges around that point estimate at this time.

So I think it is the expectation that the

particular value might change a little bit, but it is the concept that we were more putting out here in our filed case.

COMMISSIONER GILMAN: Okay. Thank you. Just wanted to understand -- put some more color around the plan for those potential charges that appear in the Settlement Agreement.

Couple more questions on the shortfall and calculations. So MCC witness Takahashi indicated that building code design temperature in the project area is negative 13 degrees Farenheit. In other words, the mechanical systems are designed to serve the entirety of the load at negative 13 degrees Farenheit.

And then if you consider that most, if not all, homes would have mechanical systems undersized to continue to demand more gas all the way down to negative 39 degrees Farenheit, that the Company likely overcedes [sic] its peak gas need by around 9 percent.

The only way I see this like particularly addressed in your rebuttal was I think you all characterized MCC as advocating for a negative 13 degree design day temperature. That wasn't exactly how I interpreted it. But instead, assuming that

they were arguing that the vast majority of building mechanical systems would max out their peak gas draw somewhere between negative 13 and negative 39 degrees Farenheit, even assuming some rational amount of oversizing.

You know, their argument, I think, was that the linear regression for extreme low temperatures is inaccurate and unlikely to occur, and that you will max out some significant portion of mechanical systems.

So I'm just curious what reasoning the Company has to assume that all mechanical systems will continue to operate all the way down to negative 39 degrees continuing to demand more gas all the way as the ambient temperature drops.

WITNESS JONES: So there is two reasons for that. The first is observed system data. So while we don't have observed system data, particularly in the Eastern Mountain Gas System, to negative 39 in the recent past, we did include in my rebuttal testimony some information on linear regression of load at lower temperatures like negative 30. And so based on observed field data, we are still seeing that design day peak hour gas demand will increase as it correlates to temperature.

And I could pull that up if that is helpful. I'm trying to find it for myself.

COMMISSIONER GILMAN: Yeah, let me see, it is in your rebuttal.

WITNESS JONES: Yes.

COMMISSIONER GILMAN: I would like to better understand the coldest temperature that the Company actually has validation on.

WITNESS JONES: So this is on page 82 of my rebuttal testimony. It's figure GKJ-R-18.

(The electronic document was displayed.)

WITNESS JONES: For a little bit of context, this is for a different gas system from the Eastern Mountain Gas System, but we selected it because it's relatively simple. It's got a single supply going into kind of a distribution system, and so there is a really clear indication of the design day demand and the temperature.

It's not as clear to get this type of linear regression when you have a system like the Eastern Mountain Gas System which relies on several different supply points and also has quite a bit of line pack. You might not be able to see the flow rate quite as clear. So that's why we chose this system.

And what we looked at was several years of data at different temperatures and then the resulting average flow rate. And so there is some variation, and that probably has to do with, you know, actual usage during that time. Some people are on vacation, some people aren't.

But you will see a linear regression going from negative 12 to 30, which we thought was reasonable for the purposes of presenting in my testimony. And it continues to increase. So the flow rate is indicative of the supply into the area, which is directly proportionate to the design day peak hour gas demand in the area.

COMMISSIONER GILMAN: Thank you. And I'm sorry, I have questions. This is the St. Cloud, Minnesota, correct?

WITNESS JONES: That's correct.

COMMISSIONER GILMAN: I had questions about this, so I wanted to like skip to them and ask you.

WITNESS JONES: Yep.

COMMISSIONER GILMAN: Okay. Does the Company have any information as to what the building department design temperature is there for mechanical systems?

WITNESS JONES: Yes. The ASHRAE temperature for St. Cloud, Minnesota is negative 11.4.

COMMISSIONER GILMAN: The ASHRAE temperature is not necessarily the building department's design temperature. What is the building department's design temperature?

WITNESS JONES: I do not have that information. I apologize.

COMMISSIONER GILMAN: No worries. I mean, building departments have the say if they refer to other resources or not.

And what is the Company's design day temperature for that portion of the gas system?

WITNESS JONES: Again, I don't recall it off the top of my head, but it's colder than Eastern Mountain Gas System. I think it is negative 42, but please don't quote me. I would just say on the record that it is colder than the Eastern Mountain Gas System's design day temperature using the same methodology -- consistent methodology for that of what we use for Public Service.

COMMISSIONER GILMAN: Okay. And then this data, it looks like, goes down to negative 28. Which, look, I agree, if we are outside, it might not

make a big difference if it was negative 28 or negative 39. They both feel very, very cold. But that 11 degrees does seem to make a difference in terms of data.

And so I'm curious, is there any data that goes lower than negative 28? I means, it sounds like at least 13 degrees kind of unknown with regard to the design day temperature behavior.

WITNESS JONES: For this particular system, we did not identify a data set that goes below negative 28. That doesn't mean it doesn't exist, just that we didn't find it for the purposes of my testimony.

COMMISSIONER GILMAN: Okay. No worries.

WITNESS JONES: I will say, though, if there is skepticism about the design day temperature, one of the things that we did put in my rebuttal testimony was an analysis at negative 31. And that continued to prove that the Mountain Energy Project, including all of its components, were required in order to serve the supply constraint in the Eastern Mountain Gas System. And that's a reduction of -- or a warmth of eight degrees.

COMMISSIONER GILMAN: I did see that, thank you. I just wanted to get to my St. Cloud

questions answered. I knew they were there somewhere in my list. Excellent. Let me switch gears and ask you another couple of questions.

So the Company assumes -- the Company utilizes an assumption that 34 percent of the existing residential boilers and 13 percent of existing residential furnaces -- existing residential furnaces are already energy efficient, which is a value pulled from their Colorado-wide DSM potential study from 2022, I believe.

And so I was curious if this has been validated at all or confirmed like specific to the mountain areas to understand if that ratio would be the same or different?

WITNESS JONES: Jordan, I believe that question is directed to you. Maybe Kerry. Please correct me if I'm wrong.

