1	DENALI COMMISSION	
2	VIRTUAL COMMISSIONER MEETING:	ENERGY
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4		
5	January 10, 2022	
6	4:00 p.m.	
7		
8	Held via Zoom	
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10	COMMISSIONERS PRESENT: Garrett Boyle	
11	Alicia Amberg Tyson Gallagher	
12	Julie Kitka Nils Andreassen	
13	Pat Pitney Joelle Hall	
14		
15	OTHER PARTICIPANTS: Anne Stanislowski	
16	Jocelyn Fenton John Wittington	
17	Kristin Reardon Curtis Thayer	
18	Bill Stamm Katie Conway	
19	Erik Obrien	
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1	PROCEEDINGS
2	CHAIR BOYLE: Good afternoon,
3	commissioners.
4	Hope you all had fun over the holidays and
5	got to relax a little bit. Hope you also did not
6	get stuck in any of the travel mess that a lot of
7	my family did. It did not seem like a lot of fun.
8	So, I'll go around and introduce our staff
9	that we have on the line again. We have John
10	Wittington, our general counsel; Jocelyn Fenton,
11	who's our director of programs; Kristin Reardon
12	who handles the Department of Justice Victims of
13	Crime Act funds, does water/sewer projects and
14	health facilities as well; and then Katie Conway,
15	who is just joining us today after a couple of
16	years over at the private sector, but prior to
17	that, she was at ADA for a long time and brings
18	some good experience to the table for us. So,
19	we're excited to have her on board.
20	It looks like Erik Obrien is signing in as
21	well, who does our economic development, workforce
22	development, broadband, and housing portfolios.
23	So, I'm going to keep my report pretty
24	brief because, like I said, I think we have a lot
25	more to talk about than just my opinion on things,

- as important as that is to everyone, I'm sure.
- 2 First, Julie, thanks so much for having me
- 3 at AFN. I hope that was helpful. I think it was
- 4 good for me to be there.
- 5 Tyson, I think --
- MS. KITKA: Everybody liked it.
- 7 Good job.
- 8 CHAIR BOYLE: Oh, thanks.
- 9 Tyson, I thought you had been volunteered
- 10 to that one as well, but apparently you managed to
- 11 weasel your way out of it.
- MR. GALLAGHER: I got out of it.
- 13 Sweet.
- 14 CHAIR BOYLE: So --
- MS. KITKA: Well, Pat -- Pat had
- 16 her own thoughts.
- 17 So, what did you think of it, Pat?
- 18 CHAIR BOYLE: I think you're muted,
- 19 Pat.
- MS. PITNEY: Sorry about that.
- Julie, I was saying I really appreciated
- the opportunity and the time, but it's really kind
- 23 of difficult when -- when -- you know, on the Zoom
- world, you don't get that feedback. You don't
- linger with the people afterwards.

1	So, I don't know what what feedback did
2	you I I got a few texts after it.
3	But what did what did you feel like?
4	MS. KITKA: I think that the whole
5	education component went really well. Especially
6	having the secretary of the Department of
7	Education, that was really nice.
8	And, in fact, I think that they they
9	mentioned you must have been meeting with them
LO	and the commissioner must have been meeting with
11	them and so I think it just created a lot of
12	opportunities.
13	So, I thought it was good.
14	MS. PITNEY: Awesome.
15	MS. KITKA: But I swear I never
16	want to do it again in December again. I want to
1,7	go back to October.
18	It it is a holiday destroyer having all
19	that stuff so close to Christmas.
20	MS. PITNEY: Interesting.
21	CHAIR BOYLE: Valid point, Julie.
22	I think we'd all agree with you.
23	So, I have been having a lot of
24	conversations with folks from, you know, Kodiak,
25	Unalaska, Old Harbor, Petersburg, Wrangell,

1	Northwest Arctic Borough, variety of others.
2	The good news is it sounds like there's no
3	lack of need, and we could probably spend all of
4	our money next week if we really wanted to.
5	Bad news, I think, is that everyone kind
6	of expects us to fund their projects or at least a
7	part of it. So, there's some pretty high
8	expectations out there for us.
9	My message has been and will continue to
10	be for probably two or three months that we
11	are in the planning process. We want to approach
12	this strategically, not simply rush out to spend
13	money.
14	So, we're going to just keep talking to
15	folks, letting them know we're available for
16	conversations, kind of soliciting ideas and input,
17	but not any kind of rush to judgement, if you
18	will.
19	On the administrative side of the house,
20	Tyson, we continue to wait to hear back from the
21	federal highway administration on the \$15 million
22	the State is still trying to transfer us, which
23	has been out there for four months now, give or
24	take, which is kind of frustrating.
25	The delegation may be sending a letter to

