Docket No. UT-181051 - Vol. III

WUTC v. Centurylink Communications, LLC

December 5, 2022



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WASHINGTON UTILITIES AND)DOCKET UT-181051 TRANSPORTATION COMMISSION,) Complainant,) vs.) CENTURYLINK COMMUNICATIONS,) LLC,) Respondent.) VIRTUAL EVIDENTIARY HEARING, VOLUME III Pages 21-349 ADMINISTRATIVE LAW JUDGES GREGORY J. KOPTA AND SAMANTHA DOYLE * PORTIONS OF TESTIMONY ARE DESIGNATED CONFIDENTIAL AND ARE SEALED UNDER SEPARATE COVER. * December 5, 2022 9:00 a.m. Washington Utilities and Transportation Commission 621 Woodland Square Loop Southeast Lacey, Washington 98503 REPORTED BY: TAYLER GARLINGHOUSE, CCR 3358 Buell Realtime Reporting, LLC 1325 Fourth Avenue, Suite 1840 Seattle, Washington 98101 (206) 287-9066 Seattle	DAWN CORTEZ Office of the Attorney General PO Box 40109 Olympia, Washington 98504 (360) 586-6470 dawn.cortez@atg.wa.gov FOR COMTECH: SUSAN ORNSTEIN Senior Director, Legal & Regulatory Affairs 2401 Elliott Avenue, Suite 200 Seattle, Washington 98121 (206) 794-4102 susan.ornstein@comtechtel.com * * * * * * 14 15 16 17 18 19 20 21 22 23
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EXHIBITS FOR ADMISSION BR-8C Comtech Confidential Supplemental Response to Public Counsel Data Request No. 30 BR-9C Comtech Root Cause Analysis, CenturyLink Network Outage and Related E-911 Call Routing Impairment, MOU Due Date 01-11-2019, Unredacted Version BR-10 WMD Response to CenturyLink Data Request No. 4, Attachment 'Re CenturyLink Outage 122718 (58)' BR-11C Comtech Confidential Response to Public Counsel Data Request No. 8 BR-12C Comtech Confidential Response to Public Counsel Data Request No. 18 BR-13 CenturyLink Response to Public Counsel Data Request No. 8 BR-14 CenturyLink Response to Public Counsel Data Request No. 5, Attachment A, Second Revised Washington State Outage Communications Plan of CenturyLink BR-15C Comtech Confidential Response to Public Counsel Data Request No. 1, with Confidential Attachment A BR-16C Comtech Confidential Response to Public Counsel Data Request No. 3 BR-17 Comtech Confidential Response to Public Counsel Data Request No. 3 BR-17 Comtech Response and Supplemental Response to Public Counsel Data Request No. 26 BR-18C Comtech Response to Public Counsel Data Request No. 4 with Confidential Attachment B.1(b) BR-19 CenturyLink Response to Public Counsel Data Request No. 28		1 2 3 4 5 6 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	EXHIBIT INDEX (cont.) EXHIBITS FOR ADMISSION DW-1T Direct Testimony of David White SH-1T Direct Testimony of Samantha Hovey VB-1T Direct Testimony of Victor Barajas CDK-103CX Transcript of August 19, 2022, Deposition of Carl D. Klein (Confidential)

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Page 45 1 LACEY, WASHINGTON; DECEMBER 5, 2022 2 9:00 A.M. 3 --000--PROCEEDINGS 4 5 6 JUDGE KOPTA: Let's be on the record in 7 Docket UT-181051, captioned Washington Utilities and 8 Transportation Commission v. CenturyLink Communications, 9 LLC. 10 I'm Gregory J. Kopta, one of the 10 11 administrative law judges who is presiding in this 11 12 proceeding along with Judge Samantha Dovle. And we will 12 13 also be joined by the Commissioners in a few moments. 13 14 We are here today for evidentiary hearings 14 15 in this docket, and we are addressing, at this point, 15 16 some preliminary issues. We will take appearances once 16 17 the Commissioners get here so that we don't have to do 17 18 it twice. 18 19 And so let's, at least in my mind, the first 19 20 issue that we need to address are the exhibits. 20 We have circulated an exhibit list to the 21 21 22 parties and gotten feedback on that. My intention is to 22 23 admit the exhibits on the exhibit list with the 23 24 exception of those to which the parties have not -- all 24 25 parties have not stipulated. But there are a couple of 25

cross-examination exhibits. I understand that this is for the convenience of crossing witnesses so that they know which documents they will be needing to address during their testimony.

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But at the same time, it is confusing for the record because, for example, in this case, there are objections to some exhibits, but then stipulations to the same document that's labeled as a different exhibit. So this causes a little bit of consternation.

At this point, I do not want to go back through the exhibit list and purge duplicates, but for future reference, I guess, it would be best to have a document with only one exhibit number to it.

And please, when you are referring to exhibits that have multiple exhibit numbers, both in your cross-examination and in post-hearing briefing, try to use the same one so that we're not continually referring to the same document under different names. It makes it confusing for us, and it makes it confusing for everyone. So please keep that in mind.

MR. MCGINTY: I have a question about that, Your Honor, if I may?

JUDGE KOPTA: Certainly, Mr. McGinty. MR. MCGINTY: Do you have a preference as to which exhibit number we use? For example, we have

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clarifying things.

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Mr. Sherr, I believe Exhibits CDK-4 is -should be CDK-4C; is that correct?

MR. SHERR: That's correct, Your Honor. And there's also a page that will need to be changed in Exhibit CDK-1TC because it's a -- CDK-4C is a -- is a diagram, and that diagram is reproduced on page 10, I believe, of Mr. Klein's response testimony. So when we submit updated copies of those to -- we will submit copies -- updated copies of those documents to the Commission.

JUDGE KOPTA: All right. That should be acceptable. So the exhibit list should be amended to reflect that CDK-4 is actually CDK-4C, and is a confidential -- or a document that includes confidential information.

The other change to the exhibit list that I'm aware of is that Exhibits SKC-1X through 4X should actually be numbered C -- I mean SKC-4X through 7X. Just a minor numbering change.

Does anybody else have any corrections at this time to the exhibit list that was circulated?

Hearing none, before I get to admitting exhibits, one of the issues that I have is that several documents have multiple exhibit numbers in the

Page 48 several cross-exhibits are designated as cross-exhibits

that were first admitted as part of someone's testimony. I would probably refer to that as the exhibit that was attached to the testimony consistently throughout. But do you have a different way of approaching that?

JUDGE KOPTA: That would be my preference, is if it's a document that's already part of someone's testimony or exhibits to their testimony to refer to it in that manner.

And if it's a cross-exhibit that is just a cross-exhibit that has multiple numbers, then just as a rule of thumb, I would refer to it as whatever document number it was when it was first discussed in the hearing.

I mean, if it's one that was subject to an objection and then admitted, then I would refer to it by that number.

If it's just used in cross of a witness, the first witness that it's used with, I would use that number, I think.

As I say, it's a rule of thumb. It doesn't necessarily have to be that way, but, again, we're trying to minimize confusion. And, you know, short of getting rid of all duplicates, which I don't think is the best use of anyone's time, then I think that's the

7 (Pages 45 to 48)

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best way to proceed. Does that make sense to you, Mr. McGinty?

MR. MCGINTY: That does make sense. Thank you for the clarification.

JUDGE KOPTA: All right. Sure.

And while we're talking about that, you did not -- or you have an objection or are not willing to stipulate to Exhibit JHJ-26CX, which is the same as DW -- JDW-82CX. Are you objecting to both of those exhibits or just the one?

MR. MCGINTY: I was objecting to both of those exhibits. I was attempting to use the convention you previously indicated, where I was only referring it -- I was only referring to it by the exhibit number that was -- it was first addressed as in the exhibit list that was provided by CenturyLink. That was my intention, but I intended to object to all instantiations of that document.

JUDGE KOPTA: All right. Thank you.

And, Ms. Suetake, the same question to you. Three of the exhibits that you have objected to are also exhibits that have been marked for a witness other than Mr. Rosen. Is it your intention that you are objecting only to those documents that's used with Mr. Rosen or are you objecting to those documents in their entirety

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is admit the exhibits subject to any objections to
 documents that are the same as the BR documents that you
 have objected to. Does that -- does that -- would that
 cover the waterfront from your perspective, Ms. Gafken?

MS. GAFKEN: I think that would cover the waterfront from my perspective.

JUDGE KOPTA: All right. Well, that's what I'll do, then.

So with respect to the exhibits, all of the exhibits on the exhibit list that was circulated, which include the prefiled testimony and associated exhibits as well as the cross-examination exhibits, are admitted subject to the limitation that I just discussed with Ms. Gafken.

And with the exception of the following documents, Exhibits BR-33X through 45X; BR-64X through 86X; Exhibit JHJ-26CX; Exhibit JHJ-27CX; Exhibit JDW-82CX; Exhibit JDW-81CX; Exhibit JDW-68X through 72X; Exhibit JDW-80X; and exhibit RA-9CX. I believe those are all of the exhibits to which the parties did not stipulate.

Are there any other exhibits at this point that anyone can identify to which the parties -- one party or another does not stipulate?

MS. GAFKEN: Judge Kopta, there is one more

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however they are labeled?

MS. SUETAKE: Judge Kopta, my co-counsel, Lisa Gafken, will be addressing the objections to the exhibits.

MS. GAFKEN: Judge Kopta, my intention is to object to all exhibits -- of the exhibits. So each time it's identified for any witness. And when we get to that, I -- I have each one of the references. I was also grappling with the reducing of confusion issue. So I will probably just stick with the strategy of identifying each.

So there's a couple of exhibits that are identified three times. There's a couple of exhibits that are identified twice. I'll probably just provide both of those and all three of those references during the argument, just for absolute clarity.

JUDGE KOPTA: Okay. Well, that poses a little bit of a dilemma for me because I had intended to admit all of the exhibits to which the parties stipulated. And in labeling those to which you did not stipulate, you simply used the BR exhibit numbers and not any of the others.

So I don't -- at this point, I suppose, it makes it a little bit -- I'm not sure what to do in terms of admitting the exhibits. Perhaps what I will do

Page 52 exhibit. We did identify it in our initial email. It

exhibit. We did identify it in our initial email. It was BR-87X. We -- we do have a copy of that now, and that is one that I will be objecting to.

JUDGE KOPTA: All right. CR-87 or BR?
 MS. GAFKEN: B as in Brian, BR.

JUDGE KOPTA: Okay. That's what I thought.

Just wanted to make sure we get the initials correct.

All right. So BR-87X is also not admitted.

And I understand that we can address the objections to some of these exhibits at this time.

Mr. McGinty, all of those that are identified for Staff witnesses are those that you believe you can address at this point; is that correct?

MR. MCGINTY: I think that's correct.

JUDGE KOPTA: All right. Then why described to the state of the state of

JUDGE KOPTA: All right. Then why don't you proceed. I don't know whether you can do them all at once or whether we need to do one by one, but whatever makes the most sense from your perspective.

MR. MCGINTY: I'm happy to go down the list and provide our specific objections to the exhibits. I'll probably lump them together to those that have similar arguments that pertain to them.

So JHJ-26CX and JHJ-27CX, which are the same as JDW-81CX and JDW-82CX, this is just a simple lack of foundation issue. From the face of the document, it's

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not clear what these are. It's not clear where the data came from, who compiled them, what the headings to the columns mean, anything along those lines.

If foundation is laid during the hearing, happy to withdraw the objection. Although, not sure how that will occur in cross-examination, but -- or if foundation can be pointed out to me that it already exists in the record, then, again, happy to withdraw the objection.

But that's just a simple lack of foundation objection.

JUDGE KOPTA: All right. Well, let's stop there before you move on to the other ones and allow CenturyLink to respond.

Mr. Sherr or Mr. Steese?

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MR. STEESE: Your Honor, this is Chuck

Steese. I will address the exhibit issues.

Exhibits JHJ-26 and 27CX are also already in the record as attachments to Mr. Webber's testimony, specifically JDW-28C and JDW-30C.

So Mr. Webber already has those documents attached to his testimony. And so the foundation, for lack of a better term, of those documents has already been established through their own witness.

JUDGE KOPTA: All right. Well, here we have

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information about the fact that they're focused on 911 throughout the country. So to us, this simply provides background about ComTech, and certainly meets the relevance threshold since ComTech and its network are at issue in this proceeding.

With respect to JDW-69X through 72X, ComTech was the subject of complaint in South Dakota relating to the fact that various 911 calls would not complete there. The complaint is one of those exhibits bought by the South Dakota Commission, and the various provisions that it cites to in the complaint are essentially identical to various points and problems that they raised here.

So from our perspective, this is relevant to show that ComTech's 911 network design is faulty. And it has not only been faulty here, it's been faulty somewhere else as well.

JUDGE KOPTA: Does this particular witness have any knowledge or have any involvement in those South Dakota proceedings?

MR. STEESE: Your Honor, I do not know.

JUDGE KOPTA: Well, unless there's some tie
between the witness and those documents, I don't see any
basis on which to admit them through cross of that
witness.

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another example of why it's cumbersome to have documents with multiple exhibit numbers.

MR. MCGINTY: Objection is withdrawn. JUDGE KOPTA: All right. Thank you.

Then, just to be consistent, I admit those four documents into the record.

Next.

MR. MCGINTY: So next is -- I'll address JDW-68X to 72X. Now, 68X appears to be a filing with the Securities and Exchange Commission with respect to ComTech.

And then 69 to 72X are newspaper articles and pleadings having to do with an out-of-state matter involving an, I think, a South Dakota 911 system outage.

I just don't see the relevance of these.

The hearing, evidentiary hearing, today is on Staff's complaint related to allegations made against

CenturyLink for a 911 outage that occurred in Washington State. These potential exhibits are simply irrelevant and make no fact at issue more or less likely to have occurred.

occurred.JUDGE KOPTA: Mr. Steese?

MR. STEESE: Yes, I'll discuss JDW-68X first. This is an SCC filing by ComTech. It provides various background about ComTech. It provides

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And as far as the SCC filing, same thing. I don't know that there's any indication in that witness's testimony that he had anything to do with that or has any knowledge of that SCC filing.

And so therefore, I'm going to sustain the objection. I don't -- through his testimony.

Next, Mr. McGinty.

MR. MCGINTY: So the next would be JDW-80X. This appears to be labeled as a demonstrative -- I'm getting some feedback. Oh, there we go.

It's labeled as a demonstrative exhibit. It appears to be a timeline that was put together by CenturyLink. It's overly argumentative. It'd be appropriate for a brief, but it's not evidence that ought to be admitted in order to prove any fact at issue.

JUDGE KOPTA: Mr. Steese?

MR. STEESE: Your Honor, the document is both a summary and a demonstrative. Evidentiary Rule 1003 permits this submission of summary exhibits so long as each of the exhibits upon which the document is created is referenced. It certainly is. This is a timeline of events. The events themselves are directly at issue, not only in Mr. Webber's testimony, but in Mr. Rosen's testimony, Mr. Turner's testimony, a whole

Docket No. UT-181051 - Vol. III - 12/5/2022 Page 57 Page 59 series of witnesses. And so this goes directly to 1 either privileged attorney-client communications or 1 2 2 Mr. Webber. protective work product due to a common interest 3 And the timeline itself, we think, 3 agreement, Public Counsel, Commission Staff, and WMD. As a result, Public Counsel objects to the 4 establishes very clearly a public connection between the 4 5 cross-exhibit contained in BR-33X and ask that it be faulty network design and the outage on the 911 calling 5 6 in December 2018. 6 excluded. 7 JUDGE KOPTA: Are all of the dates on this 7 I'll also address BR-87 as that appears to 8 timeline included in testimony or other exhibits that 8 be somewhat related. That appears to be a response to a 9 9 have already been admitted to the record? public records request and privilege log. The 10 MR. STEESE: Yes, Your Honor. 10 information subject -- I'm sorry -- the information JUDGE KOPTA: All right. Well, I see this 11 contained in that exhibit is also subject to the same 11 is cumulative of that information. I understand how 12 attorney-client privilege and work product doctrine that 12 13 it's useful for you, but I agree with Mr. McGinty that, 13 was established with the common interest agreement. certainly, it's more appropriate for a brief as opposed 14 14 There's nothing relevant that's contained in the 15 to an exhibit for cross-examination. So I will sustain 15 unredacted portions of the exhibit. And as a result, 16 that objection and not admit that exhibit. 16 Public Counsel again asks that the cross-exhibit 17 Finally, RA-9CX, Mr. McGinty. 17 contained as BR-87X be excluded. 18 MR. MCGINTY: Yes, Your Honor. This is a 18 JUDGE KOPTA: Mr. Steese? 19 response to a data request that CenturyLink promulgated 19 MR. STEESE: With respect to these two 20 to Staff as it was responded to in September of 2022. 20 exhibits, Your Honor, the entire point is what The issue here that Staff supplemented this 21 Ms. Gafken just said. And that is almost immediately 21 after the outage occurred, Public Counsel, WMD began 22 response in October, and the supplemented version is not 22 23 the one that's being admitted. It prejudicial to Staff 23 coordinating together. 24 to provide the unsupplemented response here. 24 And so the fact that the Public Counsel

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correct. That was an error on our part. We'd like to supplant the RA-9X with the supplemented version of the request for admission. That was just a mistake in terms of the version that was submitted. JUDGE KOPTA: And, Mr. McGinty, do you have any objection to --MR. MCGINTY: No objection to that. JUDGE KOPTA: All right. Then I will allow that to be substituted, and I will admit that exhibit. I believe that takes care of those to which you have objected, Mr. McGinty? MR. MCGINTY: That's correct. JUDGE KOPTA: All right. Ms. Gafken for Public Counsel. MS. GAFKEN: Thank you. There are a number of exhibits that we're objecting to, and I think it makes sense to group them and take them separately as we go. The first two that I'll address is BR-33X

and BR-87X. BR-33X is a request from WMD or -- I'm

and protected work product. There is nothing relevant

that's contained in this exhibit. Any substance of

question would require an answer that includes the

sorry -- a request to WMD for privileged communications

MR. STEESE: Your Honor, Mr. McGinty is

JUDGE KOPTA: Mr. Steese?