WITNESS MANN: Yeah. So for this project, we did rely on some of the data from the most recent Colorado potential study from 2022. And that includes the efficiency estimations of the boilers and furnaces. We did not conduct a full baseline study as part of that project to assess that in the specific Breckenridge region.

COMMISSIONER GILMAN: Okay. And I'm also

curious -- something I was a little confused about. I believe the NPA study showed a higher average home size, especially in the Eastern Mountain Gas System and Breckenridge area. Well, no, it is only the mountains. So mountains more generally. Forget what I said. Mountains more generally.

I was a little confused if the NPA analysis did or did not then follow through with that higher home size assumption in the peak capacity impacts.

WITNESS MANN: So implicitly, I would say it does in the sense that we are using the data from the forecasting team to calibrate the savings that are available through measures like electrification.

So while we kind of start with the Xcel TRM to kind of do a bottom up estimate on the savings that are available, it is then calibrated to the estimated consumption for those customers. And we did that on a regional and customer class basis.

So that home size isn't explicitly in the calculation for, you know, the energy savings available for some of these measures, but it is calibrated in the consumption data, which would be influenced by the home size.

COMMISSIONER GILMAN: Okay. And that

treats the entire mountains as like a monolith rather than like a more localized approach? Or how localized is that consumption data?

WITNESS MANN: So the way that we broke this up was the same kind of geographies that we were looking at based on that mapping earlier. So for each geography, we split the customers into residential, commercial transport, multifamily transport, and multifamily. And we used the data from Xcel for each region specifically to calibrate the consumption and savings that are available in each of those regions. So that is the disaggregation level.

COMMISSIONER GILMAN: Okay, thank you. Slightly different topic. My fault for not having time to better organize these for you.

Ms. Jones, in your rebuttal, you listed a set of operational emergency measures that can be used -- and totally understand it is not the Company's preference, so I already get that -- including regulator station bypass, moratoria, and emergency electric outages to reduce gas heating.

And I just wanted to confirm, it's my understanding the Company did not use any of those before siting supplemental supplies in the area in

the 2022-2023 season, but I just wanted to confirm that I'm right about that.

WITNESS JONES: My guess is -- well, so no, we did not use any emergency measures. So I will say that for a fact based on my knowledge.

Operational measures -- I wouldn't want to say for a certainty that we never used them before we sited LNG because they are more of like a system level on the day of. If we are experiencing something strange, we might deploy an operational measure such as bypassing a regulator station. But it wasn't a normal course of business action.

COMMISSIONER GILMAN: Okay. And I want to just get some clarity. Hearing Exhibit 111, which I think is Jones' rebuttal. Does that sound right?

(The electronic document was displayed.)

COMMISSIONER GILMAN: So page 66, there is the figure -- yeah, there we go. Perfect.

So this kind of shows this linear regression relationship between ambient temperature and -- or minimum daily temperature and gas demand. And I was wondering if you could help me understand what portion of the data on this chart is observed and what portion is kind of forecasted or extrapolated.

WITNESS JONES: So this chart is not observed. This is meant to represent what the Company assumes the relationship would be between the design day peak hour gas demand and the minimum daily temperature. And so this is the curve that we use.

So if we have observed data at negative 30, how do we get it to negative 39? We would follow the linear regression on this chart here. So that's what it's meant to demonstrate.

Where we get this data is actually a recommendation from industry experts. So we use the Synergi Gas CMM modular, which correlates heating degree days to hourly gas consumption. And they recommend a regression similar to this.

COMMISSIONER GILMAN: Okay. Understood. And it would just be -- if it's in an area where you are using a different design temperature, the graph just stops earlier, right?

WITNESS JONES: Yeah. And it's more so meant to show -- so if we do our model verification with observed data -- and again, I'm going to use negative 30 as an example. Once we determine that that model is accurate or within a reasonable level of accuracy, using this regression is how we would then scale it up to get our design day conditions.

COMMISSIONER GILMAN: Understood. Okay. Got it.

And then so the Company provided some analysis on rebuttal about the continued need for supplemental supply, as you pointed out, Ms. Jones, even at somewhat warmer design day suggestions like in the low negative 30s. And I just wanted to confirm at what ambient temperature the Company currently presumes the shortfall would show up in an operational problem for them. I just wanted to confirm that.

WITNESS JONES: Yeah. So based on our most recent modeling for the upcoming heating season, so 2025 to '26, we would begin to experience insufficient inlet pressures in Breckenridge at negative 23 degrees Farenheit. And then it is negative -- I'm looking.

It is in my rebuttal, so I want to make sure I don't say the wrong number. Hold on just one moment.

I was right. So for your records, it is on page 30. But we would begin to experience insufficient pressures in Keystone at negative 19 degrees. So far warmer than any design day temperature considered in my rebuttal testimony.

COMMISSIONER GILMAN: Okay. So that the volume is smaller than immediate need is more acute in Keystone, I guess? Is that the right way to describe that?

WITNESS JONES: It is a warmer temperature in which we start to need gas.

COMMISSIONER GILMAN: Okay. Related to that, you identify in your direct testimony that the parameter for the Keystone supplemental supply was a maximum injection rate of 285 mscfh which is, to my understanding, the same injection rate being planned for Breckenridge even though the shortfall in gross numbers is far higher in Breckenridge.

So I just wanted to kind of understand the perspective of how do those required injection rates end up the same when the Breckenridge shortfall is several magnitudes bigger than the Keystone shortfall?

WITNESS JONES: Yeah, happy to clarify that. So the maximum injection rate of commercially available LNG equipment is usually around the 285 mscfh mark. So we used that as a design parameter when we were developing the hybrid portfolio that it should not exceed 285. But when we actually got the results, the injection flow rate in Keystone is less

than what we need in Breckenridge.

And so, again, I can point you to my testimony. So it was more of like do not exceed, and we never did. So please hold on that one.

COMMISSIONER GILMAN: So that's not actually the planned injection rate?

WITNESS JONES: No. So if you look at my direct testimony, page 166.

(The electronic document was displayed.)