1	Secretary Buttigieg on that soon or they may
2	have already. I've tried to check in to see where
3	that is but did not get a response prior to the
4	meeting.
5	MR. GALLAGHER: Is there anything
6	else we can do State side, or just kind of it is
7	where it is right now?
8	CHAIR BOYLE: I think we're just
9	kind of stuck in bureaucratic hell for the moment
LO	sadly.
L1	MR. GALLAGHER: Okay.
L2	CHAIR BOYLE: We're trying to get
L3	us out of there, but I I understand there's
L 4	sensitivities between State DOT and federal
15	highways, and you don't want to blow up that
16	relationship.
L7	MR. GALLAGHER: Yeah.
18	CHAIR BOYLE: So, hopefully the
L 9	delegation can get some movement for us.
20	MR. GALLAGHER: Okay.
21	CHAIR BOYLE: And then I'm also in
22	the processing of process of trying to get GSA
23	to realize that the commission has independent
24	leasing authority.
25	For those of you not familiar, GSA does

1	the vast majority of leasing for all the agencies
2	in the federal government.
3	So, if we do get them to understand we
4	have that authority, our lives when it comes to
5	procuring office space will be much easier and
6	much cheaper.
7	You know, we won't have a third party
8	telling us where we have to locate and then
9	charging us a 7 percent fee every year if we're
10	not in federal-owned space.
11	So, hoping to pursue that in the coming
12	weeks and get an answer from them.
13	Regarding the meeting on the 24th, Val
14	Davidson, unfortunately, can't be with us because
15	of the board meetings at ANTHC. But Jerry Moses
16	and David Beveridge will be able to join and speak
17	to the their water, sewer, and solid waste
18	funding.
19	And I've also invited Indian Health
20	Services staff to join us for their perspective,
21	but we didn't hear back from them.
22	I'll just pause for a second, see if there
23	are questions, comments, concerns before we
24	MS. KITKA: I I I would
25	suggest you invite Norton Sound Health

1	Corporation, Megan Alvanna-Stimpfle.
2	CHAIR BOYLE: Okay.
3	MS. KITKA: They have a new model
4	that they want to showcase on water and sanitation
5	that might be something of interest to the
6	commissioners.
7	CHAIR BOYLE: Yeah. I can do that.
8	I will reach out to her.
9	MS. KITKA: I can send you some
10	paperwork on that because we did a roundtable and
11	showcased that. So, we've got a lot of
12	information.
13	It does look really promising, to us,
14	anyway.
15	CHAIR BOYLE: Yeah. I had a chat
16	with them probably two months ago at this
17	point that they kind of briefed me up on it.
18	But I'll reach out to Megan.
19	MS. KITKA: Thank you.
20	CHAIR BOYLE: Anyone else?
21	All right. So, let's jump into the
22	discussion topics that I sent over last week.

workforce development, how we want to allocate

this up to \$2 million.

So, we had a lot of chat last time about

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1	A lot of folks are concerned about the
2	lack of workforce. But exactly how we can address
3	that problem that's going to start probably later
4	this year and last for several years is a very
5	hard question to answer, I think.
6	Alicia, what you sent over looked
7	absolutely fascinating last week.
8	Erik's going to dig into that and reach
9	out and get some better information.
10	As I said, staff kind of proposed maybe we
11	do a needs assessment with the University, the
12	Department of Labor, and kind of get a sense of
13	the scope and size of the problem as a starting
14	point and move forward.
15	But we are always, of course, open to
16	input from the commissioners. So, if there are
17	good ideas from you all on how to approach
18	workforce development issues, we'd love to hear
19	about them. Give you time to think about it for a
20	little bit longer.
21	MS. HALL: I had a question about
22	the the scope of the workforce we're talking
23	about.
24	Is it workforce specifically for the
25	appropriations we're looking at here, or I'm

- 1 thinking about our health clinics and things like
- 2 that where we have a separate -- we have a
- 3 separate line of workforce that constantly has to
- 4 be refreshed.
- 5 So, wondering what the -- what the gambit
- is here. Is it supporting the investments that
- 7 are in the infrastructure bill -- like broadband,
- 8 et cetera -- or is it bigger than that?
- 9 I think that might be -- I think that's
- 10 kind of a closing-the-parameters question here.
- 11 Like, which workforce need are we
- 12 attempting to satisfy?
- 13 I'm not clear about that right now.
- 14 CHAIR BOYLE: Well, my impression,
- I would say, from the last conversation, was more
- 16 about directly related to the infrastructure bill.
- 17 I don't know if you want to disagree with
- 18 that.
- MS. PITNEY: So, with my -- with my
- Denali Commission hat on, my -- my scope is: How
- 21 do we use this opportunity to build -- you know,
- 22 to train our own to -- to build our place-based
- workforce for the long term?
- Because we -- you know, you're right,
- Joelle. I mean, the general healthcare workforce,

1	whether whether we had COVID or not, was more
2	than we could could do. And now with COVID and
3	with kind of the transition people are making,
4	it's huge.
5	Our you know, teacher education, for
6	that matter. I mean, there's there are
7	there are so many workforce needs, it is
8	compounded by this.
9	But as you know, Tyson's working on
L O	broadband. If we're talking about broadband and
1	the future, if we have broadband in in you
L2	pick the place in northern or western or, you
L3	know, Metlakatla, or wherever, what could we
L 4	how could we prioritize our workforce from this
L5	angle of the Denali Commission to make sure the
L 6	people who choose to live there are capable of
L7	doing the jobs?
L8	Because then it's a circular economy
L9	instead of people just coming in and taking the
20	money and going out.
21	It's kind of like our effort to train
22	nurses in in the communities so we're training
23	those people in those communities, and they stay
24	there.