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us is something that is important to establish that they had been coordinating from, basically, day one.

witnesses are advocating positions taken by the WMD to

So from our perspective, we're not intending in any way, shape, or form to get into the common interest discussions. The entire purpose is to show the coordination that was taking place.

JUDGE KOPTA: I really don't see that as something that the Commission needs to get involved with. We're really more interested in the underlying facts and what happened, not who is helping who. So I don't see any basis on which that information is going to be at all relevant to the Commission's determination.

So I will sustain the objection to those two exhibits.

Next, Ms. Gafken.

MS. GAFKEN: Next, BR-39. BR-39 is an exhibit that contains a public records request from CenturyLink to WMD. And that public records request is focused on ComTech. Also contained in that exhibit is a letter from WMD to CenturyLink addressing certain service credits under the contract.

Neither document is relevant to the proceeding at hand. This proceeding is focused on CenturyLink, not ComTech. The contract remedies are also irrelevant to whether CenturyLink met its

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regulatory liability. And as a result, Public Counsel objects to the cross-exhibit contained in BR-39X and asks that it be excluded.

JUDGE KOPTA: Mr. Steese?

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MR. STEESE: Yes, Your Honor. BR-39X is actually an attachment to the motion -- our response to the motion for summary determination. Public Counsel's argument is that CenturyLink breached the contract by failing to provide various network and transport responsibilities here. We think that that is misdirected. This letter shows that they had an opportunity to a certain breach of contract against CenturyLink and, in fact, sent a letter demanding service level credits. And -- and we objected, saying that we were not the cause of the outage.

So this letter goes directly to the issues that are at issue and placed at issue by Public Counsel.

MS. GAFKEN: If I may, Mr. Steese mistakes what the basis of our motion for summary judgment is. We are not alleging breach of contract, but we are pointing to the contract as evidence of what CenturyLink's duties were with respect to the 911.

JUDGE KOPTA: Well, again, this is something I don't see any relationship to this in Mr. Rosen's testimony, and certainly there's enough evidence in the

connection between these documents and Mr. Rosen's testimony. If he has any personal knowledge about these, that's one thing. If he does not, then there's no basis to allow these in through his testimony.

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Therefore, I will sustain the objection on that basis.

Next, Ms. Gafken.

MS. GAFKEN: The next that three -- three BR exhibits -- and they do have corresponding other exhibits. So let me list those exhibits first and then get into the argument.

BR-43X, which is also designated as JDW-53X; the next set is BR-44X, which is also designated as JDW-54X and JHJ-24X. And then the next one is BR-45CX, which is also designated as JDW-55CX and JHJ-25CX.

And although one of these exhibits or one set of exhibits is designated as confidential, I do not need to talk about what the confidential information is in that to make the objection.

So this set of exhibits addresses Commission Staff's informal request for information directed at ComTech during its investigation prior to filing the complaint that we are here for the hearing for.

Public Counsel objections to these exhibits as being irrelevant and beyond the scope of this

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record to make the argument that you want to make, Mr. Steese. I don't think the document is necessary for that. So I sustain the objection to that document.

Next

MS. GAFKEN: Okay. The next one is an exhibit that has a couple of different exhibit designation. BR-42CX, which has also been designated JDW-52CX. This exhibit contains CenturyLink's vendor agreements and a contract between CenturyLink and ComTech related to ALI, the ALI transition.

JUDGE KOPTA: And ALI is A-L-I all caps? MS. GAFKEN: Yeah. Okay.

JUDGE KOPTA: For the court reporter.

MS. GAFKEN: That's a good -- good reminder, Judge Kopta. Public Counsel objects to the relevance of this exhibit as the documents do not relate to questions of this docket. As a result, Public Counsel objects to Cross-Exhibit BR-42CX and JD-52CX and asks that these exhibits be excluded.

JUDGE KOPTA: Mr. Steese?

MR. STEESE: The contracts between ComTech and CenturyLink and -- all part of the transition network. We think this is highly relevant to the proceeding, and it should be included.

JUDGE KOPTA: I, again, do not see a

proceeding.

BR-43X, and JDW-53X is Staff's response to CenturyLink Data Request No. 2, which asks Staff to produce communications with ComTech.

BR-44X, JDW-54X and JHJ-24X contains the questions that Staff asks ComTech. BR-45CX, JD-5CX and JHJ-25CX contains ComTech's responses.

This proceeding is focused on CenturyLink, not ComTech. And as a result, Public Counsel objects to the exhibits that I've identified and asks that they be excluded.

JUDGE KOPTA: Mr. Steese?

MR. STEESE: This proceeding absolutely relates to ComTech's network design. Mr. Rosen talks at great length about ComTech's network design and cites repeatedly to ComTech data request responses.

So the fact that these responses are directly from ComTech, discuss its network design, at least some of them do, that the whole point is to look at the ComTech network design and determine whether or not it was or was not the cause of the outage, why 911 calls did not complete.

And, again, Mr. Rosen discusses at great length in both his direct testimony as well as in his responsive testimony ComTech data request responses and

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whether or not that network was or was not designed properly.

JUDGE KOPTA: Well, I note that the exhibits as designated for witnesses other than Mr. Rosen are not exhibits to which Mr. McGinty or Staff has objected.

I agree that ComTech's network is at issue in this proceeding. Therefore, I will overrule the objection with respect to the exhibits as designated for witnesses other than Mr. Rosen.

If Public Counsel wants to make an objection to the use of those -- you know, those documents during Mr. Rosen's cross-examination based on any lack of personal knowledge that he may have about the responses, you are free to do so.

But at this point, I admit those exhibits and overrule the objection.

Next.

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MS. GAFKEN: Okay. The last two exhibits that I'll talk about at this point are BR-64X and BR-65X.

Both of those exhibits are Public Counsel responses to CenturyLink data request asking about ComTech's SS7 capabilities. Neither exhibit presents relevant information, as ComTech SS7 capabilities are not subject to this proceeding. Therefore, we object to

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MS. GAFKEN: The other remaining objections are going to be based on how the exhibits are used. So the ones that I've already addressed and that Judge Kopta ruled upon, those are ones that are more general in nature. And the other exhibits, as I said, will depend on how CenturyLink intends to use them with their witness.

JUDGE KOPTA: I think that's a fair way of proceeding. I agree, Mr. Steese, it would be beneficial if we could address all objections at this point, but that does not seem to be something that we can do. So we will just await the use of those documents in cross-examination of Mr. Rosen to determine whether they will be admitted or not.

All right. I think that takes care of exhibits. The other elephant in the room is confidentiality.

Several of the parties and the Commission itself have raised the issue of the extents to which we need to close those hearings to those who have not signed the confidentiality agreement or otherwise entitled to review confidential information.

Mr. Steese, are you going to be addressing this on behalf of CenturyLink?

MR. STEESE: Your Honor, yes, I will.

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the admission of those Cross-Exhibit BR-64X and Cross-Exhibit BR-65X.

JUDGE KOPTA: Mr. Steese?

MR. STEESE: Your Honor, this is -- the response is the same. Comtech's network design and its SS7 design and capabilities are directly at issue in this proceeding.

And for the exact same reason as I articulated moments ago, these documents go directly to that network design.

JUDGE KOPTA: These are both responses to -by Public Counsel, specifically Mr. Rosen, to data requests from CenturyLink.

I agree with Mr. Steese that this is an issue before the Commission. Therefore, I overrule the objection and will admit those two documents.

Any other objections at this point that we can address?

MR. STEESE: Your Honor, if I can briefly. I understand that in an email from this morning, Public Counsel said that they did not need to raise objections to the other exhibits at this point in time.

In an effort to help the proceeding move quickly, we would ask, if possible, that we address the other remaining objections as well.

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JUDGE KOPTA: All right. First question I
have for you, given that Mr. Sherr was the one who
raised this initially is, how much of the
cross-examination that you're anticipating would need to
be in a closed session?

MR. STEESE: That's obviously very witness dependent, Your Honor. There are a couple of witnesses that it will be minimal.

But in terms of Dr. Akl, it will be virtually all of his examination. Mr. Webber will probably be about 70 percent, and Mr. Rosen about --

JUDGE KOPTA: Sorry. I didn't hear the percentage for Mr. Rosen.

MR. STEESE: About 50 percent.

15 And it's the -- kind of this thing where 16 there's two issues.

One is the details are almost always identified as confidential, and the details are what we need to discuss.

But the other is if we share a document on a screen that has a line identified as confidential, irrespective of whether or not I am asking about that particular line, it is important for the witness to be able to see the exhibit and for everyone to be on the same page.

of this case.

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And so that only, in a couple of instances I can think of, is going to pose an issue. We have tried very hard to -- places or -- where it's a start and stop with minimal public questions because you have to set some foundation sometimes in the middle that would not be confidential.

But it's going to be rather extensive, and in that vein, too, we saw that WMD sent an email earlier today. We want to make sure that we understand the bounds of what is deemed confidential to make sure that we don't cross a bridge that WMD does not want us to cross in terms of the types of questions that we might ask that might seem not confidential to us that they would find to be confidential.

JUDGE KOPTA: Mr. McGinty, do you anticipate delving into confidential information in your cross-examination of CenturyLink witnesses?

MR. MCGINTY: Yes, I do. Particularly with the clarification today that call flow information is confidential.

I can't imagine -- you know, and obviously, this is a difficult subject to talk about because you might ask a question that you don't think imposes or creates an opportunity for an answer with confidential information, but then, you know, it does in an

information.

I do want to note that, of course, we would prefer to have as much of this proceeding be open as possible, understanding completely that there are some very sensitive topics being talked about.

Regardless of how much of the proceeding ends up being in a closed session, Public Counsel would urge the Commission to, of course, write the order that would clearly allow the public to understand what's happened in this case. And I am confident that the Commission will do that. I wanted to express that on the record.

So in any event, we do recognize the need to, most likely, close at least portions of this proceeding. But, of course, always lean towards wanting as much open to the public as possible.

I am going to ask Mr. Nelson to respond to what portion of the cross that we anticipate might be confidential.

MR. NELSON: Good morning, Your Honor. John Nelson on behalf of Public Counsel. I both underscore Ms. Gafken's comments about generally speaking the preference for open tribunals.

However, I do also share Mr. McGinty's comments about anticipating when or when not we may

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unanticipated way.

So this is difficult for me to imagine a way to delineate between a non-confidential cross and a confidential cross of any of the witnesses I intend to examine.

JUDGE KOPTA: And do you have any rough estimate of the amount of your cross that might involve confidential information?

MR. MCGINTY: I think it's virtually all or could be all, especially with the clarification that WMD made today, that their intention that anything that may involve confidential information not to be in closed session, I think that's got to be everything. Everything may involve confidential information.

JUDGE KOPTA: Ms. Gafken or Ms. Suetake?
MS. GAFKEN: I will start with some
comments, and then I may need to pass the baton to
Mr. Nelson to address how much -- what portion of the

cross may or may not be confidential.

But I did want to say that certainly Public

Counsel supports using a closed session for those portions that would cover confidential materials.

Commission does have a process that allows us to do this when we can't conduct cross that does elicit a confidential response or touches on confidential

delve into confidential matter. You know, for example, question may not intend to delve into it, and the response elicited from the witness may very well go down confidential material, just given the technical nature

So, you know, I normally would like to take it on a witness-by-witness basis, but I do believe that some portions -- it's reasonable to expect some portions of the cross testimony to delve into confidential material.

JUDGE KOPTA: Well, this is a dilemma because this case does involve a much larger share of information that's designated as confidential than most hearings. And the fact that we're doing it virtually makes it that much more challenging.

If, for example, a witness you anticipate that 70 percent of the cross is going to be confidential, I don't see any basis for having a non-confidential and a confidential session for that witness. Rather just have the whole thing under a confidential session.

The question then arises as to whether we do this on a witness-by-witness basis or we do it on a more global basis so that all confidential testimony, for example, of one party's witnesses would be in a closed

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session while the nonconfidential portion would be conducted outside of that in the more open proceeding.

Do parties have any suggestions or comments on which method would be most efficient?

MR. STEESE: Your Honor, I have a question first.

When I looked at and Mr. Sherr looked at WMD's comments earlier today, they were talking about network design and call flows. They were talking about, as we understood it, the current 911 network design. Obviously, the network design at issue here is the transition network design, which is no longer in place.

So the question that we have for WMD is, if we're focussing on the transition network design, we don't know -- CenturyLink does not know which portions, if any, still are part of the existing network design.

So might be that what we're talking about here is a vestige of the past, and we don't need to worry about the confidential portions.

But if, in fact, WMD says the opposite, and that is any call flow information, which is what Mr. McGinty interpreted and I thought might be possibly what was intended, then CenturyLink's thought is we do the entire witness examination, if there is a significant portion that is confidential and

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MS. GAFKEN: Thank you. I did want to underscore that Public Counsel certainly does rely on the confidential designations in most instances. In most cases, confidential information is the Company's. Here we have an entity that also has a pretty strong confidential interest.

But we -- it's not our information, and so we do rely on those designations. I do think that we would have to go through ours again, our presentation again and, perhaps, we'll need to refile certain things to mark things that look to be not confidential as confidential after the hearing.

Having said that, I do think that a witness-by-witness approach would be appropriate and preferred instead of doing something more global.

For example, I know that the -- there are some witnesses that will likely not need to touch on confidential information. For example, I don't believe that Public Counsel witness Stephanie Chase will have to touch on confidential information. And so I think, for those witnesses, we certainly do want an open process.

But there are other witnesses that will, and I agree with what's been stated by the other parties. But if there's a large percentage of a witness's cross that is confidential, then the entire portion can -- can

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confidential setting. And then what we can do is have the various parties, within some period of time afterwards, go through the transcript and identify the portions that are public. And then the Commission can post the public portions on its website.

JUDGE KOPTA: Well, first of all, confidential information needs to be designated. And so I'm assuming that the parties have designated information that they believe is confidential.

If someone wants to ask a question that elicits a response for information outside of the testimony that may be confidential, then I would expect that either counsel for that witness or Ms. Cortez would object, if we are in open session, to any response to that question.

That having been said, that still leaves open the question of whether it makes sense to have to go witness by witness in terms of confidential session or whether we have a more global closed hearing.

MR. STEESE: I think witness by witness. That's going, at least from us, there's going to be some that have a significant portion that are public, as I understand it. And so it makes sense to do witness by witness.

JUDGE KOPTA: Ms. Gafken?

be done in a closed -- closed session.

So those are our preferences.

JUDGE KOPTA: All right.

Judge Doyle, you had something that you wanted to add?

JUDGE DOYLE: Yeah. Just a quick logistical matter. Our coordinator, Ryan Smith, put in the chat we have a number of entities on the call that are not properly identified. So when we do go into confidential proceedings, it will be a breakout room that's been designated by those who have been pre-identified as signing the confidentiality agreement.

And so for instance, Room Audio 1, we can't admit that and guarantee confidentiality without knowing all the participants being clearly identified.

So if you could either reidentify your -- your connection or in the chat identify clearly exactly who is in that room so we can guarantee confidentiality. Thank you.

MR. SHERR: Judge Doyle, I can respond to that briefly. This is Adam Sherr on behalf of CenturyLink.

The CenturyLink team, which is rather significant for the hearing, is in downtown law office space. We are -- we are occupying two conference rooms.

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is --

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The conference room that we're speaking from, I believe, is identified as CLC Room 1. So we have a connection for the room, but our individual connections are on our computers.

And there is another -- what is the other room identified as? There's another room identified by -- it's just as -- I think there's a room that is identified as Perkins Coie, and that contains -- there are several members of our team that are there.

Everyone that is here on behalf of CenturyLink Communications has signed the protective order. So there is no one in either of those rooms that has not signed the protective order.

If you need -- if you would like us to provide a list and put it in the chat, I can. But you can rest assured that everyone here has signed the protective order.

JUDGE DOYLE: But I think that would be appropriate so that all the parties can guarantee that there's a list of those who are present.

We still have Room Audio 1, then a caller (508) 654-2013 -- oh, excuse me. The caller has been identified. So I guess it's just Room Audio 1. Is that also --

MR. SHERR: Yes. That's us. As I speak,

them disclosed in the live and open presentation. Thank you.

JUDGE KOPTA: Ms. Ornstein?

MS. ORNSTEIN: Thank you, Judge. I just wanted to note that while we are discussing the transition 911 system in the state of Washington, there are many elements that are still in place today in the state of Washington as well as in other states' 911 system. So that requires just an extra degree of consideration when addressing us. We don't have an objection to having a witness-by-witness approach, but we'd ask all the parties to be particularly careful in any of the details that are designated as confidential now remaining. So it's not just the state of Washington that may be impacted if something was to be a security risk.

JUDGE KOPTA: All right. Well, it sounds like the best approach is go witness by witness. So what we will do is at the beginning of each witness's testimony, go as far as we can with non-confidential or if it's a witness that, essentially, there's very little, if any, that is not confidential, then we can identify -- then I would appreciate counsel conducting the cross to inform us of that fact and we can immediately, then, go into a confidential session.

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you'll see that it identifies. So we're using the audio from the room in this high-tech setting. So that's why -- it has its own connection.

JUDGE DOYLE: Okay. So yeah. If you can make that list available so that all the parties can be -- rest assured that -- that everyone has signed that agreement. Thank you.

MR. SHERR: You bet. Thank you. JUDGE KOPTA: Ms. Cortez?

MS. CORTEZ: Thank you. Yes. I agree with -- turning back to how the proceedings should be handled, and I agree with everything that's been said. I certainly can object when a question is asked. However, I don't know what the witness will say, and I think it's -- we've all indicated it could be that a witness will misunderstand what is confidential and what is not. And once information is out there, especially as it relates to the security of the network, you know, it's impossible to pull that back.