WITNESS JONES: It is going to be Table GKJ-D-10. And to your point, the Breckenridge maximum hourly flow rate is that 285, but Keystone is 77, which was one of the reasons that we believed that CNG is more than sufficient to -- as the preferred supplemental supply facility in Keystone.

COMMISSIONER GILMAN: And is it that the commercially available equipment kind of generally all is built to operate at this 285 mscfh, or are you able to actually order smaller equipment that is more suited for that actual flow rate for Keystone?

WITNESS JONES: It depends on what type of equipment you are talking about. So LNG commercially available equipment will go up to 285. If you want it at something higher, there would be an engineering solution, of course, to boost the --

COMMISSIONER GILMAN: Well, just for Keystone. You are doing CNG in Keystone. And it seems like you set equipment parameters at 285. You only need 78. So, is the equipment then kind of right-sized down for that instantaneous flow rate that is needed at the CNG in Keystone?

WITNESS JONES: It won't be set for exactly 77, but the commercially available hourly flow rate for CNG equipment is lower than that 285.

If we want to understand the parameters a little bit more, I'm sure Ms. Roberts would be happy to answer some questions on what is commercially available for CNG equipment.

COMMISSIONER GILMAN: Okay. I just wanted to understand like the sizing a little more. I think I was thrown off by the like don't exceed what we were actually using, like what was actually going to be utilized there.

I had a few questions where I will refer to your rebuttal testimony, Ms. Jones, related to the new forecast that the Company developed in rebuttal.

(The electronic document was displayed.)

WITNESS JONES: Certainly.

COMMISSIONER GILMAN: So we are in the rebuttal here, Ms. Federico? Yes. Can we go to page

24? Perfect.

So a large part of the revision to the forecast in your rebuttal includes the addition of what the Company characterizes as the large discrete new business requests that you received essentially between the direct case and rebuttal; is that correct?

WITNESS JONES: That is correct.

COMMISSIONER GILMAN: Okay. And does this figure, GKJ-R-2, represent the entirety of those new business large discrete requests, or are there others we are not seeing here?

WITNESS JONES: It is the entirety of the large discrete new business requests received since the initial filing.

COMMISSIONER GILMAN: Okay. And then what is the status of these to get you on this list -- to get you in this pie chart, if you will? Are these signed applications? You know, what is the maturity of these requests?

WITNESS JONES: Yeah, in order to be on the pie chart, so these customers would have had to file a builder call line request. We would have put them into the hydraulic model to analyze if there was any direct infrastructure costs required for them to

come on, and then resubmitted that to the customer, and they signed their agreements.

COMMISSIONER GILMAN: Okay. So these are signed agreements?

WITNESS JONES: Correct.

COMMISSIONER GILMAN: To meet service at the sizes we are looking at. Okay.

So if we look at this, the blue sliver right at the top, 12:00 to 12:30 or 1:00, is 6.2 mscfh. And that is the discrete -- large discrete new business requests that you have in Summit County. Do you agree with that?

WITNESS JONES: I do.

COMMISSIONER GILMAN: Okay. Do you know what portion of that is in Breckenridge? Kind of given the acuteness -- I guess or Keystone given the acuteness of the needs for NPA and load reductions specific to those areas, do you have any disaggregation for us to understand the location of these loads?

WITNESS JONES: I do not off the top of my head.

COMMISSIONER GILMAN: Okay. Did the Company, as part of this analysis -- because I know you go on -- and like we will get there, but on pages

I think 52 and 53, you do new shortfall calculations where you compare the -- a little confusing because I think you called the new one the base forecast or something. But you compared the direct case to the rebuttal case there in terms of shortfall.

So given that there is a real acuteness to where loads -- well, I guess let me test my theory, first. We looked at the table previously in your technical attachment that showed like the ratios of if you have a reduction in this area, it is worth 62 percent, or whatever it may be, to the Breckenridge shortfall. Do you recall that?

WITNESS JONES: Yes.

COMMISSIONER GILMAN: So I want to understand -- my theory is if that works when you reduce load and it is worth that much, is the opposite also true that when you add load, it is of a proportional impact to that shortfall in that area assuming that load is added, you know, in a different area of the system?

WITNESS JONES: Yes. So the closer --

COMMISSIONER GILMAN: Did you understand that?

WITNESS JONES: I did, thank you. So the closer you are to the immediate insufficient

pressure, the larger an increase or a decrease in the design day peak hour gas demand would be.

COMMISSIONER GILMAN: Okay. So the ratio holds where there is an addition or a reduction of gas in the proportional impact that that change in gas volume has to the shortfall in Breckenridge, to the shortfall in Keystone, or Grand Lake holds. Like that ratio works up and down, right?

WITNESS JONES: Correct.

COMMISSIONER GILMAN: Okay. That was my theory.

WITNESS JONES: You got it.

COMMISSIONER GILMAN: So if we have got 6.2 mscfh -- I wish there was a way to say that acronym, but I've tried for months. It is not pronounceable. So we have got 6.2, but we don't know -- like did you disaggregate that for this forecasting?

Because how do we come out with the impact on the design day shortfall discretely in Breckenridge and Keystone? Like did you, as part of this process, input where physically it is located in Summit County rather than just Summit County?

WITNESS JONES: Yeah. So I don't have the exact location off the top of my head, but when we

put a discrete large new business request in our hydraulic model, it is placed at the load -- a node in which the load will actually come to fruition.

COMMISSIONER GILMAN: Okay. So what you are saying, then, is inherently, these were discounted for whatever appropriate hydraulic connection they do or don't have to the actual nodes with the problems?

WITNESS JONES: Right. So this does account for the hydraulic intricacies of our system, correct.

COMMISSIONER GILMAN: Okay, got it.

If you scroll up just a little bit, Ms. Federico. Thanks.

So these are in -- okay, let me get there. I have a lot of questions about these charts and about these new rebuttal forecasts.

So you noted there were three notable changes in your forecast for rebuttal, right? One you already brought up, which was the removal of any assumed incremental LDC design day peak hour gas growth?

WITNESS JONES: Correct.