MS. HALL: Alicia --

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1	CHAIR BOYLE: I
2	MS. HALL: Oh. Alicia, I was
3	talking to Mike Andrews earlier today, and he said
4	that you guys are going to be chatting with the
5	commission later, and he had sent me some of the
6	materials.
7	Is that the materials you guys were
8	talking about earlier in terms of the micro the
9	micro grants and that workforce model that we used
10	in the early days?
11	Is that is that what you guys were
12	chatting about?
13	MS. AMBERG: Different
14	different. No.
15	MS. HALL: Different. Okay.
16	MR. GALLAGHER: So
17	MS. HALL: So, just to that
18	point to Pat's point and to this conversation,
19	Mike Andrews you all know used to work at
20	Department of Labor. And now he has long since
21	retired, but he works he writes grants, he's
22	working on a grant for apprenticeship for
23	healthcare.
24	I think Alicia and I are involved in a few
25	peripheral things relating to this.

1	But in the early days, one of the ways
2	that they went and Julie will probably remember
3	this in the Mano Fry/Jim Sampson era he
4	really thought that the one of the best ways
5	they went about workforce was they would do micro
6	grants to communities who would come up with their
7	own they would meet a need they needed a
8	jack-of-all-trades, they needed an electrician,
9	they needed a plumber and then what we then
10	what we do is they would apply to have the remedy
11	and the tool the training that they needed in
12	their community, and then the trades would fly
13	people out there and train people in place.
14	But because there was a funding mechanism
15	to get them out there and the communities
16	identified the needs, it worked really well.
17	I was just reading a document where they
18	trained hundreds and hundreds of people in, you
19	know, dozens hundreds of communities, hundreds
20	of crafts.
21	So, with broadband I guess because I'm
22	ignorant about this is it is it five or six
23	skill sets that everybody's going to need, or
24	two or I think it would really help me to
25	kind of figure out, like, what's the

1	apprenticeable system, how it can work because
2	on a long-term structure, you have you have the
3	training, and then you have you have the
4	building, and then you have the maintenance,
5	right?
6	So, those two two things become
7	apprenticeable tracks.
8	And I'm not I'm unfamiliar with what we
9	think that workforce looks like.
10	MR. GALLAGHER: So and you
11	know, and broadband's such an interesting piece to
12	workforce development because it's as I see it,
13	as I look forward, you know, with good with
14	good broadband, with good bandwidth, it opens up
15	innumerable possibilities for training for
16	individuals, whether it's something like flight
17	simulating training or access to, you know, any
18	sort of courses electronically or digitally.
19	But I also think about you know, two
20	things. No. 1, we're going to need and I don't
21	know, you know, how many folks you have in your
22	workforce that are probably you know, hungry
23	for jobs, and there's more money and work than
24	they're going to be able to do.
25	So, how do we maximize that workforce and

1	then build on that workforce to lay you know,
2	with broadband to lay the infrastructure, whatever
3	that may be, and then turn around and capitalize
4	on the new opportunities for those local
5	communities where kids can get an education and
6	or, you know, training in whatever.
7	And then whether they stay in their
8	community and they're they're trained
9	physically to be a plumber or an electrician or a
10	jack-of-all-trades or to work on the broadband
11	infrastructure in the community, or if kids want
12	to stay in a community and learn how to be a pilot
13	from home.
14	Because, you know, with virtual reality
15	and good bandwidth, they'll be able to do that
16	now.
17	So, it's kind of I don't want to say
18	it's a "chicken or the egg" thing. I think we
19	to Garrett's point, if we can focus on the scope
20	of work that Denali has, maybe try to kind of

It's kind of like going from a circle to a spider web. It just opens up all sorts of doors.

broadband will continue to open up the

possibilities to do more and more.

focus on some of those work areas, things like

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22

23

1	I don't know if that helps you at all.
2	MS. HALL: I guess I guess I'm
3	way back at the beginning.
4	Are we trying to define a workforce to
5	build the broadband infrastructure?
6	That
7	MR. GALLAGHER: Sure.
8	MS. HALL: I guess that's my
9	I I still I think that's the question. I
10	think that's the problem we're trying to solve
11	here, right?
12	Not the
13	MR. GALLAGHER: I think
14	MS. HALL: Not the ripple effects.
15	MR. GALLAGHER: I think I think
16	that's the primary goal is
17	MS. HALL: Okay.
18	MR. GALLAGHER: is
19	MS. HALL: Okay.
20	MR. GALLAGHER: a workforce to
21	help to help, you know, build the
22	infrastructure.
23	And whether it's the additional
24	water/sewer infrastructure or you know, I don't
25	know, Alicia, what the contractors are able to do.