So I do think that the witness-by-witness approach is best, and with the, you know, interest in the open administration of justice, I think Mr. Steese's suggestion is a good one, that we could release the transcript later with an agreement of things that are not confidential rather than taking the risk of having

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I don't know about trying to do a review of the transcript afterwards. We can talk about that at the end of the hearing to see whether that makes sense. I mean, we share Public Counsel's concern that as much of our proceedings as possible should be open to the public.

At the same time, we also are very aware that much of this information is extremely sensitive, and we do not want it to be available to those who are not entitled to see it.

So we're trying to balance those two things. And we will do what we can as we go forward. But I think that's the best that we can do at the moment.

So are there any other preliminary matters that we need to address before the Commissioners join us and we begin the cross-examination?

Hearing none, I see that Commissioner Doumit

MR. SHERR: Excuse me. Excuse me, Your Honor. This is Adam Sherr. I'm sorry. I muted myself for the benefit of all, but I am now off mute.

Just one brief preliminary matter, and that is I believe asked on Friday if Commission knows if CLC witness Lobdell would be excused or would be expected to appear to receive questions from the judges -- from Your

Page 81 1 1 Honor or from the Commissioners. Do you happen to know? 2 2 JUDGE KOPTA: We do not yet know at this 3 point. I mean, some of it may depend on what the other 3 witnesses' testimonies are and the extent to which 4 4 5 5 Ms. Lobdell's take on some of the information or some of 6 the information that comes up as it references to her 6 7 testimony may be useful. 7 8 So --8 9 9 MR. SHERR: Thank you. 10 JUDGE KOPTA: -- I hate to have her sit 10 around and wait and only not to have to do it, but the 11 11 12 only thing I hate worse than that is us needing to ask 12 13 her questions and she's not available. 13 MR. SHERR: It's all good. Thank you for 14 14 15 responding. Appreciate it. 15 16 JUDGE KOPTA: All right. Sure. 16 17 I see that the Commissioners have joined us. 17 18 So at this point, let's take appearances for the record, 18 19 beginning with Commission Staff. 19 20 MR. MCGINTY: William McGinty on behalf of 20 21 21 Commission Staff. 22 JUDGE KOPTA: And Public Counsel. 22 23 MS. SUETAKE: Public Counsel. This is Nina 23 24 Suetake for Public Counsel, and I'm joined by 24 25 co-counsels Lisa Gafken and John Nelson. 25 Page 82 1 JUDGE KOPTA: And for the Company? 1 MR. SHERR: Morning. Adam Sherr on behalf 2 2 3 of CLC. 3 MR. STEESE: And Chuck Steese on behalf of 4 4 5 CLC, Your Honor. 5 6 JUDGE KOPTA: And for the Washington 6 7 Military Department? 7 Mr. Sherr? 8 8 MS. CORTEZ: Dawn Cortez on behalf of the 9

unmuted. So I think that should take care of everything. And with that, we begin with Staff

witnesses. Mr. McGinty, do you want to introduce your first witness?

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MR. SHERR: Your Honor, can I interject? I'm sorry. This is Adam Sherr again. One more -- one more question.

Do we know if everyone in the meeting room here has signed the protective order? There was an issue regarding confidentiality that just struck my mind that I don't think we need -- I think we touched on, but didn't address directly. And that is with regard to screen sharing. There may be a need to put onto the screen, for convenience of the witness, the document that's been marked confidential and to ask that witness a question, not necessarily about the confidential part, but that confidential information will then appear on the screen. If everyone in the room has signed the protective order, there isn't an issue with that, but if not, that may be an issue.

JUDGE KOPTA: Well, my understanding is that we will only be addressing or disclosing confidential information in closed sessions. So if there's a need to screen share a portion of testimony that includes

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confidential information, then that should be in a
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closed session.

The other option would be to use a redacted version that redacts the confidential portion to the extent that that's not germane to the questions that are being asked of that witness. Does that make sense,

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MR. SHERR: It does. It does.

JUDGE KOPTA: All right. Well, then, we will proceed along those lines.

Mr. McGinty.

MR. MCGINTY: Yes, Your Honor. First Staff witness is Jacque Hawkins-Jones, whose testimony has been prefiled with the Commission.

COMMISSIONER DOUMIT: Your Honor -- if I may. Apologize.

JUDGE KOPTA: That's right. Commissioner Doumit, I neglected to allow you to speak first. So please do.

COMMISSION DOUMIT: I apologize for that, Your Honor. I have two statements for the record that I wanted to make, Your Honor. Both relate to the potential sort of, you know, involvements -- but in the matter.

The first is that I worked for Verizon until

9 Washington State Military Department. 10 JUDGE KOPTA: And on behalf of ComTech? MS. ORNSTEIN: Susan Ornstein on behalf of 11 12 Telecommunications Systems, Inc. 13 JUDGE KOPTA: Any other appearances? 14 All right. Hearing none, just a brief 15 technical observation. Please mute your phones if you are not speaking or in the middle of doing the cross or 16 17 being responded to cross questions. 18 In addition, I don't think we need the 19 cameras on, except for those who are directly involved 20 in the cross-examination, just to sort of reduce the 21 clutter a little bit. I mean, it's always nice to see 22 people, but our focus is on the witness who is 23 testifying. 24 I will be on camera. I'm assuming the

Commissioners will also be on camera and will be

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Page 85 Page 87 I came to the Commission, and I learned from their 1 1 MR. MCGINTY: No further questions. 2 record that Verizon as an originating provider was 2 JUDGE KOPTA: All right. Your testimony has 3 impacted in some degree by -- by the outage. I 3 previously been admitted, and therefore, we will move to 4 wanted to say I don't recall that incident, and I don't 4 cross-examination. Who is going to be doing that, 5 recall having anything to do with it sort of at the 5 Mr. Sherr or Mr. Steese? 6 time. But I wanted to state that for the record and 6 MR. SHERR: This is Adam Sherr, Your Honor. 7 want, you know, to ask whether there will be any 7 I will be. 8 8 objections to my participation based on that prior JUDGE KOPTA: All right. Proceed, 9 affiliation. 9 Mr. Sherr. 10 JUDGE KOPTA: All right. So are there any 10 CROSS-EXAMINATION BY MR. SHERR: objections to Commissioner Doumit participating in this 11 11 proceeding under -- with that understanding? Q. Good morning, Ms. Hawkins-Jones. Nice to see 12 12 you. I think we've spoken a couple times on the phone, 13 MR. MCGINTY: No objections from Staff. 13 14 JUDGE KOPTA: I hear no other objections, 14 but nice to meet you, well, sort of in person here. 15 and therefore, there are none. So we are -- second 15 You were not a Commission employee at the time 16 point. 16 of the December 2018 outage; is that correct? 17 COMMISSIONER DOUMIT: Second point, yes --17 A. Correct. 18 thank you, Your Honor -- is that my son works for Delta 18 Q. You joined the Commission in August of 2019? 19 Partners, which is a wholly owned subsidiary of FTI 19 A. Correct. 20 Consulting, one of the Company's witnesses, expert 20 Q. When were you assigned to investigate the outage witnesses, and works with -- for FTI Consulting. I have at question in this case? 21 21 22 not discussed this case in substance with my son 22 A. In August of 2019. 23 whatsoever, but I did, again, want to make that 23 Q. Okay. Immediately upon joining the Commission? 24 statement for the record to discern whether there may be 24 A. Correct. 25 objections based upon my relationship with my son. 25 Q. Okay. Were you assigned to head the Page 86 Page 88 JUDGE KOPTA: Are there any objections? 1 investigation on behalf of Staff? 1 2 MR. MCGINTY: No objections from Staff. 2 A. I was assigned as the lead investigator of this 3 MS. GAFKEN: No objections from Public 3 investigation. Q. Okay. Who was the lead investigator prior to 4 Counsel. 4 5 you? 5 JUDGE KOPTA: All right. 6 COMMISSIONER DOUMIT: Thank you, Your Honor. 6 A. Susie Paul. 7 7 Q. Okay. Is Ms. Paul still an employee of the Sorry for the interruption. Thank you. Commission? 8 JUDGE KOPTA: No, not at all. I'm glad you 8 9 9 A. No, she is not. clarified that. 10 Q. When you were assigned to investigate the outage 10 (Jacque Hawkins-Jones sworn.) in August of 2019, were you told that the investigation 11 11 (Main session.) 12 was focused solely on CenturyLink? 12 13 A. No, I was not. 13 EXAMINATION BY MR. MCGINTY: 14 Q. When did that -- when was that decision made? 14 15 A. In consultation with Commission Staff and our 15 Q. Ms. Hawkins-Jones, so you previously filed 16 then expert. After review of all the evidence, Staff 16 testimony with the Commission; is that right? 17 17 made a determination in their investigative report. A. Correct. 18 Q. And when was -- when was the decision made that 18 Q. And is all of that testimony still true and 19 the investigation would be solely focused on 19 correct, to the best of your knowledge? 20 CenturyLink? 20 A. Correct. 21 MR. MCGINTY: Objection. Asked and 21 Q. And you adopt it today? 22 answered. 22 MR. SHERR: Well, with respect, I asked 23 23 Q. Including the cross answering testimony that you 24 when, and I don't believe Ms. Hawkins-Jones responded. 24 filed? 25 JUDGE KOPTA: I'll allow the question. 25 A. Yes.

Page 89 Page 91 Q. Okay. And those have been -- just for your 1 A. I wouldn't be able to tell you when exactly that 1 2 2 reference, those have been identified as occurred. 3 BY MR. SHERR: 3 Cross-Exhibits JHJ-26CX and 27CX? Q. Okay. And you mentioned a prior expert. That A. Yes. 4 4 5 was Mr. Wheeler, correct? 5 Q. You remember receiving these. 6 A. Correct. 6 And those call logs were broken out by hour by 7 Q. Over the course of the two years Staff 7 the total number of calls during that hour and by how 8 investigated the outage, Staff issued five sets of 8 many successful and failed calls to 911 there were; is 9 informal data requests to the Company; is that true? 9 that accurate? 10 A. I believe so. I would have to look to confirm. 10 A. Yes. Q. Could you take a look at Exhibit JHJ-3C, which Q. Okay. And there was, again, there was one for 11 11 CenturyLink and one for ComTech? 12 was attached to your direct testimony. Let me know when 12 13 vou're there. A. Correct. 13 14 A. Okay. What was the number again? 14 Q. Okay. And if the calls -- if for each row, 15 Q. It's JHJ-3C. And this was the narrative portion 15 which was an hour of the day, the number -- for the 16 of the Staff investigation report that you just alluded 16 number of failed calls, an error code was given as to 17 17 the nature of the error. Do you recall that? 18 18 A. Correct. A. And then what -- was this provided to the Staff? 19 Q. This is attached to your direct testimony. 19 Q. And CenturyLink in its cover email that -- that A. So that's Staff investigation report? 20 accompanied those call logs defined the various --20 Q. That's right. That's Exhibit JHJ-3C. Do you various error codes. Do you recall that? 21 21 have access to that now? 22 22 A. Yes, I do. 23 A. Yes, I do. 2.3 Q. And these logs showed thousands of failed 911 Q. Okay. If you're -- are you looking at it 24 calls during the time frame to ComTech, sort of PSAPs. 24 25 electronically? 25 Do you recall that? Page 90 Page 92 A. Yes, I am. 1 1 A. Correct. 2 Q. And virtually no unsuccessful calls to 2 Q. Great. So it's a 28-page PDF. Could you look 3 at page 12 of the PDF. If you go to the very bottom, it 3 CenturyLink PSAPs. Do you recall that? 4 says page 10. I will note that in this case, most 4 A. That's how it was presented, yes. 5 Q. Okay. And CenturyLink explained that the small 5 documents have multiple numbers on them. So that can be 6 a little confusing, but let me know when you're there. 6 number of uncompleted calls did not actually fail as a 7 result of the network outage. Do you recall that? 7 A. I am looking at page 10 of the report. 8 8 Q. Great. A. I believe that's how it was presented, yes. 9 9 Q. Okay. After receiving that data -- and let me So if you look at the bottom -- the bottom --10 go back. 10 the very, very end of that page, it says 2018 11 So this was -- you received the data several 11 investigation information. Could you just read to 12 months before the complaint was filed in this case 12 yourself the first sentence? 13 against CenturyLink, true? 13 A. Okay. 14 A. Yes. 14 Q. Does that refresh your recollection as to how 15 Q. Okay. After receiving the data that we just 15 many sets of data requests the Staff sent to CenturyLink 16 discussed, did Staff send any follow-up questions to 16 during the course of the investigation? 17 ComTech? 17 A. Yes. 18 A. I don't believe so, no. 18 Q. Okay. It was five; is that correct? 19 Q. None to explore whether something specific in 19 A. Correct. It says five. 20 ComTech's practices or network design caused 911 calls 20 Q. Great. 21 to fail in Washington? 21 In your response to Staff's final set of 22 A. So we didn't send any follow-up after receiving 22 informal data requests to CenturyLink, that was from 23 these. 23 August of 2020, CenturyLink produced 911 call logs, one 24 Q. Okay. And over the course of the same two-year 24 for CenturyLink, one for ComTech. Do you recall those? 25 investigation, Staff sent one set of data requests, 25 A. I do recall seeing call logs, yes.

Page 93 Page 95 1 don't want your answer to include anything that's been informal data requests, to ComTech. That was in 1 2 February of 2019, and another brief follow-up -- set of 2 identified as confidential. 3 follow-up questions in August of 2019. Do you recall 3 But do you have Exhibit JHJ-25CX in front of 4 those? 4 you? 5 A. I recall sending data requests to CenturyLink 5 A. Yes, I do. 6 during those times. I don't recall exactly what was on 6 Q. Okay. And these are the August 2019 follow-up 7 them. 7 question from Staff to ComTech as well as their 8 Q. Okay. Well, fair enough. Let me clarify. I'm 8 September 12, 2019 responses; is that correct? talking about sending data requests to ComTech, not 9 9 A. That is correct. 10 CenturyLink. 10 Q. Okay. And, again, you have this electronically in front of you? A. Correct, yes. 11 11 Q. Okay. So there was an -- and if -- for your 12 12 A. Yes. I do. reference -- and this isn't a memory test -- so for your Q. If you could take a look at page 4 of the PDF. 13 13 I want to direct your attention specifically to the 14 reference, Exhibit JHJ-24X and JHJ-25CX are the two sets 14 15 of auestions. 15 question, the Data Request No. RS-3A. It appears about 16 A. Yes. 16 halfway, two-thirds down the page. 17 Q. Just to clarify, you recall that there were --17 A. Yes, I'm there. 18 there was one set of questions sent in February '19 --18 Q. Can you just read the question and answer to 19 of 2019 and then a brief follow-up sent in August of 19 yourself, and let me know when you've done so. 20 2019? 20 A. Okay. A. Correct. Q. Okay. So here ComTech explains that its SS7 21 21 connectivity was impacted by the outage and that it 22 Q. Let's take a look at Exhibit 24X. Let me know 22 23 when you have that on your screen. 23 experienced intermittent lack of redundancy -- excuse me -- intermittent lack of circuit redundancy, correct? 24 A. I have it available. 24 25 Q. This document -- excuse me. Go ahead. 25 A. Correct. Page 94 Page 96 Q. And Staff received these responses 15 months 1 A. I have it available. 1 2 2 Q. I'm sorry. I spoke over you. Can you say that before filing the complaint against CenturyLink, true? 3 3 A. They received them in September of 2019. Q. And the complaint was filed in December of 2020? 4 A. I have the document JHJ-24X open. 4 5 Q. Thank you. 5 A. Correct. 6 And these are Staff's initial questions to 6 Q. Okay. Any time within those 15 months -- at any 7 ComTech in February of 2019? 7 time during those 15 months did Staff follow up to 8 A. Correct. 8 investigate how ComTech design constructed or maintained 9 Q. And Staff doesn't ask any questions here about 9 its SS7 network supporting 911 calling in Washington? 1.0 ComTech's network design, does it? 10 A. Staff was constantly reviewing information as 11 A. I didn't draft these questions. These were 11 far as the data responses received from ComTech, and in 12 drafted by Susie Paul. So these are the questions that 12 consultation with our experts on the -- how the network 13 she asked at that time. 13 was designed. And so that -- so I don't know if I would 14 Q. Okay. Can you take a -- just take a look. I 14 be able to answer your question exactly. 15 understand that you didn't draft them. Can you take a 15 Q. Well, let me ask a more specific question. look through the questions. Let me know when you 16 16 Did Staff follow up with ComTech to investigate 17 proceeded reading through them. 17 how ComTech's network was designed, constructed, or 18 A. Yes. 18 19 Q. Okay. Are there any questions about ComTech's 19 A. If there was no data request provided, then no, 2.0 network design? 20 Staff did not follow up with ComTech. 2.1 A. No. 21 Q. Great. Q. Thank you. 22 22 And you reviewed the prefiled testimony of Let's look at Exhibit 25CX. Now, I will note 23 23 CenturyLink witness Stacey Hartman, which has since been 2.4 this document has been identified as confidential. And 24 adopted by Jeanne Stockman, correct? 25 so be careful to the extent that your answer -- you 25 A. That's correct.