COMMISSIONER GILMAN: Can you quantify that for me as far as how that impacted the design

day shortfall for each of -- you know, specifically, I think, Breckenridge and Keystone, the most two acute issues. Because that is a negative number, right? That is a benefit to the shortfall, basically making the shortfall smaller.

So help me understand like the quantification as to that one particular notable change in the forecasting.

WITNESS JONES: I did not analyze each of those three factors individually, so I wouldn't be able to give you a real quantification of that impact.

COMMISSIONER GILMAN: Okay. Presumably, the Company has that?

WITNESS JONES: We could create it through a hydraulic model. But our hydraulic model, we made all three changes at once. So we don't have the individual impacts of those changes identified.

COMMISSIONER GILMAN: And I've never run a hydraulic model, but I would assume you have to tell it your assumptions for the increase in estimated design day for your LDCs? So I would just assume there is a number you told -- or your hydraulic model told you what it thought it would use extra.

WITNESS JONES: Right. So in the

hydraulic model, you are correct, there is a flow category for where you want to add additional load that you turn on or off. I don't recall what that exact number is, nor could I quantify how that impacts the exact supply shortfall in Breckenridge making that one change.

COMMISSIONER GILMAN: Okay. But presumably, that is an input that you told the hydraulic model rather than vice versa?

WITNESS JONES: Correct.

COMMISSIONER GILMAN: The Company did know that number. I know you don't know it this second, but like the Company inputted a number or removed that number as far as the potential LDC impact?

WITNESS JONES: It is a known number by the Company. It is not known in my head right this second.

COMMISSIONER GILMAN: Understood, okay, got it. But that's a negative number, right? So as we are looking at these charts, that, as the first step, would have dragged the blue line down not up, right?

WITNESS JONES: Correct.

COMMISSIONER GILMAN: And that was over the duration, right? Like, that wasn't just a few

years. You said they don't need it. It is like you did not model any new demands by LDCs, right?

WITNESS JONES: Correct.

COMMISSIONER GILMAN: Second one -- second notable change in the forecast for rebuttal was these newly received large discrete new business requests that we were talking about and that are shown in the pie chart on page 24.

So I will note the largest, by far, part of the pie chart is in Grand County, which I think has a fairly limited -- I can find it -- impact on like Breckenridge itself, right?

So if I look at the Breckenridge shortfall, Grand Lake is in the 40 percent ratio impact to Breckenridge? Would you agree with that?

WITNESS JONES: I don't have that number in front of me, but I would be willing to take your word for it.

COMMISSIONER GILMAN: I'm looking at Table 4.6, which is Breckenridge. Area 1, which is like the Grand Lake area, varies from .37 to .49 in terms of impact on Breckenridge.

WITNESS JONES: Yep, that is -- well, it is about 50 percent. Area 1, .49, yes.

COMMISSIONER GILMAN: That is other Grand

Lake, other Area 1 is .37, Grand Lake top is .42, so there is a lot of variation there.

WITNESS JONES: Right, because Grand Lake -- or Grand County, excuse me. So we are talking about Grand County, not Lake. So Grand County is pretty large. So you would want to be looking at Area 1, other Grand Lake. Or let me see.

COMMISSIONER GILMAN: So with the majority of the new large discrete loads coming in, do you understand that the nature of that in Grand County -- that's quite the number, the equivalent of 1,240 residential customers. Is that residential? Is that commercial? Industrial? What type of load are we talking about?

WITNESS JONES: Those would typically represent like a new development, so it would be a mix of residential, multifamily and individual homes, and then commercial. I don't have the exact split, again, in front of me, but it is known by the Company.

COMMISSIONER GILMAN: Okay. And what is the development timeline on those loads?

WITNESS JONES: So those would be coming to fruition within the next one to two years.

COMMISSIONER GILMAN: Meaning full

build-out?

WITNESS JONES: Correct.

COMMISSIONER GILMAN: Okay. Like full build-out and occupancy, like is what I mean.

WITNESS JONES: I couldn't confirm occupancy. That is usually not what they provide us. So when we get a new business request, they will tell us when do we need to have the full amount of gas service available to them.

COMMISSIONER GILMAN: Okay. So it is fair to assume from our previous discussion that when the large new discrete loads are added in Grand County, they have a sub 50 percent ratio impact on the shortfall in Breckenridge?

WITNESS JONES: Correct. Well, on the pressure in Breckenridge, correct.

COMMISSIONER GILMAN: Which I'm using shortfall as -- I mean, shortfall is what we have here in our new calculation. Do pressure and shortfall kind of move together, more or less?

WITNESS JONES: They do. But the reason I differentiate is because when we are talking about the gas system, right, the amount of demand we have is the amount of supply we have.

And so if we are already in a supply

constraint environment, then when we add any load, we just need that additional supply. And then how bad the pressure is in Breckenridge might be a little bit of a different ratio.

COMMISSIONER GILMAN: Okay. It is a little bit of sponginess because they move together, but perhaps there is a little bit of shock absorbing happening somewhere?

WITNESS JONES: Yeah, fair enough.

COMMISSIONER GILMAN: Okay. And then a small portion of new load in Lake County, relatively small portion in Eagle County. And I'm curious in that Eagle County, the purple, is 12.2 mscfh, so about double what we are expecting to see in Summit County.

But my understanding, is that entire purple piece of the pie only really Red Cliff? Like it is only the portion of Eagle County that is hydraulically connected?

WITNESS JONES: To the Eastern Mountain Gas System, correct.

COMMISSIONER GILMAN: So you've got -- you have signed applications for 153 equivalent residential worth in the town of Red Cliff?

WITNESS JONES: In Eagle County. I

wouldn't be able to confirm off the top of my head that that's directly Red Cliff.

COMMISSIONER GILMAN: So this could include, then, areas that are not necessarily hydraulically connected in the same way?

WITNESS JONES: Anything downstream of Meadow Mountain that is Eagle County is included in that chart. I just wouldn't be able to confidently say that it was in the city of Red Cliff where this application is coming to fruition.