1	I imagine they want to get all the work they can
2	because we're not going to rely on any
3	out-of-state help because they're going to be busy
4	too, right?
5	And so do we need to train more workers
6	here?
7	Do we need to kind of meter the work so
8	our crews stay busy?
9	I'm not sure what the answer is.
10	But I think we should focus on the tasks
11	at hand, which is is building the
12	infrastructure first.
13	MS. HALL: Garrett or Alicia I
14	mean, can you guys so, this is what are we
15	talking about here?
16	Are we talking about I mean, actually,
17	I'm looking for specifics.
18	Are we talking about laborers to dig
19	trenches to lay wires?
20	Are we talking about electrical workers?
21	Like, what are we well, I don't
22	understand what the work is.
23	When you say "broadband," I know
24	MR. GALLAGHER: Sure.
25	MS. HALL: I get the end of it,

- 1 but I don't know the beginning of it.
- 2 So, what -- what is the technical skills
- 3 that we're talking about training for?
- 4 MR. GALLAGHER: Sure.
- 5 So, you know, it would depend on what type
- of technology was elected to be used.
- 7 So, in -- in broadband, there's three
- 8 primary technologies. There's satellite
- 9 technology, microwave technology, and then fiber
- 10 technology.
- MS. HALL: Uh-huh.
- MR. GALLAGHER: There's two types
- of satellites. There's traditional satellites,
- 14 and there's a newer kind called low earth orbit or
- 15 LEO satellites. That would involve the
- 16 construction, placement, and operation of earth
- 17 ground stations as well as receivers on every
- 18 structure and then kind of calibrating them in
- 19 with satellites.
- 20 Microwave infrastructure are line-of-sight
- 21 towers with big dishes in every direction. You
- 22 know, GCI is known for their terra network. So,
- you know, you've got your tower on a mountain top
- 24 with dishes in every direction.
- 25 And so you got --

1	MS. HALL: Same technology since
2	World War II, right?
3	MR. GALLAGHER: That's right. Yup.
4	MS. HALL: And it's White Alice.
5	MR. GALLAGHER: It's it's it
6	works when others don't.
7	And then fiber is you know, depending
8	on if you're on land or or subsea, you're
9	either, you know, digging a trench or putting that
10	on a pole or in a in a right-of-way or
11	something that's already been dug up.
12	So, whether you're aboard a ship or you're
13	physically, you know, digging up a trench, you'd
14	be laying physical infrastructure in in what
15	you know, we aim to be right-of-way
16	rights-of-way, but, ultimately, a physical
17	connection.
18	So, those are the three types of work.
19	I don't know if that helps you from
20	there
21	MS. HALL: Uh-huh. It does.
22	MR. GALLAGHER: Anyways, that
23	for broadband, that's that would be the
24	starting point.
25	MS. KITKA: You know what

1	this this is Julie I would broaden that to
2	that is the build-out of the physical
3	infrastructure.
4	But then you have the other flip side of
5	use and adaptation of the broadband and
6	AFN just is filing today our cured
7	application with NTIA on use and adaptation.
8	And they tell us our application which
9	is now finally cured and pending there is the
10	largest consortium that they've had in the country
11	coming there.
12	And we'll have an answer in a week and a
13	half, and we expect that to be positive.
14	But when we look at workforce and use and
15	adaptation is we need a circuit writer program
16	that will go and help setup technology and
17	troubleshoot and and build up skill sets on
18	that.
19	And then also think in terms of we need to
20	get our heads wrapped around building
21	knowledge-based economies.
22	How do we take advantage of the ability to
23	do that?
24	How do we, you know, push out even more
25	healthcare and and education, and how do we

make this work, but how do we think broad enough 1 that we actually have our people capture these 2 3 opportunities? So, I would add -- I would add to your 5 physical infrastructure that use and adaptation 6 category. And we'll let the Denali Commission know as soon as we hear from NTIA. 8 9 But I think the Denali Commission may want to partner with us and grow some of those aspects 10 11 t.00. 12 So, thanks. 13 CHAIR BOYLE: Yeah. 14 I just suggest maybe thinking about two 15 different tracks here, Joelle. 16 That, one, we have kind of our 17 annual-based appropriations every year, right? And we do a lot of workforce development 18 19 with those fundings that try to get to that 20 circular economy that Pat was talking about where 21 we train folks to reside in villages to do the 22 operations and maintenance work on the power 23 houses, for example. 24 But if we're going to take 2 million in 25 infrastructure bill funding, would it be smarter

1	to target that specifically to a workforce that is
2	going to be needed to do all the infrastructure
3	work, not just laying the broadband but,
4	Alicia, I'd ask for your comments here is that
5	I would imagine skilled labor is a very difficult
6	thing to find in villages.
7	So, can we train up carpenters,
8	electricians, brick layers, whoever you need out
9	in a village to go do that work when, you know,
LO	one of these villages gets a \$1 million grant to
1	build something, right?
L2	MS. AMBERG: Yeah. That's
L3	certainly
L 4	And I'm sorry. I'm getting over just a
15	generic cold.
16	But I that's certainly, you know, our
L7	top issue of concern is finding that qualified
L8	workforce, especially with the competition that
L9	we're going to have with other states and their
20	labor markets. You know?
21	As you all know, Alaska was still pulling
22	out of our recession, you know, when other
23	states particularly in the Pacific Northwest
24	we're already booming in the construction market.
25	And so, you know, we are going to have