Page 99 Page 97 1 Z locations identified. Do you see those --Q. Okay. And you saw that that, among other 1 2 things, that attached to that testimony were emails and 2 A. Yes. 3 documents gathered by CenturyLink through discovery in 3 Q. These are the circuits -- this is your understanding that these are the circuits that ComTech 4 this case? 4 was leasing from CenturyLink for its use, for ComTech's 5 A. Yes. 5 6 MR. SHERR: Your Honor, I think this is 6 use, as SS7 links in support of its 911 network? 7 where we may have to go into confidential concession for 7 A. That is ComTech's response, yes. 8 one brief segment of questions. 8 Q. Okay. Do any of these four connections originate and terminate within the state of Washington? 9 JUDGE KOPTA: All right. Is it -- will you 9 10 be finished with your cross after this? 10 A. I wouldn't be able to answer that. Q. Okay. Well, look at that, which is identified MR. SHERR: I will not. This is new. Would 11 11 12 you like me to -- would it be preferable I skip this and as No. 1 here. I don't want you to read it out loud. 12 It identifies two locations. 13 13 come back to it? 14 JUDGE KOPTA: That would be my preference, 14 A. Correct. 15 15 MS. CORTEZ: Objection. If I may, I'm -- I yes. 16 MR. SHERR: Okay. 16 guess I'm a little confused. One of the things that I 17 JUDGE KOPTA: I don't want to have to go 17 asked not to be raised in the open sessions were 18 18 back and forth. That's the concern I have. If this locations. These seem to be locations that relate, one, 19 comes up again, then we have to go into another session. 19 to the transition, but, two, these two entities may still be in place today. So I thought these things 20 20 So let's get them all at one time. MR. SHERR: Okay. Sounds good, Your Honor. 21 21 would be addressed in the closed session. 22 BY MR. SHERR: 22 JUDGE KOPTA: Well, they are designated as 23 Q. Let me change subjects. 23 confidential. So it sounds like you need to reserve Looking back at Exhibit 25X. 24 that for the confidential session, Mr. Sherr. 24 25 25 MR. SHERR: Understood. Thank you. A. Okay. Page 98 Page 100 Q. Could you scroll down to this is page 6 of the 1 1 MS. CORTEZ: Thank you. 2 2 PDF and, again, these are the follow-up questions from BY MR. SHERR: 3 ComTech to Staff, correct? 3 Q. Ms. Hawkins-Jones, let's look again at 4 A. These are their responses, yes. 4 Exhibit 3C, which is attached to your direct testimony. 5 Q. Okay. So the follow-up questions, the questions 5 This is the Staff investigation report. 6 were issued in August of '19, these responses from 6 A. Give me one minute to pull it up. 7 September of '19? 7 Q. Okay. 8 A. Okay. I am there. 8 A. Correct. 9 Q. Okay. Looking specifically at the response to 9 Q. Okay. And this is the investigation report that question identified as RS-3C, which is the only -- the 10 was filed on the -- with the Commission by Staff on the 1.0 only question that appears on that last page of the 11 same day as the complaint was filed in December of 2020, 11 document? 12 true? 12 13 13 A. Correct. A. I believe so, yes. Q. Okay. And I'll note that there is information 14 14 Q. Did you draft the report? 15 that is identified as confidential here. So please do 15 A. I did draft the report, yes. not read that information out loud. 16 Q. Okay. Obviously, you were familiar with its 16 17 Do you see that within that confidential 17 contents, then, before it was submitted by Staff? 18 information, without identifying specifics to it --18 A. Yes, I am familiar with it. 19 MR. SHERR: And I'll be honest, Your Honor. 19 Q. Okay. And this 28-page document is merely the 2.0 I'm not sure if this information is still considered 20 narrative portion of the report, but the report also 21 confidential, but it's identified as such here. So I 21 contained voluminous exhibits as well, true? 22 2.2 A. Correct. will treat it as such. 23 Q. Okay. And those have been filed with Commission 23 BY MR. SHERR: 2.4 Q. Seeing that -- where -- the information that is 2.4 in this proceeding? identified as confidential, there are four circuit A and 25 25 A. Correct.

Page 101 Q. Okay. If you could take -- and each of those 1 1 Q. Do you agree that ComTech was responsible for 2 2 attachments were identified as Appendix A through -- I designing, constructing, and maintaining its own SS7 3 can't remember -- but A through some letter; is that 3 network? 4 4 true? N or O? That's how they were identified? MR. MCGINTY: Objection. Beyond the scope. 5 5 A. Yes. JUDGE KOPTA: Mr. Sherr? 6 Q. Okay. Can you please open, on your screen, the 6 MR. SHERR: I'm simply asking if 7 document that's been marked as Exhibit JHJ-28CX? 7 Ms. Hawkins-Jones, who led the investigation, has an 8 A. Okay. I'm there. 8 opinion as to whether ComTech had responsibility for its 9 9 Q. Okay. And this was marked, as you can tell from own network. 10 the upper left-hand corner of the first page, this was 10 JUDGE KOPTA: I will allow the question. 11 identified as Appendix G to the Staff investigation A. I am not a network design expert, and so I 11 12 12 report? wouldn't be able to speak on that. We worked in A. Correct. 13 consultation with our technical experts. 13 BY MR. SHERR: 14 Q. Okay. And what this document is is the root 14 15 cause analysis document compiled by ComTech just a 15 Q. Does the Staff investigation report, which was 16 couple weeks after the outage; is that your 16 Exhibit JHJ-3C, does the Staff investigation report 17 understanding? 17 address the sufficiency of ComTech's SS7 network design? 18 A. Correct. 18 A. Staff's investigation report goes over the 19 Q. When did Staff receive this document? 19 recommendations provided to the Commission. And in that 20 A. I would have to look to confirm the date. 20 case, it is regarding CenturyLink, not ComTech. 21 Q. Do you know approximately when? 21 Q. Thank you. 22 22 A. I believe sometime in January of 2019. I'm going to have you look back at your direct 23 Q. Good enough. Thank you. 23 testimony, which is Exhibit JHJ-1CT. Let me know when And you've read this document before, correct? 24 you're there. 24 25 A. Correct. 25 A. I am there. Page 102 Q. Could you look at the very last page, which is 1 Q. Okay. Great. 1 2 2 page 6. Let me know when you're there. Can you look at page 5 of your testimony. Let me know when you get to page 5. 3 A. I am there. 3 4 Q. Okay. The page 6 contains a table. The table 4 A. I am there. is entitled "Corrective and Preventative Actions." Do 5 5 Q. Starting at line 4, there's a question, Please 6 you see that? 6 briefly describe the December outage. 7 A. Yes. 7 So here you briefly describe the outage to the 8 8 Q. Would you read No. 4 to yourself. Again, it's 911 system in Washington, correct? not clear to me what portions of these documents are 9 9 confidential. So I don't want you to read it aloud. 10 Q. And you're aware that no part of CenturyLink's 10 11 911 system failed as a result of the Infinera outage, 11 But can you just read what's been identified as No. 4 to yourself, and let me know when you've done that. 12 12 aren't you? 13 13 A. Can you repeat the question? A. Okay. 14 Q. Okay. At any point after receiving this root 14 Q. I can. 15 cause analysis and before filing the complaint nearly 15 Are you aware that no part of CenturyLink's 911 two years later, did Staff investigate whether ComTech 16 system failed as a result of the Infinera outage? 16 17 had sufficient circuit diversity for its SS7 links? 17 A. I don't know if I would be able to agree with 18 A. I wouldn't be able to say, given that this was 18 that statement. 19 provided when I was not an employee of the Commission. 19 Q. Are you aware of any interference with calls 20 Q. Are you aware of any data requests or inquiries 20 going between originating service providers and Intrado 21 sent by Staff to ComTech, at any point after this 21 gateway? 22 document was received by Staff, where Staff inquired and 22 A. Could you rephrase? 23 investigated as to whether ComTech had sufficient 23 Q. Sure. I'm simply asking your awareness. Are

you aware of any interference, any issues, with calls

traversing between originating service providers and the

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Page 104

24

25

circuit diversity in December of 2018 for its SS7 links?

A. Not to my knowledge.

24

25

Page 107 Page 105 1 Intrado gateway? Ms. Hawkins-Jones led the investigation that led to a 1 2 A. Yes, I am aware. 2 complaint for millions of dollars against CenturyLink. 3 Q. Okay. What issues were there between -- well, 3 The determination of that complaint, the key let me ask you this: Do you testify regarding problems 4 4 determination of that compliant, which is about 911 with calls traversing between originating service 5 5 failure, is whether CenturyLink was responsible for 6 providers and the Intrado gateway? 6 calls failing. 7 A. The information that Staff has and what I have 7 And so I'm simply exploring 8 testified to has been in consultation with our technical 8 Ms. Hawkins-Jones' knowledge, if she has any, as to the 9 9 experts. And -- which is why we have what our existence of problems at various portions of the call 10 determination and recommendation was in our report. 10 JUDGE KOPTA: This witness does discuss the 11 11 So what I -- what I have testified to is what my 12 12 Commission Staff's investigation. So I think it's a recollection and knowledge is in the matter. Q. Okay. I want to make sure that the question was 13 13 proper inquiry, and if Ms. Hawkins-Jones doesn't know, 14 clear enough because it may not have been to you. 14 she can say that she doesn't know. 15 Are you aware that Intrado, I'm not speaking 15 A. And I think I have stated that I am not a 16 about ComTech and I'm not speaking about Infinera, that 16 technical network design expert, and we did rely on our 17 Intrado was the underlying 911 provider for CenturyLink 17 experts for that specific knowledge. 18 in Washington at the time? 18 BY MR. SHERR: 19 A. Yes, I am aware. 19 Q. Okay. So you don't know is your answer to the 20 Q. Okay. So I am talking about the portion of the 20 auestion? call that went between the originating service provider 21 A. Yes. 21 22 and Intrado's gateway. 22 Q. Okay. Are you aware of any issues with the 23 Do you have evidence that there were -- there 23 operation of the Intrado selective router at the time of 24 were problems with calls going between the originating 24 25 service provider and the Intrado gateway? 25 A. Could you restate the question? Page 106 Page 108 A. I believe that I would not be the -- this -- can 1 Q. Sure. 1 2 2 you rephrase the question? Are you aware of any issues with the operation of the Intrado selective router at the time of the 3 Q. Sure. I can. 3 Are you aware of any problems -- now this -- let 4 4 outage? 5 5 me take you back. This is December of 2018, during the JUDGE KOPTA: Mr. Sherr, I understand where 6 network event, during the outage. 6 you're going with this. But I think we've pretty well 7 Are you aware of any calls failing, if you're 7 established that Ms. Hawkins-Jones is not a technical 8 thinking about the call flow, between the originating 8 expert. She's going to give you the same answer each 9 service provider and the Intrado gateway? 9 time. So I don't know that it's terribly productive to 10 A. I'm not aware of calls failing. 10 continue down this road. Q. Okay. Are you aware of any issues with calls 11 MR. SHERR: I understand, Your Honor. I can 11 traveling between the Intrado gateway and the Intrado 12 12 move on. 13 13 selected router? BY MR. SHERR: A. Again, I'm not a network design expert, and we 14 14 Q. Ms. Hawkins-Jones, you understand that this relied on them for their consultation in this 15 15 complaint addresses not an outage on CenturyLink's 911 16 network, but on an outage affecting one of CenturyLink's 16 investigation. 17 Q. Understood. But I'm asking about your 17 national transport networks; is that correct? 18 awareness. 18 A. Correct. 19 Are you aware of any issues with calls traveling 19 Q. I'm going to have you change your screen one 2.0 between the Intrado gateway and the Intrado selected 20 more time. If you take a look at Exhibit JHJ-4. Let me 21 router? 21 know when you're there. 22 MR. MCGINTY: Objection. Lack of 22 A. You said JHJ-4? 23 foundation. I'm not sure this witness is familiar with 23 Q. Yeah, 4. This was an attachment to your direct 24 24 the call flow details counsel is asking about. testimony as well. 25 25 MR. SHERR: Again, Your Honor, A. I would need a minute to pull that up.

,	Page 109			Page 111
1	Q. If you're not able to, I can also share my	1	*CONFIDENTIAL TESTIMONY*	
2	screen.	2	CONTIDENTIAL TECHNICITY	
3	A. That would be great. Thank you.	3		
4	Q. Sure. Sorry. I could have said that earlier.	4		
5	Are you able to see my screen?	5		
6	A. Yes.	6		
7	Q. Great.	7		
8	And so Exhibit 4, JHJ-4, to your testimony was	8		
	the narrative of the FCC's investigation report from	9		
	August of 2019; is that correct?	10		
11	A. Correct.	11		
12	Q. Okay. And this is also Appendix C to the Staff	12		
	investigation report on file with the Commission, true?	13 14		
14	A. Correct.	15		
15 16	Q. Are you aware that CenturyLink, as a result of this investigation, CenturyLink was fined a total of	16		
	\$500,000 for the nationwide impact of the outage by the	17		
	FCC?	18		
19	A. Yes.	19		
20	Q. And the FCC found only 11 failed calls on	20		
	CenturyLink's 911 network. And all of those were in	21		
	Arizona, none in Washington; is that correct?	22		
23	A. If that's what they reported, yes.	23		
24	Q. You don't have any reason to disagree with that?	24		
25	A. I do not.	25	*CONFIDENTIAL TESTIMONY*	
	Page 110			Page 112
1	Q. Okay.	1	*CONFIDENTIAL TESTIMONY*	
2	MR. SHERR: Your Honor, the remaining	2		
3	questions I'll go back to all need to be in confidential	3		
4	session.	4		
5	JUDGE KOPTA: All right. How long do you	5		
6 7	anticipate your cross continuing?	6		
8	MR. SHERR: Oh, probably about ten minutes. JUDGE KOPTA: Okay. All right. I just want	7		
9	to make sure we're still under our time limits.	8 9		
10	It is currently 10:30. So why don't we take	10		
11	our morning break. I would like to keep it to ten	11		
12	minutes, if possible. So if we would well, in this	12		
13	case, since it's 10:28, if we can resume at 20 until	13		
14	11:00, and at that time we will go into confidential	14		
15	session to allow you to ask questions that pertain to	15		
16	information designated as confidential.	16		
17	MR. SHERR: Thank you.	17		
18	JUDGE KOPTA: Let's be off the record.	18		
19	(A break was taken from	19		
20	10:29 to 10:43.)	20		
	(Confidential session.)	21		
21	[*CONFIDENTIAL TESTIMONY*	22		
22	•			
22 23		23		
22	*CONFIDENTIAL TESTIMONY*	23 24 25	*CONFIDENTIAL TESTIMONY*	

,		Page 113			Page 115
1	*CONFIDENTIAL TESTIMONY*		1	*CONFIDENTIAL TESTIMONY*	
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		Page 114			Page 116
1	*CONFIDENTIAL TESTIMONY*		1	*CONFIDENTIAL TESTIMONY*	
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25	*CONFIDENTIAL TESTIMONY*		25	*CONFIDENTIAL TESTIMONY*	l

24 (Pages 113 to 116)

,	Page 117		Page 119
1	[*CONFIDENTIAL TESTIMONY*	1	Q. Did CenturyLink use that national transport
2	•	2	network to fulfill any 911 related responsibilities that
3		3	it had?
4		4	A. Can you restate the question?
5		5	Q. Sure.
6		6	So did CenturyLink use the national transport
7		7	network to fulfill any 911-related responsibilities that
8		8	it had?
9		9	A. Yes.
10		10	Q. And what were those responsibilities?
11		11	A. To provide 911 service to the state of
12		12	Washington.
13		13	MR. MCGINTY: Okay. No further questions.
14		14	JUDGE KOPTA: All right. Thank you,
15		15	Ms. Hawkins-Jones. We appreciate your testimony. You
16		16	are excused.
17		17	Mr. McGinty, would you like to call your
18		18	next witness?
19	*CONFIDENTIAL TESTIMONY*]	19	MR. MCGINTY: Yes. I think next witness in
20	(Pause in the proceedings.)	20	the order is James Webber.
21	(Main session.)	21	JUDGE KOPTA: All right. Mr. Webber, if you
22	JUDGE KOPTA: Let's be back on the record.	22	could turn your camera on so we can see you.
23	Understand that the Commissioners have no questions for	23	THE WITNESS: Hopefully you can see me and
24	Ms. Hawkins-Jones.	24	hear me now.
25	Mr. McGinty, do you have redirect?	25	JUDGE KOPTA: I can both see you and hear
	Page 118		Page 120
1	MR. MCGINTY: Yes, very briefly, Your Honor.	1	you.
2		2	THE WITNESS: Excellent.
3	REDIRECT EXAMINATION	3	(James Webber sworn.)
4	BY MR. MCGINTY:	4	JUDGE KOPTA: Mr. McGinty, do you have any
5	Q. First of all, Ms. Hawkins-Jones, you testified	5	questions for Mr. Webber?
6	that you rely on consultation with experts in your	6	MR. MCGINTY: No. His testimony is
7	investigation in this case. Could you describe that	7	prefiled. As long as that's adopted and admitted into
8	process?	8	the proceeding, no questions.
9	A. Sure. So the I don't know if I glitched out	9	JUDGE KOPTA: It has been admitted with
10	for a second Staff did consult and hire the	10	certain caveats, but none that are germane to exhibits
11	consultants to provide us with the technical expertise	11	that he filed.
12	regarding the network, if we had questions, what that	12	So who on behalf of CenturyLink will be
13	looked like, walk us through, explain those things to us	13	questioning Mr. Webber?
14	to use and encapsulate that information into our	14	MR. STEESE: Your Honor, it will be Chuck
15	investigative report.	15	Steese that's questioning Mr. Webber.
16	Q. And what's the reason for that?	16	JUDGE KOPTA: Do you have a significant
17	A. That is because on Staff or yeah. On	17	amount of questions that do not involve confidential
18	Staff, the Commission Staff, did not have that in-depth	18	information?
19	technical knowledge readily available.	19	MR. STEESE: Very little, but some. I tried
20	Q. Thank you.	20	to organize it where the first 20 minutes or so is
21	Now secondly, you testified that the outage that	21	non-confidential, Your Honor, and then we would go into
22	occurred in this case occurred on a CenturyLink national	22	confidential setting after that.
23	transport network and not on its 911 system. Do you	23	JUDGE KOPTA: Well, let's do it that way. I
24 25	recall that testimony? A. Yes.	24 25	want to make sure that we have as much on the public record as possible. So, Mr. Steese, you may proceed.
	A 100	1 75	record as dossible. So, IVII. Steese, VOU may broceed.
23	Α. 103.	-3	