COMMISSIONER GILMAN: Okay. The only reason I ask is there is very little there.

WITNESS JONES: I know.

COMMISSIONER GILMAN: It is an outstanding area to see 153 equivalent new homes.

COMMISSIONER GILMAN: But it is equivalent, right? So it could be a smaller number. It could be one like commercial building and then houses as well. So I wouldn't necessarily say that you should interpret that as saying there is going to be 153 houses built in Red Cliff. It is just a way to quantify that value in kind of like more real person terms of how much that load could equate to.

COMMISSIONER GILMAN: Okay. Let me get back to my notes here.

So as we look at these two figures in front of us, GKJ-R-7 and 8, which show respectively Breckenridge and Keystone, and really just the changes between the direct and rebuttal forecast.

Can you -- I mean, it sounded from your question before that you can't, but can you identify for me what proportion of the increase we are looking at in each is due to the second reason for updating the forecast, which is the addition of these new large discrete new business requests?

WITNESS JONES: Yeah, I wouldn't be able to quantify that for you without a hydraulic model in front of me.

COMMISSIONER GILMAN: Okay. And then the third reason is updated design day peak hour gas demand loading to account for natural growth widely across the system within residential and small commercial customer classes?

WITNESS JONES: Correct.

COMMISSIONER GILMAN: Okay. So I want to understand this third section. Don't all the Company's forecasts already include estimates for natural growth in residential and small commercial customer classes?

WITNESS JONES: Right. So that statement

is just meant to indicate that we performed our model -- or our model verification for the '24-'25 heating season.

In order to get the shortfall on the '25 or '26 heating season, you add one year of design day peak hour gas demand growth in the categories of residential and small commercial. And that generally would represent what normal growth could occur or growth that we wouldn't necessarily individually input into the Synergi Gas hydraulic model as a large discrete new business request.

COMMISSIONER GILMAN: Okay. So let me make sure I understand. So is the difference that you added one more recent winter season of growth? Maybe I'm misinterpreting.

WITNESS JONES: We got updated customer loading as of '24. And then in order to get it to '25, you have to add one year of normal growth.

COMMISSIONER GILMAN: Okay. And that wasn't done? I'm still like a little bit struggling with why the forecast for natural growth isn't like still reliable. Like I'm not 100 percent grasping why this is different or what the update is. I'm sorry.

WITNESS JONES: Maybe help me understand

your question. So you said it is not reliable. I think I'm trying to say that that is what we used. So I think we are talking apples and oranges. We used the forecast -- the base forecast, but we added one year to get to '25, two years to get to '26, three years to get to '27.

COMMISSIONER GILMAN: I'm just trying to understand what the difference in the changes for accounting for natural growth across the system were between the direct and rebuttal since, to me, inherently forecasts include assumptions for natural growth.

So like how was that assumption changed between direct and rebuttal? And I'm sorry, I'm just like not grasping your answer.

WITNESS JONES: No, no. That was helpful the way you explained it. So I think your fundamental understanding, we are aligned on. A design day peak hour gas demand forecast includes normal growth, right? Do you agree with that?

COMMISSIONER GILMAN: Uh-huh.

WITNESS JONES: So then the difference between the blue line and red line is what forecast we used. So in my direct testimony, we used what we are calling the original forecast, which was a

forecast developed in 2022 that included BE assumptions in alignment with the 2023 Biennial Plan and Strategic Issues goals.

Since then, we have created the new forecast, which is our new base forecast. And that base forecast includes several updates that are discussed in the 2025 gas infrastructure.

But as an inherent assumption for BE, it now includes the 2024 to 2026 DSM/BE adoption levels, assuming that the adoption remains the same through the entire planning period. So you have two different levels of BE because it is just a different forecast utilized.

COMMISSIONER GILMAN: Okay, okay. So my blue line direct case, you were using 2023 DSM/BE, which was kind of nonexistent DSM. And then you are saying for the red line, your new forecasting includes more updated '24 to '26 DSM/BE adoption levels?

WITNESS JONES: Correct.

COMMISSIONER GILMAN: No Clean Heat Plan?

WITNESS JONES: Not in the base forecast, no.

COMMISSIONER GILMAN: Okay. And so the '24 to '26 DSM and BE was, I guess I would say, more

aggressive? Included more BE? I mean, there wasn't BE planned before that. So clearly, it includes more BE than none -- than the '23 would have.

So tell me, did this third adjustment that we are talking about, this natural growth -- which, to my understanding from you, in large part, accounts for this change in the assumption on the DSM/BE front. Did this present an increase in the shortfall we are seeing on these charts or a decrease in the shortfall on these charts?

WITNESS JONES: Just give me one second. If we don't want to change the screen, that is totally fine, but there is a table for your reference on page 49. It's Table GKJ-R-1. And it shows the differences in the forecasts.

So the new base forecasts, if you are looking at just the bottom column -- or bottom row, excuse me, for simplicity, it does believe that the growth is higher than was previously assumed in the original or direct testimony. So it would have increased the supply shortfall in Breckenridge, Keystone, and just generally in the Eastern Mountain Gas System.

COMMISSIONER GILMAN: Okay. So I think you would probably agree with me that the updated DSM

Plans and BE probably had downward movement on that forecast. What provided all of the upward movement in the change in these natural growth forecasts between direct and rebuttal?

WITNESS JONES: I don't know that I would agree with you that it would be downward movement. And the reason why is it was the 2023 Biennial Plan and Strategic Issues docket, which, as I understood, did include targets for BE. So therefore, there was BE included in that original forecast. So I wouldn't necessarily say that it would go down.

COMMISSIONER GILMAN: Is it more BE than was approved in the '24 to '26 plan?

WITNESS JONES: I don't have the -- I mean, as a reminder, right, like I don't personally develop the customer account forecast for the Company. So I can give you limited information as to what I know. I know what the assumptions are. I don't have the exact comparison in regards to what the adoption levels for BE were versus the 2023 SI docket and the 2024 to '26 BE Plan.