some competition to try to find a workforce to 1 build these projects in the timeline necessary to 2 3 spend this money. So, we -- we're going to be really 5 challenged with that over the next few years. 6 So, that's where our focus remains. 7 MS. PITNEY: A comment that came up 8 this morning was on just the sheer magnitude of 9 permitting that's going to be required. And how -- you know, is there a way we 10 11 can, you know, take people who -- you know, 12 most -- most of the time on permitting, they're 13 looking for engineers. But, you know, we probably 14 don't have enough engineers to go around. 15 Is there a certain other skill set that 16 could take a short course, you know, intensive 17 that could be -- get them 90 percent of the way 18 there to get an engineer to then check it off? 19 You know, how do we -- what -- is there a 20 way we can leverage skill sets outside ours, and 21 can we be responsive in that way? 22 And then on just, you know, general 23 workforce stuff -- if -- you guys haven't met her; 24 Teri Cothren is our person on workforce training. And I -- I'll reach out to her and have her reach 25

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1
        out to Mike and Joelle and Alicia. I think we
        probably could have a good conversation in the
 2
 3
        future, but...
               Yeah. We're -- I -- I think we have more
 5
        opportunity to build people than -- than we can --
 6
        we can get.
 7
               But that focus, I was -- I was interested,
        Joelle, in -- in the micro grant kind of --
 8
 9
        because if you do the micro grant, you get a lot
        more people thinking about it.
10
11
               And it -- and that way it -- and maybe we
12
        adjust over time, but at least -- at least we're
13
        doing something earlier that somebody's going to
14
        take ownership for its outcome.
15
               And we build on what's successful and
16
        invest in that as we go forward.
17
                      MS. HALL:
                                 I'm happy to send the
18
        report that Mike sent me, which was a report they
19
        had written for the Denali Commission that covered
20
        a decade-long period where they -- where they
21
        engaged in this strategy and kind of how they --
22
        they were able to do it.
23
               Because --
24
                      MS. KITKA: (Indiscernible) --
25
                      MS. HALL: -- on Alicia's point,
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1	you know, you may have a person who could go out
2	and train multiple people in a community, and then
3	those contractors would have a resource in place.
4	They would they would come in, they
5	would train three or four people, and it's an
6	it's a it's a real tactile strike of training.
7	And you get in, and then you just move along.
8	And that's something that between the
9	AFL and our and our apprenticeship systems and
10	other training mechanisms that are that are,
11	you know, authorized you know, those seem like
12	ways that we could also contribute to training
13	outside of the normal the normal apprenticeship
14	model, which is long and important, but long,
15	right?
16	MS. KITKA: Yeah.
17	MS. PITNEY: But it
18	(Indiscernible crosstalk.)
19	MS. PITNEY: Go ahead, Julie.
20	MS. KITKA: she had requested my
21	views when because Mano Fry I think it was
22	his idea.

MS. HALL: Uh-huh.

good one.

23

24

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We loved that program. That was a really

1	MS. PITNEY: But I'm just thinking
2	on the on the switch on a switchgear person
3	for the Internet, you know, that's another one
4	where, "Hey. We need we need five people in
5	this community. Come in. We've got this short
6	course."
7	We'll we'll do it, and then hopefully
8	introduce them to, "Here's what it takes to become
9	a trained tech and a"
10	MS. HALL: Uh-huh.
11	I think what happened, if I I'm kind of
12	piecing together different this is probably all
13	in the same timeframe, but I remember this coming
14	up in conversations about AGDC and the natural gas
15	pipeline, right?
16	There was a lot of concern about uptaking
17	and making sure we would be able to get out into
18	the communities to bring people in.
19	It's the Alaska Works Partnership that
20	this all came out of. So, the and that's
21	Alaska Works Partnership is a consortium, and
22	they're the uptake it's like a
23	pre-apprenticeship system.
24	So, they're also kind of PR operation,
25	right?

1	So, when you talk about needing people
2	like, where are we going to go find all these
3	people?
4	That's part of what Alaska Works does.
5	And if you don't yet have the skills
6	needed to qualify for the apprenticeship to test
7	well into the apprenticeship, they give you the
8	basic math. They teach you how to use a power
9	tool. They do all these things.
10	And they they run these amazing
11	programs.
12	And they're geared towards getting people
13	into an apprenticeship, but they could have
14	they run construction academies, all of those
15	types of things.
16	So, they're an amazing asset that used to
17	be way bigger back in the day. I think we were
18	they had a relationship with Denali Commission.
19	And as lots of things, as money's moved around,
20	they got a little smaller and they meet a very
21	specific need now.
22	But all of these tools can be this
23	tool, in particular, can be ramped up.
24	And this is cool because it's how you
25	access the people who don't grow up in the family