Page 123 Page 121 1 911 connecting as originating service provider, not as a 1 And when you get to the point where you are aware that 2 confidential information is likely to be discussed, 2 911 provider, correct? 3 please let us know so that we can then go into 3 A. That's fair. Q. And so when I'm talking about designing a 911 4 confidential session. 4 network, I'm talking about designing a 911 network for 5 MR. STEESE: Of course, Your Honor. 5 6 (Main session.) 6 911 providers. You've never done that, correct? 7 7 A. Well, when you talk about designing a network, 8 CROSS-EXAMINATION 8 there's a lot involved in designing a network. And I've 9 9 BY MR. STEESE: been involved in analyzing network design and costs for 10 Q. Good morning, Mr. Webber. 10 all sorts of purposes. And I have been involved in the A. Good afternoon here in Chicago. 11 implementation of 911 from the perspective, as you 11 12 mentioned, of a local exchange carrier, which involves 12 Q. Thank you. 13 And we have met before in a different 13 switching connectivity, signalling connectivity, 14 proceeding, correct? 14 decisions regarding SIGTRAN, SS7, direct interconnection 15 A. We have. 15 via IP, et cetera. 16 16 Q. Let's start with a little bit about your So a lot of the issues comingle and overlap. 17 background. 17 And I think it's, to be fair to your question, 18 You're not an engineer, correct, Mr. Webber? 18 inaccurate to just blanket, make a statement that I've 19 A. That's correct. 19 not been involved in issues related thereto. 20 Q. And I reviewed your CV, which is MDW-2, and it's 20 Q. That wasn't my question, though, Mr. Webber. My 21 21 several pages long, correct? question was you were never involved in design of a 911 network for a 911 provider. And you identified several 22 A. I don't have the exact page count, but it is 22 23 several pages long. That's true. 23 things that you have done, but given that you didn't 24 Q. And in that CV you identify the various 24 identify that you had worked for a 911 provider helping 25 proceedings that you have acted as an expert in your 25 to design their network, I take it you have not done Page 122 Page 124 1 that, correct? 1 career, correct? 2 2 A. That is my intent, yes. A. I have not designed the totality of a 911 3 Q. And I searched that, and the word 911 is nowhere 3 network in the past. No, I have not. 4 in your CV. So have you ever been involved in a 911 4 Q. So let's turn and focus on diversity for a bit, 5 5 dispute before? and let's make sure we're defining the issue here. 6 A. Frankly, I don't recall if I've been involved in 6 You were aware that CenturyLink says in a 911 7 a 911 dispute, but I've certainly been involved in 911 7 network you should have circuits that are geographically 8 8 from a technical and a cost perspective assisting diverse, network diverse, and provider diverse. That's establishing 911 connectivity for at least one 9 9 what CenturyLink says, correct? 10 10 competitive local exchange carrier. A. Can you show me that? 11 11 So I do have experience with the costs, the Q. You've read the testimony of Mr. Turner, 12 12 equipment, the routing, the standards, and practical 13 13 application. A. I have. It's been a while. Q. But you have not designed a 911 network, Q. Do you not recall him saying that in his 14 14 15 correct? 15 testimony? 16 A. Not the three phrases that you identified 16 A. I don't know that I would say it -- that 17 definitively. As you'll note in my CV, I was a member 17 together. So I would like to see that. 18 manager of the competitive local exchange carrier. And 18 Q. Are you aware that Mr. Rosen from Public 19 in that scenario, it was my responsibility to identify 19 Counsel's witness, who has designed 911 networks, says 2.0 the signaling vendor, purchase the equipment, and 20 that circuits should be geographically, network, and 21 establish the 911 functionality. 21 provider diverse. Do you remember him saying that? 22 So in that regard, yes, I have been involved in 22 A. Again, I don't recall the exact words. If you'd 23 like to show it to me, I'd be happy to read it. 23 that, but that has not been the preponderance of my 24 2.4 Q. Okay. And your testimony is the only obligation career. 25 25 Q. So let's talk about that. You're talking about is to be geographically diverse with your circuits if

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you're a 911 provider, correct?

2.0

2.4

A. I don't think that's fair to say. If you take a look at the back end of my first piece of testimony, I identified the quad scenario, if you will. My understanding that ComTech or TSYS was employing for signalling with CenturyLink's chosen provider, which was then TNS, that provides for physical diversity, it provides for geographic diversity, and it also provides for route diversity.

Q. Okay. Perfect.

So what CenturyLink and Mr. Rosen are saying is a lack of network or provider diversity was a flaw in ComTech's design, and you disagree with that, correct?

A. I don't see any standard that was applicable, whether under the Commission's rules or the administrative codes in Washington, at the time of the outage that required the additional of, as you'll say it, provider diversity in addition to the terms that I previously identified.

Q. Okay. Perfect.

So let's focus – I'm going to do share screen, and we will move things along faster. So I'm going to bring up JDW-16, which is attached to your testimony. Do you recognize this document? I have some words highlighted to draw your attention to, but do you just

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but it says a single outage, not a single point offailure.

Q. And here the way that ComTech designed its network, the Green CenturyLink Network provided the potential for a single point of failure, correct?

A. No, I don't believe that's true. I think the words "network" and "single point" in the statement that you just identified are being conflated.

A single point is typically considered to be a physical single point, whereas that Green Network that failed, failed at multiple nodes simultaneously, and the whole network went down, which traverses thousands of miles, not a particular single point.

So it was more than just a cut at a particular point in cable or a failure of a particular card that wasn't redundant or another failure of a piece of equipment that wasn't redundant, but rather the packet storm that propagated through that IGCC's brought down the entirety of the entire Green Network. So I can't agree that it's a single point.

- Q. Are you aware that Mr. Rosen has identified software failures in the past as being, quote, "Single points of failure." You don't recall him testifying to that?
 - A. I don't recall his testimony verbatim, no.

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recognize this as an FCC release from October 15 of 2019, relating to the outage on the Green Network?

- A. I see that.
- Q. And do you see a paragraph highlighted, the first bullet. The FCC says, as of at least October 15 of 2019, ensure sufficient circuit diversity including provider diversity; do you see that?
- A. Yes. So a year later the FCC is making recommendations that describe adding provider diversity. I do see that.
- Q. And the reason is, quote, "To ensure that a single outage won't simultaneously affect different circuits," correct?
- A. Can you show me that?
- Q. It's highlighted right below.
- A. I do see that, yes. Again, this is a year after the outage, and this is adding, as I recall, additional recommendations to the industry after this outage, not prior to.
- Q. We'll get to that in a minute.

But the whole point here is to make sure that there is no single point of failure that can cause 911 calls to not complete. That's the reason for provider diversity, correct?

A. It says -- well, the words speak for themselves,

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Q. Now, you said that --

A. And let me -- let me be clear. I don't intend to be argumentative in this regard. We've got thousands of pages at issue in this case. I don't remember Mr. Rosen's testimony verbatim, and that's my point. It says what it says.

- Q. So your point with respect to Exhibit JDW-16 was this was a year after the outage. There was no standard that you can think of that created network or provider diversity for 911 providers before the incident. That's your testimony, correct?
- A. Can you show me that phrase?
- Q. I just think that's what you testified to, correct?

A. I don't recall saying that in my written testimony the way you've described it.

Q. I thought you just said that a moment ago; did you not?

A. We can go back and read the entirety of what I said a moment ago. My general point here is this is something that the FCC is seeking to do a year after the outage because the industry has matured and learned more and is now seeking guidance and establishing more information for the industry to consider as to reliability.

Page 129 Page 131 You'll notice that this CSRIC standards are 1 1 MS. GAFKEN: Judge Kopta, if I may, it 2 identified immediately above the highlighted language. 2 sounds to me like the witness doesn't know which exhibit 3 They did not include the language that's below, and the 3 it is that Mr. Steese is referring to. So providing FCC here is looking into that issue and establishing 4 4 that exhibit number, it's JDW-67CX. 5 additional industry guidance. 5 MR. MCGINTY: This is on page 31 of the PDF. 6 JUDGE KOPTA: I just want to interrupt for 6 So it won't -- if you're just opening up PDFs, it won't 7 the court reporter's benefits. CSRIC is all caps 7 be apparent from the first page. 8 C-S-R-I-C, correct? 8 THE WITNESS: Okay. And I apologize for the 9 MR. STEESE: That is correct. 9 technical -- here. 10 THE WITNESS: Thank you, Your Honor. And 10 BY MR. STEESE: Q. I'll ask you my first question. Do you see that I'll try to be more specific when I speak. I forget the 11 11 acronyms are so plentiful in our industry. 12 this NENA document was approved by the NENA executive 12 board April 5, 2018, eight months before the outage? 13 JUDGE KOPTA: Yes, they are, indeed. And I 13 14 belive you also said something about SIGTRANS. 14 MR. MCGINTY: I'm going to object. Witness 15 THE WITNESS: I did. 15 has indicated he'd like to be able to open the whole 16 MR. STEESE: S-I-G-T-R-A-N, all caps. 16 exhibit that earlier was approved. I'd like to give him 17 JUDGE KOPTA: All right. 17 the opportunity to do that. Can we take a short recess 18 THE WITNESS: And it's shorthand for 18 to make that happen? Maybe that's what we need to do? 19 signalling transport. 19 JUDGE KOPTA: All right. Let's be off the record while we address this technical issue. 20 JUDGE KOPTA: Okay. Again, we're just 20 trying to make sure that everybody can know what is 21 21 (Pause in the proceedings.) 22 going to be down on the page. 22 JUDGE KOPTA: Let's be back on the record. And, Mr. Steese, you may proceed. I believe Mr. Webber 23 BY MR. STEESE: 23 24 Q. Well, Let's look at Exhibit JDW-67X -- CX, 24 has at least a portion of the document to which you are 25 excuse me. But the page I'm going to be talking about 25 referring. Page 130 Page 132 will not have any confidential setting. 1 THE WITNESS: I do. 1 2 2 And do you see on page 31 of that PDF is BY MR. STEESE: 3 3 something entitled "Emergency Services IP Network Design Q. Mr. Webber, you can see that this is NENA 4 Information Document From NENA." Do you see that? 4 document that received executive approval on April 5 of 5 A. Right now you've got the -- the title page up. 5 2018, correct? 6 I would like to open up that document. So give me a 6 A. I agree with that. 7 7 Q. And NENA is the industry body that is moment. 8 8 Do you recall the original exhibit number to my exclusively responsible for overseeing 911 network 9 9 design, correct? direct? 10 A. It's one of the industry bodies that relates to Q. This wasn't in your direct testimony, sir. 10 11 911 design, reliability, et cetera. There are CSRIC, 11 A. Was it in my rebuttal testimony? 12 for example, under the FCC has a guidance as well, 12 Q. Nope. This is a cross-examination exhibit. 13 but -- but it is certainly one of the premier bodies. 13 14 Q. Let's turn to page 40 of the PDF. Do you see 14 Q. And do you see that -- do you know what NENA is? 15 section 2.1.2 ESInet design considerations? 15 A. It's the emergency numbering administration. 16 A. 2.12 ESInet design, I do. 16 Falls under the FCC's guidance. Q. And NENA is --17 Q. And it's talking about ESInet, Emergency Service 17 18 Infrastructure, the mission critical infrastructure 18 A. I'm still looking for that document. So I would 19 systems that support NG911 must be established with the 19 like a moment 20 very highest degree of security reliability, resiliency, 20 JUDGE KOPTA: And, again, for the court 21 redundancy, survivability, and diversity. And it 21 reporter's benefit, NENA is all caps, N-E-N-A. 22 continues. Do you see that? 22 BY MR. STEESE: 23 A. I do. 23 Q. If you want me to move the page down or a few 24 Q. And it says it is important to point out that 24 pages, I will. My first question is going to be 25 even when redundant physical circuits are quartered, for 25 relatively general, and then...

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- the most part Legacy PSAPs do not have dual
 facilities -- dual entrance facilities. Do you see
- **that?**

- A. Yes, and a PSAP is capitalized, P as in Paul,
- 5 Sam as in Simon, A as in apple, P as in Paul, little S.
 And that would be the center at which the calls are
- 6 And that would be the center at which the calls are answered.
 - Q. It next talks about further these systems and networks will remain fully operational during regular daily operations as well as during and immediately following a major natural or manmade disaster on a local region and even -- and even nationwide basis. Do you see that? Do you see that, sir?
 - A. No, not yet.
- Q. Did you see it highlighted? It's in the bottom -- last sentence of paragraph 1.
- A. Not in the version that I have. Oh, I see you've highlighted a different document. Yes, I see that.
- **Q. And --**
- A. Again, we're talking about the PSAP facilities at their locations where they're answering calls.
 - Q. The next it says, When feasible, alternate network access paths are highly desirable to consider during the ESInet design process.

- rest of the 911 network? Is that what you're saying?
 - A. My answer is that I've stated.
 - Q. And several vendors may interconnect upstream and, essentially, use the same backbone. And so it is important to understand where vendors may interconnect and how they interconnect and design an ESInet to minimize or avoid situations that lack redundancy throughout the network.

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Do you see that?

JUDGE KOPTA: Mr. Steese, I'm going to interrupt you at this point. I'm having a hard time understanding how it's useful to have Mr. Webber and you read all of these portions of this document and ask Mr. Webber about them. I don't understand what you're getting at here, and we seem to be using a lot of time to take up that particular line of inquiry.

MR. STEESE: Mr. Webber is specifically testifying that there was no standard that he was aware of that suggested provider diversity was critical to consider. And here is a document from NENA, one of the leading industry bodies by his own admission, that talks about supplier diversity and talks about how you should manage supplier diversity.

And I'm going to ask him when -- because it's obvious he has not looked at this critical

that go directly to his testimony.

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Do you see that?

A. I do, and that's similar to the quad design that was used by ComTech that we had talked about earlier.

Here, we're talking about alternate entrance facilities, if you will, into a building where a PSAP is located. So you might have a cable entering on the north side of the building. And, if you're lucky, a cable that enters on the south side of the building in case something happens.

On one side of the building, at least, the circuits into that building has one -- or one of the circuits entering that building may not have been damaged.

Q. The next paragraph says, The same level of care should be taken when purchasing circuits from vendors. In many instances, multiple circuits from providers is assumed to create greater diversity and redundancy.

Do you see that?

- 19 A. I do.
 - Q. So here NENA is specifically talking about provider diversity, correct?
- A. Within the context of the PSAP buildings where the calls are answered, they are, yes.
 - Q. And are you saying that the entrance into the PSAP facility should have greater protections than the

document, and I want to be able to make sure he understands what's here and then ask him some questions

JUDGE KOPTA: Mr. Steese, that's not your job to educate Mr. Webber on this document. If he's not familiar with it, it's not an appropriate area to cross him. Establish that he has not seen this before, if you can establish that, and then we move on.

I just don't see that it's useful to have him read a document that he -- is not part of his testimony and with which he may or may not be familiar, only to get to a series of questions. I would say get to the series of questions after you establish whether or not he is familiar with this document and the information it contains.

MR. STEESE: So I'll ask Mr. Webber a very specific question.

BY MR. STEESE:

- Q. Were you aware of this document when you were drafting your testimony? Did you consider it?
- A. Not to my recollection, no.
- Q. And isn't it true --

A. And previously, you and I discussed the CSRIC recommendations from the FCC that came out a year after this incident that we're talking about in 2018. A year

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Page 139 Page 137 later, in 2019, the FCC came out with additional 1 1 Q. I'm just asking did you consider it? 2 guidance for resiliency for networks of the type that 2 3 we're talking about. I was familiar with that, and I 3 Q. Let's look at Exhibit WMD-70. 4 cited that information. 4 JUDGE KOPTA: Before we -- before we read, I 5 But, again, that was a year after this incident. 5 notice some of that information was highlighted. Is 6 Q. And so eight months before the incident, NENA, 6 that designated as confidential? 7 the leading, one of the leading organizations, 7 MR. STEESE: Your Honor, I was trying to 8 specifically recommends getting provider diversity as 8 keep the highlights off the screen. If it was there, I 9 9 part of the ESInet design; isn't that true? apologize. I am trying very hard to not do that. 10 A. I would have to read this document in its 10 JUDGE KOPTA: All right. Well, I just want to caution everyone that we are not in confidential 11 entirety. Here, we're talking about entrance and exits 11 to PSAPs, which is different than designing the entirety 12 session. So if you're sharing your screen, please do 12 13 of the network. And without having studied this entire 13 not include information that's designated as document, I'm not going to further guess. confidential. 14 14 15 Q. Is a connection into an ESInet only from a PSAP? 15 MR. STEESE: I apologize, Your Honor. Thank 16 A. I -- I don't understand your question. 16 you. 17 Q. When you talk about an ESInet, an ESInet is the 17 BY MR. STEESE: 18 entire network that forms 911, the entire 911 network, 18 Q. Let's look at JDW-75X. Do you see that JDW-75X 19 19 is the June 24, 2016, statement of work from ComTech to 20 A. It is described as a 911 network. I wouldn't 20 the Washington State Military Department? 21 say it's in the entirety because there are other facets 21 A. That appears to be true, yes. 22 to 911 capabilities. 22 Q. And this entire document, there's redactions in 23 Q. And an ESInet has connections from selective 23 it. This is the redacted version. We never got the 24 nonredacted version from ComTech. So I'm going to show routers into switches, and it eventually makes its way 24 25 into PSAPs, correct? 25 you the portions here that begin on page 177 of that Page 138 Page 140 1 PDF. 1 A. Sure. 2 2 Q. And the ESInet is far more than just the MS. CORTEZ: Objection. Even though there 3 straight connection into the PSAP, correct? 3 are redactions, there appear to be highlighting that 4 A. Again, we're getting outside of my testimony. 4 would signify confidential information that is exposed. 5 But I would accept that premise. And, again, I would 5 MR. STEESE: That's not accurate. The 6 accept this document says what it says, but I haven't 6 highlights are my highlights to draw his attention. 7 7 MS. CORTEZ: Oh, got it. Thank you. 8 8 Q. Let's look at Mr. Rosen's testimony, which is MR. STEESE: Yes. BR-1C, bottom of page 20, continuing over to 21. You 9 9 BY MR. STEESE: 10 looked at Mr. Rosen's testimony as part of your 10 Q. So when you look at Exhibit 75X, did you ever preparation of your own materials, correct? 11 consider, Mr. Webber, in providing your testimony what 11 12 ComTech promised to deliver to Washington State Military 12 A. Which testimony is this? Department when -- with its 911 design? Did you ever 13 13 Q. Mr. Rosen, Public Counsel's --14 A. Which testimony? 14 look at this? 15 Q. Oh, I'm sorry. His direct testimony. 15 A. I don't recall talking about this document in my 16 16 A. I don't recall responding to Mr. Rosen in my testimony at all, whether in my initial testimony or my 17 reply testimony. And I don't recall whether I 17 reply. And I -- I don't recall having reviewed this 18 considered this paragraph or not. 18 document. I may have, but I don't recall it. 19 Q. So you don't recall Mr. Rosen testifying on the 19 Q. Oh, sorry. I thought you were finished. 2.0 bottom of page 20, line 19, In building 911 systems, I 20 So in looking to see what ComTech promised to 21 generally advise that supplier diversity be used to 21 deliver the State of Washington, you didn't consider the 22 guard against the kind of failure that occurred here. 22 document that identified, considered, or described what 23 You never remember looking at that? 23 they were going to deliver to the state?