COMMISSIONER GILMAN: Okay. But these are -- as we are looking at this table G -- sorry, it's getting to be a long day -- GKJ-R-1, these are fairly significant changes to the forecast

proportionately. I mean, not doubling, but coming somewhat close to doubling from the original to the base. And, of course, the base is the rebuttal. It's a little bit of confusing terminology since it is kind of updated.

So do you have any better understanding for me on what factors led the Company to now assume between the direct and the rebuttal that they have nearly double the load growth than they presumed in the direct case?

WITNESS JONES: Not knowing the exact inputs, I would maybe just provide the high level response that the customer account forecasts also includes population growth, economics, stuff of that nature as well. So that could potentially also be driving the increase between original and base.

COMMISSIONER GILMAN: Okay. And how granular are those customer account or load growth projections? I think we heard yesterday in some of the questioning some suggestion that Breckenridge, for example, is well into the 90 percent fully built out, which may not be representative of the rest of the county or even the rest of the state.

So like how granularly does the Company look at load growth potential, especially in state

resort towns that are primary built out at this point?

WITNESS JONES: So our customer account forecasts are geographically aggregated to the counties.

And then in regards to the BE assumptions, we made an improvement, as discussed in that M docket, where we are now using propensity to adopt disaggregation to distribute the BE adoption to counties where we were previously just looking at population.

COMMISSIONER GILMAN: Okay. Can we go back to page 52 real quick? I just wanted to understand something else.

So as we look at these graphs, not only did kind of the magnitude of the line change, but the acceleration also changed. So we have got a steeper curve for the updated forecast in rebuttal than we did in the direct case. And I was curious the main reasoning behind the acceleration, not just change in magnitude.

WITNESS JONES: The slope of the line, is what you are referring to?

COMMISSIONER GILMAN: Correct.

WITNESS JONES: I think the slope of the

line is reflective of the difference between the two forecasts where the red forecast assumes a higher percent growth year over year than the blue line.

COMMISSIONER GILMAN: Okay. Is the red forecast the same forecast that is in the 2025 GIP?

WITNESS JONES: Yes.

COMMISSIONER GILMAN: Okay. And that forecast is specific to Summit County?

WITNESS JONES: It is a county-specific forecast, correct.

COMMISSIONER GILMAN: Okay. Let me see what else I've got. Sorry, I'll get there. We hit a lot of questions, just maybe not in the order I had them on here.

So just one more question with regard to the pie chart. I think it is on page 24. But according to my math, this results in the addition of 1,527 equivalent new residential customers. That would be 4.6 percent growth in customer count on the Eastern Mountain Gas System.

Debatable? It sounds like one year, two years? I originally understood the rebuttal to be one year. Is that in line with recent growth? As I understood, the recent growth number was smaller than that on an annual basis by a fairly considerable

amount.

WITNESS JONES: By recent growth, do you mean what occurred between 2019 and 2023?

COMMISSIONER GILMAN: Correct.

WITNESS JONES: So that number was, I believe, 1.7. This 4.6, you could assume that that would happen over two years, so it would be about half of that, so one per year. So I do believe we are still seeing significant growth. Whether or not that is in line -- we could do some quick math, 2.3 compared to 1.7.

COMMISSIONER GILMAN: And the Company kind of characterized, it sounded like, the growth from 2019 to 2024, you know, in your testimony as somewhat of an acceleration in growth that kind of caused this project. So is the 1.7 already an acceleration from what the Company had seen before that in growth of customers?

WITNESS JONES: Yeah. So I think the reason that we qualify that as an acceleration is if you look at our system-wide growth numbers, we generally, in the past, have experienced kind of like a 1 percent growth year over year. So anything above 1, I would say, would be accelerated or considered to be higher than normal compared to other areas of our

system.

COMMISSIONER GILMAN: Okay. I'm curious with all of these new requests -- and understandably, like the equivalent new residential customer load doesn't mean that is the exact number of customers you are seeing, right? So you are dealing with, it seems like, over a thousand new customers across the Eastern Mountain Gas System.

I'm curious, did the Company notify the large new service requests about the Company's urgent shortfall situation in the area?

WITNESS JONES: No. That is not a normal practice of the Company. And further, we have had supplemental supply facilities. Therefore, we have been able to mitigate the risk of supplemental -- I'm sorry, excuse me, supply shortfall in the area.

COMMISSIONER GILMAN: Well, I understand it is not a normal practice, but this isn't a normal situation, right, to have such a massive shortfall in an area with no traditional infrastructure solution to solve it.

And although I understand you've placed supplemental supply there for the last three heating seasons, certainly, the Company's perspective in this proceeding is that there is an urgent need for a more

permanent solution. But you are saying that is not something that you've communicated at all to the new business requests that are coming into this area?

WITNESS JONES: I would agree that the Company believes we have an emergent issue that we need a long-term solution for. But no, we did not notify these large new business requests of that.

COMMISSIONER GILMAN: Did you notify them about the Company's proposal for significant incentives for electrification including up to the full incremental costs of electrification as opposed to gas?

WITNESS JONES: No, we did not, nor do I think that that would have been appropriate prior to some sort of approval that those incentives would come to fruition. And the reason I say that is the last thing that the Company wants to do is cause any market confusion.

So if we go to new customers and say, yeah, just wait, wait, wait, we are going to be able to give you 100 percent, and it doesn't actually get approved by the Commission, that could cause some significant backlash on these developers wanting to engage with the Company moving forward on potential incentive solutions.

COMMISSIONER GILMAN: Now, the Company already has available through the Clean Heat Plan significant incentives and programs you are structuring around new construction, correct?

WITNESS JONES: That is my understanding.

COMMISSIONER GILMAN: Did the Company have specific discussions with these discrete new business requests about the existing program, not even those proposed here but already approved through the Clean Heat Plan that would incentivize electrification as opposed to gas?

WITNESS PEUQUET: Maybe I --

WITNESS KLEMM: I can jump in if you would like.

WITNESS PEUQUET: Yeah, perfect, thank you.