1	with the trades, and they don't know that they
2	want to grow up to be an electrician. They just
3	know they don't want to go to college. They can't
4	sit still, and they want to go do something else.
5	And this is a way to get them exposed to
6	things that they wouldn't normally be exposed to.
7	So, I will forward that on to you,
8	Garrett, that document that Mike Andrews sent
9	over.
10	And when you have your conversation, you
11	know, he is a font of I mean, I cannot tell you
12	how valuable that man's brain is to the exercise
13	of trying to get workers trained.
14	So, encourage you to pick his brain as
15	long as you can.
16	CHAIR BOYLE: Will do.
17	That does sound like what you had sent
18	over to us last week, Alicia, the Alaska Works
19	thing.
20	MS. AMBERG: Yeah.
21	So, I had connected Garrett with Alexis
22	over at Alaska Works. And we'd talked about the
23	building maintenance program that they used to
24	have through the Denali Commission.
25	And I hadn't realized that Mike was still

- involved in that level as well. I mean, I'd
- 2 worked with Mike on this Department of Labor grant
- 3 that we're just co-applicants on or supporting or
- 4 whatever. But I didn't realize any of that was
- 5 connected.
- 6 So -- but Mike would be a great contact
- 7 regardless, Garrett.
- 8 CHAIR BOYLE: Okay. Thank you.
- 9 MS. HALL: He can spend \$2 million
- 10 easy. I promise.
- 11 CHAIR BOYLE: Well, like I said,
- everybody I've talked to has really great ideas,
- and they could all spend all of our money really,
- 14 really fast.
- So, Tyson, can I ask for you to talk for
- 16 maybe five minutes about what the State's doing on
- 17 broadband?
- MR. GALLAGHER: Yeah.
- 19 CHAIR BOYLE: I mean, 250 million
- is not a whole bunch of money when we're talking
- 21 about billions, potentially.
- MR. GALLAGHER: It's -- it's not,
- but it could be really helpful.
- So, I'll give the quick once-over. I
- 25 think I've spoken to this group.

1	The State is excited about really
2	excited about the opportunities in broadband.
3	Alaska, thanks to the infrastructure package,
4	could get anywhere from a billion to billion and a
5	half dollars to the State program for broadband
6	infrastructure, in addition to the several billion
7	dollars that have been made available through the
8	Tribal Connectivity Broadband Program [sic].
9	There are certain compliance requirements
LO	we have on the State side, and we're having a
L1	little tough time just matching up the timing
L2	aspect with the State budget cycle.
L3	So, the latest NTIA has communicated to us
L 4	that their expected NOFO for the BEAD that's
L5	the Broadband Equity, Access, and Deployment
L 6	Program that's the primary pot of money. They
L7	expect to issue that NOFO in May of '22.
L8	At that time, the State will will need
L 9	to submit a letter of intent with our kind of
20	outline or plan for a broadband office.
21	That will then give us access to our kind
22	of first allotment of administrative money or
23	\$5 million, 5 percent of the \$100 million minimum
24	allocation the State would receive.
25	From that point, the State would be

1	responsible for developing and providing
2	submitting a five-year action plan for how we plan
3	to build out the State, as well working with the
4	telco providers to submit their network mapping
5	information to the FCC.
6	That information is really important
7	because that will be what's kind of used to to
8	calculate how many eligible populations we have,
9	which will determine how much money the State gets
10	through that BEAD program.
11	That is a piece that I had kind of
12	discussed with our staff about possibly utilizing
13	the Denali Commission this funding or some of
14	your help.
15	Our State geospacial mapping team at DNR,
16	I I had a briefing with them last week. And so
17	the language actually in the infrastructure
18	bill you know, currently, the FCC requires
19	what's what's called coverage information or
20	kind of community-level information for broadband
21	mapping.
22	The language in the Broadband Data Act
23	within the infrastructure bill calls for what's

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called Serviceable Location or kind of to a

specific address.

24

25

1	Alaska does not have that information on
2	file, whereas other states do. We tend to run,
3	you know, 10, 20, 30 years behind in a lot of
4	technical mapping stuff.
5	I don't think that anyone, at least in our
6	preliminary conversations, thinks that the state
7	will be able to get caught up with other states.
8	But the hope is is that we can engage with the
9	FCC about how they currently measure compliance
10	for FCC administered telecom programs.
11	Because I know that they use very specific
12	bandwidth deliverables for each of these
13	organizations companies that receive federal
14	funding.
15	And so trying to have a mapping person
16	essentially working in coordination with the FCC
17	to make sure that that we're we're getting
18	verifiable information, and they're not misreading
19	Alaska's populations so we get the full amount of
20	data we thought could be a beneficial use of that
21	money or, you know, some resources at Denali.
22	I mean, Erik's been great to work with.
23	And so to whatever extent you all thought
24	that had some merit, I certainly can submit a
25	concept for you to consider. You know, I'm open

to ideas as well. 1 But -- but mapping is something that I 2 think we need to kind of -- I'd like for us to be 3 proactive because sometimes the FCC will apply their -- their view of the world. 5 6 And, Garrett, you know that doesn't always 7 work for Alaska. 8 So -- so, that was the thought and 9 concept. I'm certainly open to -- to consideration. But from the State, that's kind of 10 11 where we're at and where we're planning on working 12 over the next few months. 13 CHAIR BOYLE: Thanks, Tyson. 14 Does anyone have questions before we turn 15 it over to the presenters? 16 If not, Bill, I see you're on. 17 Curtis, I see you're on. 18 Are we ready to hand it over to you guys? 19 MR. STAMM: Good afternoon, 20 everybody. 21 Curtis, I said I was going to go first. You still good with that? 22 23 MR. THAYER: You won the coin toss.