A. I think that mischaracterizes what I stated

24

25

previously.

24

25

A. I -- I read it and I see that you read it

accurately. I don't --

What I indicated was I did not talk about this document, whether in my direct testimony or in my reply testimony. I don't recall whether I read this document, and I don't recall statements, either in my direct or my reply testimony, where I had analyzed what ComTech promised to provide to WMD. That's simply not within the scope of what I had done.

Q. So you did not -- did you recall ComTech promising that its network would eliminate all single points of failure? Were you aware of that?

A. I don't recall that. I see a document right

- here that says something to that effect, but I don't recall that.
- Q. Do you recall ComTech promising network redundancy, similar diversity and redundancy influence all network build-out aspects to consider. Did you -- were you aware of that?
- A. As I sit here, as I said before, I don't recall having seen this document. I don't recall these phrases particular -- particularly, but I don't dispute that they exist.
- Q. And do you recall ComTech saying that it implements redundancy through, quote, "Carrier diversity," closed quote. Were you aware that they gave that assurance to the state?

1 understood.

So let's look at page 56 of that document 74X.

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A. You're going to have to make that a lot bigger. Sorry.

Q. I'm -- it's page 56. It is PDF page 62, and, of course, I'll make it bigger. Happy to do it.

And were you aware that the contract says that a service level agreement failure occurs when there is vulnerability to a single point of failure? Were you aware of that?

- A. I -- I don't recall that being in that contract, but it doesn't surprise me.
- Q. So then if we look at page 38, the force majeure provisions of the contract. Why don't you take your time and just read that provision to yourself, and then I'm going to ask a few questions.
 - A. Okay. I've read that.
- Q. So in this particular provision, the Washington Military Department tells ComTech that if there is an outage that could have been avoided utilizing applicable redundancy requirements, then they are not -- they are still responsible if they did not employ applicable redundancy requirements, correct?
- A. I'm not an attorney, but I do see applicable redundancy requirements as a phrase in the force majeure

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A. I don't recall that in this document. I do recall seeing that in responses to discovery. In TSYS's

or ComTech's answers to both the Staff and to PC I

4 recall that being identified, but I don't recall this

5 particular document.

- Q. You say PC, the Public Counsel?
- A. I do.

Q. So then let's look at Exhibit 75X -- excuse

me -- 74X.

Did you look at the contract between the Washington Military Department and ComTech in looking to see what ComTech was contractually obligated to provide to the State of Washington?

A. I recall looking at a lot of the contract documents to understand the network, and I forget the exact question that you asked. So maybe you could rephrase that.

Q. I just want to make sure that there's a contract between WMD and CenturyLink that you reference in your testimony.

There's also a contract between WMD and ComTech, and I'm asking whether you considered the contract between WMD and ComTech?

- A. Yes, I looked at both.
 - Q. Okay. Thank you. I just didn't know if I

paragraph 1105.

Q. And so if ComTech had designed its network in accordance with NENA standards and employed carrier or network diversity, this particular outage on the Green Network would not have impacted their ability to complete 911 calls, would it?

A. I don't understand your question as it relates to this paragraph. You've switched from redundancy to some other term, and you're talking about the Green Network outage.

Q. Sorry?

A. Well, I don't understand your question.

Q. Fair enough.

A. You're asking me to give a legal interpretation on a question that I don't understand. So I think we're going to have to back up and start with a new question.

Q. NENA said that when designing a 911 network, one is supposed to employ carrier diversity, correct?

A. The portion of that contract that -- or the portion of that NENA document you showed me was talking about connectivity into the PSAPs, and I do recall seeing the words "diversity" or the word "diversity" in there, but I'm not going to interpret that whole document right now. I haven't studied it. I told you that previously.

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,	Page 145			Page 147
1	Q. I'll ask a separate question, then, just a very	1	(Confidential session.)	
2	direct one. This is not looking at the contract.	2	(Confidential session) [*CONFIDENTIAL TESTIMONY*	
3	Had ComTech deployed circuit diversity on its	3	[COM IDENTIAL TECHNICITY	
4	signalling links strike that.	4		
5	Had ComTech employed carrier diversity on its	5		
6	signalling links and used something other than the	6		
7	CenturyLink Green Network to deploy two of its	7		
8	signalling links, the 911 calls to PSAPs served by	8		
9	ComTech would have completed during the December outage,	9		
10	true?	10		
11	A. I can't say that with certainty. When you look	11		
12	at the FCC's report, the FCC identifies people who were	12		
13	impacted by the CenturyLink Green Network outage as a	13		
14	general matter. When I say "people," I mean companies.	14		
15	Two of those companies were West. Another one was TNS,	15		
16	and if you had different circuits, if you will,	16		
17	connected from ComTech to TNS, and TNS is in the middle	17		
18	of ComTech and CenturyLink for the remaining	18		
19	provisioning of the totality of the 911 services in the	19		
20	state, and TNS is impacted, I don't know whether	20		
21	different circuits connecting TNS to ComTech would or	21		
22	would not have resolved the problem. I simply don't	22		
23	have an answer to that. My answer is I don't know.	23		
24	Q. But ComTech certainly did not have network	24		
25	diversity on its signalling links, did it?	25	*CONFIDENTIAL TESTIMONY*	
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1	A. I would disagree with that. When when you	1	*CONFIDENTIAL TESTIMONY*	
2	look at my direct testimony, for the tail end of that	2		
3	testimony, I identify the quad links. That basically	3		
4	means there are two sets of STPs on both sides.	4		
5	MS. CORTEZ: Objection. I I can't tell	5		
6	where this testimony is going. I don't know if it's	6		
7	going to stray into the various technical aspects of the	7		
8	network that I've that I've indicated that we need to	8		
9	protect. And so we've already mentioned several of the	9		
10	providers that we'd hoped to avoid bringing out as well.	10		
11	So maybe this would be better in the private session.	11		
12	MR. STEESE: Your Honor, I was on the verge	12		
13	of going into confidential setting so CenturyLink would	13		
14	not oppose.	14		
15	JUDGE KOPTA: All right. Then we will await	15		
16	any further response to that question until we're in	16		
	confidential session.	17		
17				
18	Do you have anything else that we can	18		
18 19	discuss in open session, Mr. Steese?	19		
18 19 20	discuss in open session, Mr. Steese? MR. STEESE: Your Honor, everything else is	19 20		
18 19 20 21	discuss in open session, Mr. Steese? MR. STEESE: Your Honor, everything else is going to be in and out of confidential.	19 20 21		
18 19 20 21 22	discuss in open session, Mr. Steese? MR. STEESE: Your Honor, everything else is going to be in and out of confidential. JUDGE KOPTA: All right. Can you stop	19 20 21 22		
18 19 20 21 22 23	discuss in open session, Mr. Steese? MR. STEESE: Your Honor, everything else is going to be in and out of confidential. JUDGE KOPTA: All right. Can you stop sharing your screen for just a moment, Mr. Steese.	19 20 21 22 23		
18 19 20 21 22	discuss in open session, Mr. Steese? MR. STEESE: Your Honor, everything else is going to be in and out of confidential. JUDGE KOPTA: All right. Can you stop	19 20 21 22	*CONFIDENTIAL TESTIMONY*	

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21 witness, Mr. McGinty. Do you want to call h	
22 MR. MCGINTY: Yes, next witness is	s Robert
23 Akl.	
24 (Robert Akl sworn.)	
25 *CONFIDENTIAL TESTIMONY* 25 JUDGE KOPTA: Thank you.	
Page 210	age 212
1 *CONFIDENTIAL TESTIMONY* 1 Mr. McGinty, anything further for him?	
2 MR. MCGINTY: No.	
3 JUDGE KOPTA: Your prefiled testimo 4 exhibits have been admitted, and you are ava	
4 exhibits have been admitted, and you are ava 5 cross. Mr. Steese, I assume, will be asking you	
6 questions.	,u
7 MR. STEESE: That's correct, Your Ho	onor.
8	
9 CROSS-EXAMINATION	
10 BY MR. STEESE:	tode::0
11 Q. Good afternoon, Dr. Akl. How are you 12 A. Good, thank you.	today?
12 A. Good, thank you. 13 Q. And we met before virtually during you	ur
14 deposition, correct?	
15 A. Yes.	
16 Q. In this matter, the Commission Staff is	paying
17 you \$850 per hour, correct?	
18 A. Yes.	200
19 Q. All right. Let's talk about your experie 20 One of the things you do as a professor is you	
20 One of the things you do as a professor is you are as a professor is you are at a professor in the professor is you are at a professor in the professor is you are at a professor in the	ou waon
22 A. Yes.	
23 Q. And one type of network that you teach	h your
24 students how to design is an SS7 network, or	correct?
25 *CONFIDENTIAL TESTIMONY*] 25 A. Yes.	

Page 215 Page 213 Q. And you teach your students that when designing 1 1 testimony. 2 an SS7 network, it's essential to design the network so 2 JUDGE KOPTA: Mr. Steese, do you want to 3 there is no single point of failure, correct? 3 give a reference in Mr. Akl's testimony to the question 4 4 5 5 Q. And link diversity is a critical ingredient in MR. STEESE: On page 1, he talks about the 6 network reliability and requires provisioning links in 6 cause. And, to me, when you're talking about the cause 7 such a manner that a single failure will not cause the 7 of an outage, it's important to understand what he knows 8 disruption of services, correct? 8 and doesn't know about who's involved. So he's here to 9 A. That is fair, yes. 9 talk about causation and, certainly, ComTech and its 10 Q. And because of the critical nature of SS7 links, 10 network design is central to the cause in question. physical, electrical, and architectural diversity are JUDGE KOPTA: To the extent that he has 11 11 12 necessary, correct? 12 reviewed it, and I believe that may be the basis of a 13 A. Yes. 13 question of him. But I don't think assuming or going 14 Q. And you teach students, when you're teaching 14 beyond his testimony is appropriate at this juncture. 15 them how to design an SS7 network, that that network is 15 MR. STEESE: I don't understand, Your Honor. 16 critical to stay up because if it's down, calls don't 16 How can one testify about cause if there's a number of 17 complete, correct? 17 facts you haven't considered? By definition, that is 18 A. Yes. 18 appropriate cross-examination of an expert, to show that 19 Q. And, again, it's always important when designing 19 the testimony should be discounted completely because an SS7 network to ensure there's no one single point of 20 they didn't consider a number of facts that led to the 20 21 failure, correct? 21 causal question. 22 A. And not just an SS7, but, yes. It would apply 22 JUDGE KOPTA: Well, Mr. Steese, you can make 23 to SS7 also. 23 that argument in your brief. But if you're going beyond Q. And for providing your opinions that are 24 his testimony, you're going outside of the scope of a 24 25 contained in your testimony, I think it's RA-1C, you 25 permissible cross-examination. Page 214 Page 216 only reviewed the materials that are referenced in your 1 1 MR. STEESE: Just give me one moment, Your 2 testimony, correct? 2 Honor. 3 A. Yes. 3 JUDGE KOPTA: Sure. 4 Q. And you weren't aware that the State of 4 BY MR. STEESE: 5 Washington was going through a transition to a new 911 5 Q. So turn to your testimony at page 5. Let me 6 provider during the outage, were you? 6 know when you're there. 7 A. I -- I was aware at some point, but I wasn't 7 A. I am there. 8 aware -- that was not something I was asked to look 8 Q. And you reference a specific exhibit, correct? 9 9 You have Mr. Webber's Exhibit 4, correct? 10 Q. And you weren't aware that ComTech was the 10 A. Yes, there are multiple exhibits that I covered 911 service provider for the PSAPs that had 911 11 11 reference on that page. One of them is JDW-4. Q. Correct. And if we look at JDW-4, which I'll 12 calls fail during the outage, were you? 12 13 13 pull up on the screen. Just one moment. JDW-4 is the A. I was not -- I did not provide any opinions on 14 that, but I was aware there were other parties that are 14 FCC report about the outage, correct? 15 involved, but I did not provide any opinions on ComTech 15 A. Yes. 16 or 911. 16 Q. And in looking at this particular -- oops, 17 Q. Wasn't my question. I want to make sure I 17 excuse me -- this particular exhibit, this particular 18 understand. My question is: You weren't aware that 18 exhibit talks about, in paragraph 6, covered 911 service 19 ComTech was the covered 911 service provider for the 19 providers are required to take reasonable measures to 20 PSAPs that had 911 calls fail during the outage, were 2.0 provide reliable 911 service in three specific respects. 21 you? 21 including, No. 1, circuit diversity, correct? 22 22 MR. MCGINTY: I'm going to object as beyond A. Yes, I see the word that you are pointing to or 23 the scope. Dr. Akl's testimony was very limited to the 23 reading.

Q. And when you look, it says that they are

required to do this. And required is mandatory,

24

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Red and Green networks. So I'm not sure what the

questioning regarding ComTech has to do with Dr. Akl's

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Page 219 Page 217 1 1 correct? It's a mandatory word. Thou shall --Q. Okay. Let's focus, then, on this packet storm 2 A. I see the words you are reading. That is 2 that occurred on the Red and Green Networks. 3 correct. 3 So first, you have never been retained by a 4 Q. And when it's talking about, in the next 4 client, until here, to evaluate what caused a packet 5 sentence, they must certify annually, whether they audit 5 storm to occur, correct? 6 physical diversity. The word is "must," again, a 6 A. Regarding causes of a packet storm as it relates 7 mandatory word, correct? 7 to what happened here, that is correct. 8 A. Yes. I see the word that you are reading. 8 But as -- but as you've asked me in my 9 9 Q. Now, in this particular case, if you go to your deposition, I have looked at packet storms before and 10 testimony at page 1, just let me bring that up quickly. 10 how to prevent them. You see your testimony. Your CV. Sorry. Testimony is 11 Q. You were retained by a client who had -- was 11 not there. I know how to do this. Just give me one 12 involved in a patent infringement case that had 12 13 second. 13 technology that theoretically was described to prevent Page 1 of your testimony, correct? 14 14 packet storms. That's been your involvement with packet 15 storms, correct? 15 A Yes 16 Q. I changed to page 2 right when you said --16 A. My involvement in packet storms in litigation 17 A. Yes. I didn't mean to do that. 17 related to a patent that relates to packet storms as 18 18 Q. And if you look at your testimony, point No. 1 well as teaching my students on the technology of what 19 says that you focused on the causes of the outages on 19 causes packet storms, how to avoid packet storms. That the Red Network and the Green Network as well as the 20 20 is why I was an expert retained relating to patents 21 relationship between the two events, correct? 21 related to packet storms. And that's my understanding 22 A. Yes. I only looked at, not outages in general, 22 of why I am retained in this matter, to render opinions 23 not 911, but I only looked at CenturyLink's Red Network 23 on the packet storms on the Green Network. 24 Q. And you've never written an article on packet 24 and Green Network, those outages. And the relationship 25 25 between the Red's outage would have given us insight to storms, correct? Page 220 Page 218 1 1 prevent the Green Network outage. A. No, I've written articles on networks in 2 2 Q. So you were not asked to give an opinion one way general, but not specifically on packet storms. 3 or the other about what caused 911 calls to complete. 3 Q. But you've read articles written by others about 4 You were just looking at the relationship between the 4 packet storms, correct? 5 outage on the Red Network in February of 2018 to the 5 A. Yes. 6 outage on the Green Network in December of 2018; is that 6 Q. And none of those articles that you can recall 7 correct? 7 involved an evaluation of what caused that packet storm, 8 8 A. Yes, that is fair. I did not look or analyze correct? 9 anything outside the CenturyLink's Red and Green Network 9 A. Well, a lot of times, we don't know the cause of 10 10 outages and their relationship. a packet storm. That is the point, is we try to Q. Forgive me. I'm going to ask the question 11 11 prevent -- we try to design the network to prevent again. I didn't completely understand your answer. 12 12 packet storms; if they happen, to minimize their effect. 13 13 So you were not asked to give an opinion as to They aren't something that's normally you anticipate or, 14 why 911 calls did not complete during the outage on the 14 rather, they're something that you assume can happen, 15 Green Network; is that correct? 15 but you design to try to prevent or minimize their 16 16 A. I would agree that I did not look at the 911 damage in a couple of different ways. 17 aspect of it. I only looked at the outage on a Green 17 Q. Thank you. 18 Network as a result of packet storm. 18 MR. STEESE: Your Honor, at this point I'd 19 Q. So I'm going to round this out to make sure I 19 like to go into confidential session, and I would remain 20 20 there for the rest of my time. 21 So you did not look to see if the reason why 911 21 And just so you know, it's going to be 22 22 calls did not complete is because there was a lack of significantly less than my two hour projected.

50 (Pages 217 to 220)

JUDGE KOPTA: Well, I appreciate that,

Mr. Steese. Whatever time we can save will be

beneficial all the way around.

diversity on the ComTech network. That's not something

you ever evaluated, correct?