WITNESS KLEMM: Any of those conversations would not have likely to have occurred when the gas service requests came in. But if they were in conjunction with some of our business services or our relationships with builders and developers, they would have happened at that level in either our account management level or in conversations if it was brought up with the builders and developers as we are rolling out the Clean Heat Plan and the

Beneficial Electrification and new DSM rebate levels.

COMMISSIONER GILMAN: But as a matter of course, the Company did not make it a priority to communicate to these new business requests about those programs, nor anything about the shortfall in the area they are trying to join?

WITNESS PEUQUET: Well, maybe another piece of information here that could be helpful, Commissioner, is there is a discussion of this exact topic in our pending Gas Infrastructure Plan.

In that filing, we talk -- we have a witness -- I believe it is witness Steven Martz who talks about the Company's new approach to electrification first and how that is changing some of our business practices here.

And so while I agree with how Grace was describing it on informing these customers around the gas constraint, I agree that is not part of our practice. There is a lot of uncertainties on what that could have led to. So we wouldn't have done that.

However, we have been engaging with customers around these new electrification offerings and seeing if they are interested in that as part of this application process.

And so there is more discussion of that in the GIP itself, but just wanted to call in the tie in cross proceedings there.

COMMISSIONER GILMAN: No, I appreciate it. That's helpful. So you are kind of communicating more generally, but I'm not hearing that there was a top priority to communicate that to these customers specifically who are looking to join the Eastern Mountain Gas System?

WITNESS PEUQUET: Yeah, I can't speak to these customers specifically. However, I would say it is absolutely a high priority to communicate electrification incentives, generally.

So back to -- excuse me -- Kerry and Grace's points, it kind of depends on the timing of these service requests when they came in and depending on where we are in this new process we have been developing internally in recent months and years.

It's possible that these specific requests didn't get a ton of knowledge on electrification, but it is also possible we did. We would just have to look at that in more detail. And I don't think the folks here in this virtual room have those details at their fingertips.

COMMISSIONER GILMAN: Okay. A question, Ms. Jones, from your rebuttal, which I think we still have up.

On page 9, you indicate that in 2024, the Company added 1,400 -- oh, gosh, I hope I'm on the right page. Ms. Federico, if you type in 14,000. If you type in 14,000, maybe we will find it.

In 2024, the Company added approximately 14,000 residential gas customers, and so far this year added 5,000 new residential gas customers. Is that accurate?

WITNESS JONES: That is correct. And those numbers are system-wide.

COMMISSIONER GILMAN: Yeah, system-wide. And this would be as of -- when did you submit your rebuttal, in July?

WITNESS JONES: That sounds correct.

COMMISSIONER GILMAN: Okay. Like early July.

WITNESS JONES: Yeah, time is flying.

COMMISSIONER GILMAN: I'm sure if we scroll down, but too much scrolling. In the middle of the year.

What do you mean by added? Does that mean you got an application, or they actually are like

taking service and occupying the premise?

WITNESS JONES: Yes, a new service connection, so actually receiving gas service.

COMMISSIONER GILMAN: Okay. Is there any cyclical nature to this in the year whereby just because of like construction timelines, especially in the mountains where the ground is frozen a good portion of the year, that there are certain times of year that are far more common for the actual hookups to happen rather than other times of the year?

WITNESS JONES: I don't have data on that, unfortunately.

COMMISSIONER GILMAN: Okay. No worries. But if we assume that this -- you know, I think we established this came in early July or whatever, basically exactly halfway through the year. So in your system-wide numbers, the Company had added 5,000 new residential customers halfway through the year.

So just in a straight proportion, you would be down 30, 40 percent off of what you would have seen in 2024 at 14,000 for the whole year. If it is representative of half the year and we just double it, that is 10,000, not 14,000 for 2025. Would you agree with that math?

WITNESS JONES: I would agree that -- I

mean, obviously, I would agree that 5,000 times two is 10,000. I'm just not certain we are comparing apples-to-apples given that that is for a longer time period than the 5,000.

COMMISSIONER GILMAN: That is what I was trying to understand like if there was some cyclical nature you understand about it. You know, if the ratio is a straight ratio, which makes an assumption, it would appear that the 2025 numbers are considerably lower.

WITNESS JONES: Unfortunately, I don't know much about the cyclical nature, so wouldn't be able to comment on that.

COMMISSIONER GILMAN: Okay. On page 59 of your rebuttal -- I hope I have the page right this time. No.

MS. BRAMA: Commissioner Gilman, I'm sorry to interrupt, but I saw Ms. Roberts come off mute, and I didn't know if she had something to add before we move on.

COMMISSIONER GILMAN: Go ahead.

WITNESS ROBERTS: I just wanted to talk a bit to this seasonality. And I do believe there is seasonality, as you were pointing out, Commissioner Gilman, with construction.

And so if we are looking at the first portion of the year, not quite knowing if it is half or not, I think we are generally speaking to the 5,000 could be a little bit low because these first months of the year are colder, and you may see less construction. So generically, you are thinking the right way there.

COMMISSIONER GILMAN: I agree with you about when construction starts. I don't know about when construction ends. So if that is the determinative factor, I mean, there might be a fair bet for any time of the year, but I'm not quite sure.

WITNESS ROBERTS: If you are starting construction, the construction ends later, which the hookup is going to be on the later end of the year.

COMMISSIONER GILMAN: Could be, if you have a 12-month construction cycle. I don't know. Some people do things different.

Can we try page 56? Sorry about that. So there is a table here. There we go.

Just curious. So this shows the forecasted design day peak hour growth rates from 2030 -- by 2025 to 2035 in the low forecast sensitivity. What is the big dip in 2029 in the total and residential peak design day hour growth?

WITNESS JONES: Yeah, that is a good question. Not having the forecast inputs in front of me, I wouldn't be able to answer.

COMMISSIONER GILMAN: And you don't know what the dip after 2033 is, either?

WITNESS JONES: I do not.

COMMISSIONER GILMAN: Okay. I wanted to understand a little bit the way I'm thinking about understanding the coincidence of especially the potential of electric resistance backup or peak electric heating need and coincidence with the existing system peak.