Well, thanks, everybody. My name is Bill
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MR. STAMM: All right.

24

Stamm, president and CEO of Alaska Village 1 2 Electric Cooperative. 3 I appreciate the opportunity to talk to the board and also appreciate being --5 MS. HALL: Okay. 6 MR. STAMM: -- in the partnership 7 with Denali Commission --8 CHAIR BOYLE: All right. 9 MR. STAMM: -- since 2001. I'm going to try to share my screen here. 10 11 Hopefully I can -- is that disabled? 12 Do you not want me to share a screen? 13 I can just talk. 14 CHAIR BOYLE: All right. Give it a 15 shot again. 16 I just made you a host. 17 MR. STAMM: Okay. 18 Can folks see that? 19 CHAIR BOYLE: Yes. MR. STAMM: All right. Okay. 20 21 I'm trying to see how to shift up to --22 here we go. 23 So, Garrett told me to stay away from who

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I found as I was going through this that it is

AVEC is and the projects we've done together, but

24

25

1	rather informative to help figure out where our
2	path is and what we might do in the future.
3	I'd like to talk a little bit about what
4	we've done in the past, what we're doing
5	presently. Want to talk a little bit about the
6	partnerships that we've gained over the years
7	working with the Denali Commission on some of
8	these very interesting projects.
9	And then where do we go from here?
10	In general, AVEC has been using Denali
11	Commission funding for rural power system
12	upgrades as you're all aware power plant
13	upgrades, bulk fuel upgrades.
L 4	We have been a rural electric cooperative
L5	for 50 years. We started in 1968 with 4
16	communities. By 1975, there were 40 communities,
L7	and now we're up to 58.
L8	On this slide you can see that we burn
L9	quite a bit of diesel fuel. So, it's always been
20	one of our goals to reduce our diesel burn.
21	Through efficiencies at the power plant, we've
22	reduced that number quite a bit over the years.
23	And the latest and greatest method for
24	reducing diesel burn is using renewable energy and
25	integrating wind and solar into our power plants.

1	You can see that our revenue for the year
2	is about 52- to \$54 million, and half of that is
3	our cost of fuel. So, just getting fuel into the
4	tanks takes up half of the revenue that we spend
5	in order to make power.
6	Quick look back at the projects that we've
7	done. As I mentioned, power plant upgrades, tank
8	farm upgrades, pipelines, integration with
9	renewables, distribution upgrades which
LO	throughout a lot of Alaska, when we built out
L1	those power systems in the early '70s, it was all
.2	laid on the ground or underground distribution.
L3	We've converted a lot of that to overhead.
L 4	Wind turbine installation integration,
L5	heat recovery with some of our partners at ANTHC.
L 6	And in the early years when there was a
L 7	large influx of money with the Denali Commission,
L8	the training and workforce development was really
L 9	a part of integral an integral with the
20	projects that we were doing.
21	And as the years went by, money became a
22	little bit more difficult to come by. We went to
23	full partner project contracting to lowest bid.
24	And some of that training component got decoupled
25	from the projects themselves.

1	There's still quite a bit of training
2	going on with AVTEC power plant operator training,
3	tank farm operator training, and training
4	throughout the communities with the START program
5	with technical assistance for the communities.
6	Current DC funded projects that AVEC is
7	involved with, no surprise, there's bulk fuel
8	upgrades. There's rural power system upgrades.
9	Most recently, we started doing individual
10	switchgear replacements within our power plants as
11	we've been as much money available for complete
12	power plant replacements.
13	So, we've been going in and essentially
14	removing the brains of the outfit and upgrading
15	that with fully automated electronic gear.
16	And that gives us the leverage in order to
17	integrate renewables in the future, even if we do
18	not have the funding to do that now.
19	A lot of money spent on statewide
20	maintenance and improvements, replacing engines,
21	overhauling engines, getting more efficient
22	electronically controlled engines in places where
23	we haven't had that before. And also bulk fuel
24	maintenance and infrastructure improvements.
25	There's outbound St. Lawrence Island.

- Both Gambell and Savoonga have been beaten up by
- 2 salt air. The projects that we installed 20 years
- 3 ago are a little bit -- looking a little bit sad.
- 4 So, we've undertaken a project to repaint all the
- 5 power plant and tank farm in both Gambell and
- 6 Savoonga.
- 7 A difficult task in itself just because
- 8 the weather window is -- is pretty tight, COVID
- 9 has also played a difficult card for us there.
- 10 It's been delayed a year.
- 11 They did not complete everything they
- needed to do in Gambell, and they'll be going back
- out to finish Gambell and start Savoonga this
- 14 year.
- One of the projects that was listed in
- 16 that previous slide was St. Mary's family of
- 17 projects. It's kind of culmination of a lot of
- 18 things that we've been doing over the years. This
- brings together the technology and efforts that
- we've done individually in a lot of different
- 21 places.
- 22 St. Mary's is now joined by a 20-mile tie
- line to Mountain Village. We installed a 900 kW
- 24 EWT wind turbine. That went online about two
- years ago.