A. That is correct.

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2.4

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1	age 223
2	
3 MR. SMITH: Sorry. I'm here. My computer 3 4 was freezing up a little bit. Ready for me to send you 4 5 back? 5 6 JUDGE KOPTA: Yes, please do. 6 7 MR. SMITH: All right. I'm on it. 7 8 (Pause in the proceedings.) 8 9 (Confidential session.) 9 10 [*CONFIDENTIAL TESTIMONY* 10 11 12 12 13 13 14 15 15 16 17 17 18 19 20 20 21 22 22 23 24 24	
4 was freezing up a little bit. Ready for me to send you back? 5 back? 6 JUDGE KOPTA: Yes, please do. 7 MR. SMITH: All right. I'm on it. 8 (Pause in the proceedings.) 9 (Confidential session.) 10 [*CONFIDENTIAL TESTIMONY* 11 12 12 13 13 14 14 15 15 16 16 17 17 18 18 19 20 20 21 22 23 24 24	
5 back? 6 JUDGE KOPTA: Yes, please do. 7 MR. SMITH: All right. I'm on it. 8 (Pause in the proceedings.) 9 (Confidential session.) 9 [*CONFIDENTIAL TESTIMONY* 11 12 13 14 15 16 17 18 19 20 21 22 23 24 24 24	
6 JUDGE KOPTA: Yes, please do. 7 MR. SMITH: All right. I'm on it. 8 (Pause in the proceedings.) 9 (Confidential session.) 10 [*CONFIDENTIAL TESTIMONY* 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 24 24	
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*	Page 253	Page 255
1	*CONFIDENTIAL TESTIMONY*	JUDGE KOPTA: Then we will move to Public
2	CONTIDENTIAL TECHNION	2 Counsel.
3		3 Ms. Gafken or Ms. Suetake, do you want to
4		4 call your next witness? Or, Mr. Nelson, I don't mean to
5		5 leave you out.
6		6 MS. GAFKEN: Public Counsel calls Stephanie
7		7 Chase.
8		8 JUDGE KOPTA: All right.
9		9 (Stephanie Chase sworn.)
10		10 JUDGE KOPTA: Ms. Gafken, any questions for
11		11 Ms. Chase?
12		12 MS. GAFKEN: Sure. I have a few preliminary
13		13 questions.
14		14
15 16		15 EXAMINATION
17		16 BY MS. GAFKEN: 17 Q. Ms. Chase, on whose behalf are you testifying
18		18 for today?
19		19 A. Public Counsel.
20		20 Q. Were your testimony and exhibits prepared by you
21		or under your instruction and supervision?
22		22 A. Yes, they were prepared by me.
23		23 Q. Do you have any changes to your testimony or
24		24 exhibits?
25	*CONFIDENTIAL TESTIMONY*]	25 A. Yes, I have one correction to make to my
	<u> </u>	,
	Page 254	Page 256
1	Page 254 [*CONFIDENTIAL TESTIMONY*	Page 256 1 initial to my direct testimony, the revised version.
1 2		
		initial to my direct testimony, the revised version. On page 18, lines 10 and 11, I transposed the total numbers. And so the the number at the end of
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Page 259 Page 257 CROSS-EXAMINATION for the Commission to evaluate the foreseeability of the 1 1 2 BY MR. SHERR: 2 particular packet malformation? 3 Q. Good afternoon, Ms. Chase. I'm Adam Sherr, 3 A. Well, that is one of the Commission's 4 CenturyLink. Nice to meet you. 4 enforcement criteria, is one of the 11 enforcement 5 A. Nice to meet you as well. 5 criteria, is to consider the foreseeability of the 6 Q. You've been with Public Counsel since January of 6 7 2020, correct? 7 Q. Let's look at pages 5 to 6, 5 and 6 of your 8 A. Yes, that's true. 8 testimony, specifically line 7. 9 9 Q. You were not with Public Counsel at the time of A. On page 5 or on page 6? 10 the outage? 10 Q. I'm so sorry. Yeah. Starting on page 5. A. I was not. 11 11 Q. Let's take a look -- do you have in front of you Q. There you discuss CenturyLink's past 911 12 12 Exhibit 1 -- SKC-1TC, your direct testimony? outages, correct? 13 13 14 14 A. Yes. Q. Would you take a look at page 3 of your 15 Q. Do you understand that the outage that occurred 15 16 testimony, specifically lines 5 through 8? 16 in December of 2018 did not involve any aspect of the 17 A. Okay. I'm there. 17 CenturyLink 911 network in Washington? Q. Okay. And there you reference an outage on 18 18 A. I understand that the outage was on the national 19 CenturyLink's national network, correct? 19 transport network, but I also understand that that 20 A. Yes. 20 outage impacted the way that the interconnection was set Q. Okay. Same page, line 18, you make reference to up between ComTech and CenturyLink. 21 21 22 a failure on CenturyLink's nationwide fiberoptic 22 Q. So it's your understanding, just to make sure 23 network? 23 I'm following you, that the impact of the outage on the A. Yes. 24 national network affected the signalling network, the 24 25 25 SS7 network, that was used in support of 911 calling in Q. Do you understand that the specific circuits Page 258 Page 260 that ComTech was leasing from CenturyLink that Washington; is that accurate? 1 1 experienced the outage in December of 2018 were on 2 2 A. Yes. Q. Okay. Do you understand the distinction between 3 CenturyLink's national network, true? 3 the 911 network and the SS7 network? 4 A. Yes. They were on the national transport 4 5 network, but impacted the 911 service that was being 5 A. Yes. I understand that there are -- that there 6 transitioned to ComTech. 6 are multiple levels to sort of layer the cake for 7 Q. Okay. And you understand that these were 7 these -- for this system. interstate circuits and not intrastate circuits? 8 8 Q. Okay. Are you aware of this outage affecting 9 A Yes 9 any component -- I'll ask again -- of CenturyLink's 911 Q. Let's look back at page 3 starting on line 19. 10 network in Washington? 1.0 MS. GAFKEN: Objection. Asked and answered. 11 11 Q. And carrying over to page 4, line 5. You 12 JUDGE KOPTA: Overruled. I'll let her 12 13 13 briefly discuss the packet storm event, correct? answer that. 14 A. I do. 14 A. So I -- I am aware that CenturyLink's national Q. Okay. Did you evaluate the probability of the 15 15 transport outage impacted the interconnection between particular packet malformation that preceded the packet ComTech and CenturyLink at the state level. 16 16 17 storm event? 17 And I've sort of forgotten your question. I'm 18 A. I did not. 18 sorry, Mr. Sherr. Can you rephrase it? 19 Q. In your view, is it important for the Commission 19 BY MR. SHERR: 2.0 to evaluate the probability of the particular packet 2.0 Q. Sure. I will ask it again. 21 malformation? 21 Are you aware of any of the packet storm on the A. I can't really address that, I don't think. But 22 national transport network affecting any aspect of 22 that's a better question for our technical expert, CenturyLink's 911 network? 23 23 2.4 2.4 A. Could you be more specific about what you mean Mr. Rosen. 25 Q. Do you -- from your perspective, is it important 25 by CenturyLink's 911 network?

Page 263 Page 261 1 Q. You're not sure? Q. Sure. Well, let me ask you: Do you 1 2 understand -- again, do you understand the difference 2 A. I'm not sure. 3 between the 911 network and the SS7 network? 3 Q. Are you aware that CenturyLink Communications, A. Yes. 4 4 CLC, was unaware until the outage that ComTech had Q. This outage affected the SS7 network, correct? 5 5 placed all of its SS7 links on the CLC Infinera Green A. Yes. 6 6 Network? 7 Q. The SS7 network of ComTech, not the SS7 network 7 MS. GAFKEN: I'm going to object. This is 8 utilized by CenturyLink, correct? 8 beyond the scope of Ms. Chase's testimony. 9 9 A. I think that's correct, yes. JUDGE KOPTA: Yes, Mr. Sherr, if you would 10 Q. Okay. Let's jump to page 16 of your testimony. 10 point to a particular point in Ms. Chase's testimony, A. Okay. Okay. I'm there. that would be helpful. 11 11 Q. I'm almost there. MR. SHERR: Sure. I can move on. Your 12 12 13 A. Oh, sorry. 13 Honor. Ms. Chase testified regarding the outage. So 14 Q. Specifically, if you look at page 16, starting 14 I'm asking for her understanding of some of the 15 on line 19, and the sentence that carries over to 15 underlying facts relevant to the outage, but I can move 16 page 17, line 1, you say, Additionally, CenturyLink 16 17 created this network without vendor diversity where a 17 JUDGE KOPTA: Thank you. 18 single software error could take down an entire system. 18 BY MR. SHERR: 19 Did I read that correctly? 19 Q. Ms. Chase, are you aware that if ComTech had A. Yes. 20 placed two of its four SS7 links on another CenturyLink 20 Q. What system were you referring to there? network or on the network of another provider that 911 21 21 22 A. To the 911 system as a whole. 22 calls -- ComTech -- or PSAPs would not have failed 23 Q. But -- okay. Again, there was no direct affect 23 during the outage? to CenturyLink's 911 system, only the SS7 network 24 A. I can't answer that, but I think that would be a 24 25 utilized by ComTech? 25 better question for Mr. Rosen. Page 264 Page 262 A. If by 911 -- do you mean -- by 911 system, do 1 Q. Let's take a look at page 18, which I think you 1 2 you mean an impact to CenturyLink's PSAPs? 2 advised us just a moment ago. 3 Q. Well, I don't want to testify for you. So I 3 A. Yes. Q. Okay. So I don't have to ask you about 4 leave it there. I think we got the answer. 4 5 Did you read miss -- did you read CenturyLink's 5 transposing the numbers. 6 response testimony? 6 A. Right. 7 A. Yes. 7 Q. Thank you for that. 8 Q. Okay. Including the testimony and exhibits of 8 A. Mm-hmm. 9 Stacy Hartman, which has since been adopted by Jeanne 9 Q. On page 18, you specifically, at line 10, you 10 Stockman and Steven Turner? 10 recommend that the Commission penalize CenturyLink Communications, as revised, \$5,376,000 for violation of 11 11 Q. Okay. Are you now aware that ComTech lacked RCW 80.36.220; is that correct? 12 12 vendor diversity for its SS7 links at the time of the 13 13 A. Yes, that's correct. Q. That statute deals with the duty to transmit 14 December 2018 outage? 14 15 A. I'm going to defer that question to Mr. Rosen. 15 messages, true? Q. So you don't know? 16 16 A. That is true. 17 A. I do not recall offhand. 17 Q. Do you or Mr. Rosen testify about the substance 18 Q. Okay. Are you aware that ComTech designed, 18 of that claim at all? 19 constructed, and managed its own SS7 network? 19 A. No. There is not anything in my testimony that 20 A. I'm not sure that I can answer that, either. 2.0 addresses the -- or makes a legal conclusion about that 21 Q. Okay. Are you aware that ComTech placed all 21 statute. 22 four of its SS7 links on the same CenturyLink national 22 Q. Okay. Do you make any policy arguments 23 concerning that particular violation that you allege? network? 23 24 24 A. I -- I don't make a specific reference to that A. Again, I think that's a better question for 25 25 Mr. Rosen. statute. My -- my testimony focuses on the -- more on

	Page 265		Page 267
1	the criteria, enforcement criteria, that the Commission	1	general, could not reach emergency services by dialling
2	has set out in their policy statements.	2	911, if they did not have that functionality on their
3	Q. Okay. Any evidence? Are you aware of any	3	telephone?
4	evidence that CenturyLink refused to transmit messages	4	A. I am not aware of a CenturyLink identified
5	of another telecommunications provider?	5	customer specifically, but many other customers in
6	A. I'm not sure that I can answer that question.	6	Washington who had difficulty reaching 911 services and
7	Q. Okay. Are you aware of any evidence that	7	in the case of many emergencies.
8	CenturyLink discriminated in transmitting messages?	8	Q. Okay. Is it your understanding, then, of this
9	CenturyLink had a responsibility under the	9	rule that any failed 911 call creates liability as a
10	contract to transmit and and provide 911 services	10	violation of WAC 480.120.450?
11	for to the state of Washington. And because of the	11	A. It's my position and Public Counsel's position
12	outage, that didn't happen. So that is a violation of	12	that CenturyLink had an obligation as a 911 provider,
13	what the statute requires.	13	under the contract, to provide and, you know, from the
14	Q. Okay. Let me ask my question again because I	14	caller to the PSAP, and that was not that obligation
15	think that may not have been clear.	15	was not met.
16	Do you have any evidence that CenturyLink	16	Q. Okay. Public Counsel's allegations in this
17	discriminated in transmitting messages?	17	case, and as articulated in your testimony and
18	A. I do not have evidence of discrimination	18	Mr. Rosen's testimony, focus on CenturyLink
19	specifically.	19	Communications' role as interexchange carrier, not as an
20	Q. Okay. Any evidence that CenturyLink neglected	20	originating service provider; is that correct?
21	to transmit message of another telecommunications	21	A. Yes, I believe that's correct.
22	provider?	22	Q. Okay. Thank you.
23	A. I do not have evidence of neglect.	23	MR. SHERR: I have no further questions.
24	Q. Same page, the next line, so as corrected,	24	JUDGE KOPTA: All right. Thank you,
25	Public Counsel you specifically recommend a penalty	25	Mr. Sherr.
	Page 266		Page 268
1	of \$10,752,000 for violation of WAC 480.120.450. Do you	1	Any questions for Ms. Chase from the
2	see that?	2	Commissioners?
3	A. Yes.	3	COMMISSIONER RENDAHL: None from me. Thank
4	Q. And this rule relates to E911 obligations of	4	you, Your Honor.
5	local exchange carriers, true?	5	CHAIR DANNER: No questions, Your Honor.
6	A. Yes.	6	COMMISSIONER DOUMIT: No questions. Thank
7	Q. Do you or Mr. Rosen testify about the substance	7	you.
8	or merits of that particular claim?	8	JUDGE KOPTA: All right.
9	A. I don't address the specific the requirements	9	Redirect, Ms. Gafken?
10	of the specific WAC in my testimony.	10	MS. GAFKEN: I have some brief redirect.
11	Q. Are you aware of any evidence that CenturyLink	11	
12	acting as an originating service provider let me	12	REDIRECTEXAMINATION
13	start over.	13	BY MS. GAFKEN:
14		1 1 4	Q. Ms. Chase, you were asked questions about the
	Are you aware of any evidence that CenturyLink	14	•
15	Communications, the respondent in this case, acting as	15	SS7 network and the 911 network. Do you recall that
16	Communications, the respondent in this case, acting as an originating service provider, failed to offer 911	15 16	SS7 network and the 911 network. Do you recall that line of questioning?
16 17	Communications, the respondent in this case, acting as an originating service provider, failed to offer 911 dialling functionality to its customers?	15 16 17	SS7 network and the 911 network. Do you recall that line of questioning? A. I do.
16 17 18	Communications, the respondent in this case, acting as an originating service provider, failed to offer 911 dialling functionality to its customers? A. Again, I'm aware of CenturyLink's obligations	15 16 17 18	SS7 network and the 911 network. Do you recall that line of questioning? A. I do. Q. Is your understanding that the SS7 network is
16 17 18 19	Communications, the respondent in this case, acting as an originating service provider, failed to offer 911 dialling functionality to its customers? A. Again, I'm aware of CenturyLink's obligations under the contract to provide 911 service, and that	15 16 17 18 19	SS7 network and the 911 network. Do you recall that line of questioning? A. I do. Q. Is your understanding that the SS7 network is part of the Washington 911 network?
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16 17 18 19 20 21	Communications, the respondent in this case, acting as an originating service provider, failed to offer 911 dialling functionality to its customers? A. Again, I'm aware of CenturyLink's obligations under the contract to provide 911 service, and that didn't happen because of the outage. So they failed to fulfill those obligations. Q. Are you aware, in general, if a CenturyLink	15 16 17 18 19 20 21 22	SS7 network and the 911 network. Do you recall that line of questioning? A. I do. Q. Is your understanding that the SS7 network is part of the Washington 911 network? A. It is. Because all there are multiple parts that, you know, make up these networks, not just the the signalling path, but also the voice calls.
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16 17 18 19 20 21 22 23 24	Communications, the respondent in this case, acting as an originating service provider, failed to offer 911 dialling functionality to its customers? A. Again, I'm aware of CenturyLink's obligations under the contract to provide 911 service, and that didn't happen because of the outage. So they failed to fulfill those obligations. Q. Are you aware, in general, if a CenturyLink Communications local customer — so in CenturyLink's capacity as an originating service provider, are you	15 16 17 18 19 20 21 22 23 24	SS7 network and the 911 network. Do you recall that line of questioning? A. I do. Q. Is your understanding that the SS7 network is part of the Washington 911 network? A. It is. Because all there are multiple parts that, you know, make up these networks, not just the the signalling path, but also the voice calls. Q. You were asked questions about your analysis in your testimony about the outage. Do you recall those
16 17 18 19 20 21 22 23	Communications, the respondent in this case, acting as an originating service provider, failed to offer 911 dialling functionality to its customers? A. Again, I'm aware of CenturyLink's obligations under the contract to provide 911 service, and that didn't happen because of the outage. So they failed to fulfill those obligations. Q. Are you aware, in general, if a CenturyLink Communications local customer — so in CenturyLink's	15 16 17 18 19 20 21 22 23	SS7 network and the 911 network. Do you recall that line of questioning? A. I do. Q. Is your understanding that the SS7 network is part of the Washington 911 network? A. It is. Because all there are multiple parts that, you know, make up these networks, not just the the signalling path, but also the voice calls. Q. You were asked questions about your analysis in