So in your supplemental direct, Ms. Jones, you had indicated the gas system has two peaks, one in the morning and then a slightly smaller one in the evening. And the exact difference isn't quantified because you don't have, you know, intelligent meters, basically, out there. So it is basically an approximation.

But since there is the potential for that, your assumption is that there is 100 percent coincidence with the evening electric winter mountain peak. Is that fair?

WITNESS JONES: That sounds correct, yes.

COMMISSIONER GILMAN: For the electric --

WITNESS JONES: I think in my supplemental testimony, we do acknowledge there is potential that that is conservative. But for the purposes of planning, we find that to be reasonable.

COMMISSIONER GILMAN: Okay. And I was trying to figure out if we are still using -- like if those are, as I understand from your previous testimony, kind of extrapolated on the idea of what the gas system may demand at this negative 39 degrees Farenheit, then convert it to electric, made a COP of one. Is there just a lower likelihood of that sort of extreme temperature occurring at that point in the day?

I mean, it seems to me that like predawn, sure, that might be your coldest time of the whole day. I will buy it. But like after a whole day of sun -- I mean, let's face it, like it doesn't snow when it is that cold, right? So it is like a somewhat sunny day.

Is it really possible that we have as extreme of temperature that is coincident with an evening peak as would be for a predawn peak?

WITNESS JONES: So it doesn't really -- it doesn't -- so typically, the minimum daily temperature is going to occur in the evening, right,

coincident with the morning peak, right? But it's really a matter of how gas is consumed throughout the entire day in order to accommodate that minimum temperature.

It doesn't mean that that minimum temperature occurred at the exact same time as the peak gas consumption occurred, but rather that was the behavior of the gas consumption when it peaked in order to accommodate that negative 39 degree temperature.

COMMISSIONER GILMAN: Okay. I get that. And I have a slew of questions -- I'm so sorry for you -- also on like the litany of temperatures and how we sort through that.

But as this relates to the electric impact, now it's not a gas load anymore. It is an electric load now. So there is not that sponginess of it depends on what happens all through the day. This is like more of an instantaneous situation, right, if I'm understanding my physics properly on the electric system.

So is it still accurate to be planning the gas that then gets converted at negative 39 when, really, what we are trying to do is estimate the electric impact at a time of day certain coincident

with an evening peak?

WITNESS JONES: I may see if either Tanner or Kerry or Jordan have a little bit more information on the performance of electric heating. That is slightly out of my subject matter expertise. So I would certainly be happy to hear more from other folks.

COMMISSIONER GILMAN: And the questions were around like if we are using negative 39 to size the maximum size of this hypothetical electric load to give our electric impacts, is that the appropriate assumption to be making when we kind of know when that electric system peaks and it is not predawn?

WITNESS JONES: Yeah. I mean, for the purposes of planning, I would say that I agree. And I think that we have put into my testimony that it is a conservative assumption regarding the amount of incremental electric demand that may occur on the system. I'm sure other folks can talk a little bit more about that.

But as a reminder, this is really the value that we use in our CBA tool in order to calculate the marginal cost for distribution, transmission, and generation. So it is not perfect, anyway.

And for the purposes of the Mountain Energy Project, what that led to was the realization that a hybrid portfolio, particularly Hybrid Portfolio (2), was cost-effective as compared to any traditional gas infrastructure project that the Company would propose.

So, in my opinion, this is more of a fringe argument. Did we get the number perfectly correct? Probably not. And I think that that is acknowledged. But for the purposes of comparing one mutually exclusive option to another, I do think it is reasonable.

COMMISSIONER GILMAN: Okay. I do want to wrap this up relatively soon because I said 4:00, so I intend to mean 4:00. Maybe one more question. No, no. I'll save it for tomorrow. It will probably go into some tangent.

So I just want to check with you, Ms. Brama, Ms. Pacheco, anything before we take a recess until 9:00 a.m. tomorrow?

MS. BRAMA: Yes, Commissioner Gilman. We thought perhaps it is worth asking, do you need all the witnesses tomorrow, or are there any witnesses we can excuse at this point from your perspective?

COMMISSIONER GILMAN: I mean, I have some

more questions -- I'll just give you some areas -- on end use assumptions, GIP relationship and identification, NPA more specifically, cost recovery, supplemental supply. So I don't know that that excludes anyone, but that's what I have left. But I finished probably most of the forecasting and shortfall questions.

MS. BRAMA: Okay, thank you. That is helpful to know. We thought we should at least ask the question just in case.

I think the other question was just about timing for tomorrow. Since we only have one day of hearing left and the other witnesses and UCA's cross and some other cross, we just thought it would be worth checking in on timing overall.

COMMISSIONER GILMAN: Yep. I've got it here. Hold on. I'll pull it up. I think we have got three or so hours of cross tomorrow.

MS. BRAMA: I think that was our math roughly as well.

COMMISSIONER GILMAN: I've got 3.8 -- well, I think Mr. Acerra might have just a couple questions. So I think we are going to be okay, but I will certainly be trying to move prudently along. And I think people should be available for the

afternoon, but we will make sure it happens tomorrow.

MS. BRAMA: Thank you.

COMMISSIONER GILMAN: Yeah, thanks for checking.

Any other matters from anyone else before we wrap up today?

In that case, we will be in recess until 9:00 a.m. tomorrow. I'll see you all at 9:00 a.m. tomorrow. First thing will be continue questioning this panel. We will go to redirect. And then we will move into witnesses from the other parties starting with Staff.

Thank you. Appreciate it. Everyone enjoy your night.

(Thereupon, the proceedings concluded.)

REPORTER'S CERTIFICATE

The above and foregoing is a true and complete transcription of my stenographic notes taken in my capacity as Hearings Reporter for the Department of Regulatory Agency in Denver, Colorado, at the time and place noted.

Dated at Colorado Springs, Colorado, this 21st day of August, 2025.

Hearings Reporter

_/s/ *Tracy D. Boulais*_____
Tracy D. Boulais, RPR, RMR, CRR