Page 271 Page 269 1 expectation is we will finish with Mr. Rosen this 1 A. I do. 2 2 Q. Is your testimony about the outage based on your evening. And so keep that in mind as we are 3 3 analysis or the analysis of another witness? progressing. But anyway, we will be off the record. A. About the outage itself, to -- with my 4 4 (A break was taken from 5 5 testimony, I relied both on this Staff investigation 4:19 p.m. to 4:24 p.m.) 6 report as well as analysis from our witness, Brian 6 JUDGE KOPTA: Let's be on the record again. 7 Rosen. 7 And Ms. Gafken is going to call your 8 Q. And Mr. Rosen analyzed the circumstances of the 8 second-to-last witness. 9 9 outage; is that correct? MS. GAFKEN: We would like to call Brian 10 A. It is. 10 Rosen. Q. You were asked questions about CenturyLink's (Brian Rosen sworn.) 11 11 role, and Mr. Sherr asked about CenturyLink as the JUDGE KOPTA: Thank you. 12 12 originating service provider. Is the originating 13 13 Ms. Gafken, you may proceed. service provider the same as the 911 service provider? 14 14 MS. GAFKEN: Thank you. 15 A. I'm sorry, Lisa. Could you rephrase the 15 16 question? 16 EXAMINATION 17 Q. Sure. 17 BY MS. GAFKEN: 18 Is CenturyLink's role as the -- an originating 18 Q. Mr. Rosen, how are you employed? 19 service provider the same as its role as the 911 service 19 A. I'm an independent consultant. 20 provider? 20 Q. What is your occupation? What do you do? A. No. 21 A. I an engineer. I'm a -- I work on the 911 21 system and have for 20 years. Generally speaking, I've 22 Q. How do they differ? 22 23 A. The role as the 911 service provider is more 23 been involved in packet network since the mid '70s. serious, I would say, and substantive role. They have 24 I've been designing networks and working with networks 24 25 an obligation to connect persons in need of help with 25 all the way through. I have extensive experience in Page 270 Page 272 1 network design, specifically IP networks, the SIP 1 the PSAP to provide them that help in an emergency 2 2 protocol, which is used for carrying telephone calls situation. 3 Q. So in the role as the originating service 3 over IP networks, where I'm the cochair of the ITF SIP 4 provider, they have a relationship with the caller to 4 core working group, which is the standards organization 5 provide telephone service, correct? 5 for SIP. 6 A. Yes. 6 I'm also heavily involved in Next Generation 911 7 Q. And their role as the 911 service provider for 7 and have been since the inception of that project. I'm 8 8 the state of Washington, how does that role come about? currently the cochair of the I3 Architecture working A. That role came about because they have a 9 9 group in NENA, which developed the technical standards 10 contract with the Washington -- or because they had a 10 for Next Generation 911. contract with the Washington Military Department. Q. And are you testifying on behalf of Public 11 11 Q. Okay. 12 Counsel today? 12 13 13 MS. GAFKEN: Thank you. I have no further Q. Were the testimony and exhibits prepared by you 14 questions. 14 JUDGE KOPTA: All right. Thank you, or under your instruction and supervision? 15 15 16 Ms. Chase, for your testimony. We appreciate it, and A. They were. 16 Q. Do you have any changes to your testimony or 17 you are excused. 17 18 Ms. Gafken, do you have another --18 exhibits? 19 MR. STEESE: Your Honor, before we proceed, 19 A. Yes. Apparently, I have created a typo. In my 20 this is Chuck Steese. Since we're going to go late, do 2.0 rebuttal testimony, on page 21, there's a diagram and a 21 you mind if we take a five-minute health break before we 21 piece of text above it. And in the middle of that 22 22 begin with Mr. Rosen? paragraph, it says, Is beyond where Intrado connects to 23 JUDGE KOPTA: No. I think that would be 23 TNS and before CenturyLink connects to TNS. And that is 24 24 fine. So it's now 4:19. If we could have folks come erroneous. It's and before ComTech connects to TNS. So 25 25 back at 4:24. Then we can give Mr. Rosen -- my that's an unfortunate typo.

	Page 273		Page 275
1	Q. Okay. Thank you.	1	of us has finished before we talk.
2	MS. GAFKEN: Mr. Rosen is available for	2	Mr. Steese, please proceed.
3	cross-examination.	3	MR. STEESE: Thank you, Your Honor.
4	JUDGE KOPTA: All right. Mr. Rosen, your	4	•
5	testimony and exhibits have been admitted, as have been	5	CROSS-EXAMINATION
6	some of the cross-examination exhibits. So we will	6	BY MR. STEESE:
7	proceed with cross-examination.	7	Q. Mr. Rosen, it's a pleasure meeting you. I'm
8	Mr. Steese, your witness.	8	Chuck Steese. I represent CenturyLink Communication,
9	MR. STEESE: Your Honor, before I begin,	9	LLC, in this matter.
10	Mr. Rosen made his correction, and I did not get that	10	MR. STEESE: So, Your Honor, virtually
11	down. So if he could just, please, identify the page	11	everything is going to be especially with the
12	one more time. I apologize, Mr. Rosen.	12	guidance given to me or us by WMD it's going to be in
13	THE WITNESS: It was page 21 of my rebuttal	13	a confidential setting. I would just recommend we go
14	testimony.	14	straight away into the confidential setting.
15	MR. STEESE: And say that one more time, the	15	JUDGE KOPTA: All right. Let's be off the
16	correction, please.	16	record.
17	THE WITNESS: In the middle of the paragraph	17	(Pause in the proceedings.)
18	above the diagram, there's a line that starts, Is beyond	18	(Confidential session.)
19	where Intrado connects to TNS. And the	19	[*CONFIDENTIAL TESTIMONY*
20	MR. STEESE: I'm sorry. Just one moment.	20	•
21	You said page 21 of your rebuttal?	21	
22	THE WITNESS: Yes.	22	
23	MS. GAFKEN: So Exhibit BR-30T, page 21,	23	
24	lines 10 to 11.	24	
25	MR. STEESE: Say it again. I'm sorry.	25	*CONFIDENTIAL TESTIMONY*
	Page 274		
1	THE WITNESS: The correction is beyond where	1	*CONFIDENTIAL TESTIMONY*
2	Intrada connects to the TNS. The phrase and before	2	CONTIDENTIAL TESTIMONT
3	CenturyLink connects to TNS is an error. It should be	3	
4	and before ComTech connects to TNS.	4	
5	MR. STEESE: I apologize for that. I just	5	
6	wanted to make sure I got it down. Thank you.	6	
7	JUDGE KOPTA: Just a moment, Mr. Steese.	7	
8	Commissioner Rendahl?	8	
	COMMISSIONER RENDAHL: Right. So I just	9	
9	COMMISSIONER RENDALIE. Mult. 30 Hust		
9 10	- · · · · · · · · · · · · · · · · · · ·		
	wanted to clarify. Mr. Rosen, you said there's a figure	10	
10 11	wanted to clarify. Mr. Rosen, you said there's a figure on that page. I don't have a figure on my page at all	10 11	
10	wanted to clarify. Mr. Rosen, you said there's a figure on that page. I don't have a figure on my page at all on page 21.	10 11 12	
10 11 12	wanted to clarify. Mr. Rosen, you said there's a figure on that page. I don't have a figure on my page at all	10 11 12 13	
10 11 12 13	wanted to clarify. Mr. Rosen, you said there's a figure on that page. I don't have a figure on my page at all on page 21. THE WITNESS: Sorry. It's not on that page. It's	10 11 12 13 14	
10 11 12 13 14	wanted to clarify. Mr. Rosen, you said there's a figure on that page. I don't have a figure on my page at all on page 21. THE WITNESS: Sorry. It's not on that page. It's COMMISSIONER RENDAHL: Thank you for that	10 11 12 13 14 15	
10 11 12 13 14 15	wanted to clarify. Mr. Rosen, you said there's a figure on that page. I don't have a figure on my page at all on page 21. THE WITNESS: Sorry. It's not on that page. It's COMMISSIONER RENDAHL: Thank you for that clarification. I wanted to make sure I had the right	10 11 12 13 14 15 16	
10 11 12 13 14 15	wanted to clarify. Mr. Rosen, you said there's a figure on that page. I don't have a figure on my page at all on page 21. THE WITNESS: Sorry. It's not on that page. It's COMMISSIONER RENDAHL: Thank you for that clarification. I wanted to make sure I had the right thank you.	10 11 12 13 14 15 16 17	
10 11 12 13 14 15 16	wanted to clarify. Mr. Rosen, you said there's a figure on that page. I don't have a figure on my page at all on page 21. THE WITNESS: Sorry. It's not on that page. It's COMMISSIONER RENDAHL: Thank you for that clarification. I wanted to make sure I had the right	10 11 12 13 14 15 16 17 18	
10 11 12 13 14 15 16 17	wanted to clarify. Mr. Rosen, you said there's a figure on that page. I don't have a figure on my page at all on page 21. THE WITNESS: Sorry. It's not on that page. It's COMMISSIONER RENDAHL: Thank you for that clarification. I wanted to make sure I had the right thank you. JUDGE KOPTA: Okay. Mr. Rosen	10 11 12 13 14 15 16 17 18	
10 11 12 13 14 15 16 17 18	wanted to clarify. Mr. Rosen, you said there's a figure on that page. I don't have a figure on my page at all on page 21. THE WITNESS: Sorry. It's not on that page. It's COMMISSIONER RENDAHL: Thank you for that clarification. I wanted to make sure I had the right thank you. JUDGE KOPTA: Okay. Mr. Rosen MR. STEESE: That's why I was struggling too.	10 11 12 13 14 15 16 17 18 19 20	
10 11 12 13 14 15 16 17 18 19 20 21	wanted to clarify. Mr. Rosen, you said there's a figure on that page. I don't have a figure on my page at all on page 21. THE WITNESS: Sorry. It's not on that page. It's COMMISSIONER RENDAHL: Thank you for that clarification. I wanted to make sure I had the right thank you. JUDGE KOPTA: Okay. Mr. Rosen MR. STEESE: That's why I was struggling too. JUDGE KOPTA: I'm going to caution everybody	10 11 12 13 14 15 16 17 18 19 20 21	
10 11 12 13 14 15 16 17 18 19	wanted to clarify. Mr. Rosen, you said there's a figure on that page. I don't have a figure on my page at all on page 21. THE WITNESS: Sorry. It's not on that page. It's COMMISSIONER RENDAHL: Thank you for that clarification. I wanted to make sure I had the right thank you. JUDGE KOPTA: Okay. Mr. Rosen MR. STEESE: That's why I was struggling too. JUDGE KOPTA: I'm going to caution everybody to talk one at a time because we're starting to talk	10 11 12 13 14 15 16 17 18 19 20 21 22	
10 11 12 13 14 15 16 17 18 19 20 21 22	wanted to clarify. Mr. Rosen, you said there's a figure on that page. I don't have a figure on my page at all on page 21. THE WITNESS: Sorry. It's not on that page. It's COMMISSIONER RENDAHL: Thank you for that clarification. I wanted to make sure I had the right thank you. JUDGE KOPTA: Okay. Mr. Rosen MR. STEESE: That's why I was struggling too. JUDGE KOPTA: I'm going to caution everybody to talk one at a time because we're starting to talk over each other. It's getting towards the end of the	10 11 12 13 14 15 16 17 18 19 20 21 22 23	
10 11 12 13 14 15 16 17 18 19 20 21 22 23	wanted to clarify. Mr. Rosen, you said there's a figure on that page. I don't have a figure on my page at all on page 21. THE WITNESS: Sorry. It's not on that page. It's COMMISSIONER RENDAHL: Thank you for that clarification. I wanted to make sure I had the right thank you. JUDGE KOPTA: Okay. Mr. Rosen MR. STEESE: That's why I was struggling too. JUDGE KOPTA: I'm going to caution everybody to talk one at a time because we're starting to talk	10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	*CONFIDENTIAL TESTIMONY*
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	wanted to clarify. Mr. Rosen, you said there's a figure on that page. I don't have a figure on my page at all on page 21. THE WITNESS: Sorry. It's not on that page. It's COMMISSIONER RENDAHL: Thank you for that clarification. I wanted to make sure I had the right thank you. JUDGE KOPTA: Okay. Mr. Rosen MR. STEESE: That's why I was struggling too. JUDGE KOPTA: I'm going to caution everybody to talk one at a time because we're starting to talk over each other. It's getting towards the end of the day. It's an easy thing to do, but it makes our court	10 11 12 13 14 15 16 17 18 19 20 21 22 23	*CONFIDENTIAL TESTIMONY*

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*	Page 277	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*	Page 279
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*	Page 278	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*	Page 280

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*	Page 286	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*	Page 288

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		Dago 200			Dago 201
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*	Page 289	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*	Page 291
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*	Page 290	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*	Page 292

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*		
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25	*CONFIDENTIAL TESTIMONY*		25	*CONFIDENTIAL TESTIMONY*		

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*	Page 302	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*	Page :	304

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*		
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*	Page 306	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*	Page	308

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*		
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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*	Page 310	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*	Page 3	512

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*	rage JIJ	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*	rage 313
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*	Page 314	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*	Page 316

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1	*CONFIDENTIAL TESTIMONY*		1	*CONFIDENTIAL TESTIMONY*		
2			2			
4			4			
5 6			5 6			
7			7			
8 9			8 9			
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14 15			14 15			
16			16			
17 18			17 18			
19			19			
20 21			20 21			
22			22			
23 24			23 24			
25	*CONFIDENTIAL TESTIMONY*		25	*CONFIDENTIAL TESTIMONY*		
		Page 318			Page	320
1	*CONFIDENTIAL TESTIMONY*		1	*CONFIDENTIAL TESTIMONY*		
2 3			2 3			
4			4			
5 6			5 6			
7 8			7 8			
9			9			
10 11			10 11			
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13 14			13 14			
15			15			
16 17			16 17			
18			18			
19 20			19 20			
21			21			
22 23			22 23			
24			24			
25	*CONFIDENTIAL TESTIMONY*		25	*CONFIDENTIAL TESTIMONY*		

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*	Page 321	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*	rage 3	23
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*	Page 322	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*	Page 3	24

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*		
1	*CONFIDENTIAL TESTIMONY*	Page 326	1	*CONFIDENTIAL TESTIMONY*	Page	328
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24			2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24			
25	*CONFIDENTIAL TESTIMONY*		25	*CONFIDENTIAL TESTIMONY*		

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*	raye 329	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*	raye	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*	Page 330	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*	Page 3	332

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1 2 3 4 5 6	*CONFIDENTIAL TESTIMONY*	Page 333	1 2 3 4 5	*CONFIDENTIAL TESTIMONY*	Page 335
7 8 9 10 11 12 13			7 8 9 10 11 12 13		
14 15 16 17 18 19 20 21			14 15 16 17 18 19 20 21		
22 23 24 25	*CONFIDENTIAL TESTIMONY*	Page 334	22 23 24 25	*CONFIDENTIAL TESTIMONY*	Page 336
1 2 3 4 5 6 7 8	*CONFIDENTIAL TESTIMONY*	1430 331	1 2 3 4 5 6 7 8	*CONFIDENTIAL TESTIMONY*	- 430
9 10 11 12 13 14 15 16 17			9 10 11 12 13 14 15 16 17		
18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*		18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*	

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,		D 225			D 220
1 2 3 4 5 6 7 8 9	*CONFIDENTIAL TESTIMONY*	Page 337	1 2 3 4 5 6 7 8 9	*CONFIDENTIAL TESTIMONY*	Page 339
11 12 13 14 15 16 17 18 19 20 21 22 23			11 12 13 14 15 16 17 18 19 20 21 22 23		
24 25	*CONFIDENTIAL TESTIMONY*		24 25	*CONFIDENTIAL TESTIMONY*	
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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 20 21 22 23 24	*CONFIDENTIAL TESTIMONY*		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	*CONFIDENTIAL TESTIMONY*	
25	*CONFIDENTIAL TESTIMONY*		24 25	*CONFIDENTIAL TESTIMONY*	

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*		
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*	Page 342	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	*CONFIDENTIAL TESTIMONY*	Page :	344

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2			2	
3 4			3 4	
5			5	
6			6	
7 8			7 8	
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11 12			11 12	
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15 16			15 16	
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18			18	
19 20			19 20	
21			21	
22			22	
23 24			23 24	
25	*CONFIDENTIAL TESTIMONY*		25	*CONFIDENTIAL TESTIMONY*]
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1	*CONFIDENTIAL TESTIMONY*	rage 340	1	
1 2	CONFIDENTIAL TESTIMONY		1 2	[*CONFIDENTIAL TESTIMONY*
3			3	
4 5			4 5	
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1.3			12	
13 14			12 13 14	
14 15			12 13 14 15	*CONFIDENTIAL TECTIMONIV* 1
14 15 16			12 13 14 15 16	*CONFIDENTIAL TESTIMONY*] (Adjourned at 6:26 p.m.)
14 15 16 17 18			12 13 14 15 16 17 18	*CONFIDENTIAL TESTIMONY*] (Adjourned at 6:26 p.m.)
14 15 16 17 18 19			12 13 14 15 16 17 18	*CONFIDENTIAL TESTIMONY*] (Adjourned at 6:26 p.m.)
14 15 16 17 18			12 13 14 15 16 17 18	*CONFIDENTIAL TESTIMONY*] (Adjourned at 6:26 p.m.)
14 15 16 17 18 19 20 21 22			12 13 14 15 16 17 18 19 20 21 22	*CONFIDENTIAL TESTIMONY*] (Adjourned at 6:26 p.m.)
14 15 16 17 18 19 20 21 22 23			12 13 14 15 16 17 18 19 20 21 22 23	*CONFIDENTIAL TESTIMONY*] (Adjourned at 6:26 p.m.)
14 15 16 17 18 19 20 21	*CONFIDENTIAL TESTIMONY*		12 13 14 15 16 17 18 19 20 21 22	*CONFIDENTIAL TESTIMONY*] (Adjourned at 6:26 p.m.)

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,	Page 349
1	CERTIFICATE
2	
3	STATE OF WASHINGTON COUNTY OF THURSTON
4 5	COUNTI OF INUKSTON
6	I, Tayler Garlinghouse, a Certified Shorthand
7	Reporter in and for the State of Washington, do hereby
8	certify that the foregoing transcript is true and
9 10	accurate to the best of my knowledge, skill and ability.
11	200
12	MOTOR CO.
13	
14	Tayler Garlinghouse, CCR 3358
15 16	Tayler Garlinghouse, CCR 3358
17	
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