1	And for the first year, it just fed
2	St. Mary's. In that first year, it displaced 50
3	percent of the diesel fuel that was used in that
4	community.
5	Last year, we intertied with Mountain
6	Village. And we don't have the numbers for 2021
7	complete yet, but it's looking like it's going to
8	be 35 or 45 35 to 40 percent diesel
9	displacement for the combined communities with
10	that single turbine.
11	We are have finished the consolidated
12	tank farm in St. Mary's and are in the process of
13	building a larger power plant that will be able to
14	supply both the communities of Mountain Village
15	and St. Mary's from that one location.
16	I had mentioned previously some
17	partnerships that we've gained using Denali
18	Commission funds. We've built a lot of neat
19	projects that's attracted a lot of attention
20	nationally. It's also made it possible for us to
21	leverage other project funding. Denali Commission
22	can match other federal funds, which is very
23	convenient for us when we are pursuing funds from
24	Department of Energy, rural utility service, and
25	the like.

1	We worked with in-state partners ANTHC,
2	ACEP, Northwest Arctic Borough, the Tanana Chiefs
3	Conference to do a lot of our projects.
4	And I think, overall, not only the
5	projects themselves are a benefit to rural Alaska,
6	but the partnerships with these other entities,
7	the increase in design standards I know we've
8	looked at what AEA has done. AEA has looked at
9	what we've done. We've shared a lot of the
10	consultants in getting our project designs done,
11	our contract construction done.
12	And I think it's raised the grade for
13	everybody throughout rural Alaska for improving
14	and what is built for rural infrastructure, both
15	quality construction and also maintainability for
16	the years.
17	Some things to consider for new projects
18	in the future. One of the large projects I'd like
19	some consideration for is Bethel system upgrades.
20	I'll talk a little bit more about that here in a
21	little bit.
22	As noted, more of the same power plant
23	upgrades, bulk fuel upgrades. There's a long list
24	of communities that still have not been touched in
25	the last 30 or 40 years, and the facilities are

1	aging. They can all use substantial facelifts or
2	complete replacement.
3	There are distribution interties still
4	possible. One that comes to mind is from Ambler
5	to Shungnak, and I'll show a slide about that in
6	just a little bit.
7	Looking at continued renewable generation
8	and integration, I think I mentioned a lot of
9	times there is funding available, but it is not
10	complete or substantial enough to do a complete
11	project. Especially when you realize that the
12	plant or the distribution system that they are
13	trying to connect to is either single phase or 40
14	years old, does not have any automated gear.
15	So, there's a certain threshold that has
16	to be met before you can even start to integrate
17	renewables.
18	And in the past, we have seen have beer
19	able to combine a variety of funding sources
20	whether it be the State's renewable energy funds
21	or US High Energy Cost grants, Denali Commission
22	funding and combine all these things in order
23	to get some of these larger projects done.
24	Looking at renewable generation, we do
25	have wind studies in progress in Shishmaref,

- 1 Goodnews Bay, and Kotlik.
- We've applied for funding to do a study in
- 3 Pilot Station. We have a few communities that we
- 4 have already studied, have found good wind
- 5 resources, and have not acquired the funding yet
- 6 in order to go to construction -- the design and
- 7 construction.
- 8 Solar battery, we have partnered with
- 9 Northwest Arctic Borough. We have one project in
- 10 place in Shungnak where the tribes actually own
- 11 the solar battery array and has integrated with
- 12 the AVEC power plant.
- 13 We are doing a readiness in Noatak with
- the switchgear upgrade with Denali Commission
- 15 funding to get ready for a -- again, a Borough
- 16 project that is going to install solar and
- 17 batteries there.
- 18 Those areas -- Noatak, Shungnak -- have
- some of the highest cost of energy in the AVEC
- 20 system and across the US -- in Alaska and across
- 21 the US. Those areas, we have to fly fuel in, and
- it's very expensive to keep the lights on.
- I talked about the renewable readiness.
- 24 And that also includes not just generation but
- 25 also distribution. Sometimes we have to build

- 1 three-phase throughout the community or a line
- 2 extension out to renewable resources.
- 3 Excuse me.
- 4 So, the Bethel system upgrades I was
- 5 talking about. The -- Bethel has a population of
- about 6,000 -- a little bit more than 6,000.
- 7 That's probably 20 percent of the population that
- 8 AVEC serves all in one community.
- 9 We took over Bethel in 2014. At that
- 10 time, it was just the main power plant. And it
- did have a pretty extensive heat recovery system
- 12 that feeds the hospital there, the State prison,
- 13 State youth facility, some buildings at the
- university, I think the fire hall. And all of
- those facilities built in the '70s were lovingly
- 16 maintained, but they have reached their useful
- 17 life.
- 18 There was a large upgrade to the YKHC
- 19 hospital over the last few years. We realized
- that the bus ratings in the power plant were not
- 21 up to snuff.
- So, you can see in the upper right-hand
- 23 corner, there's a modular switchgear building that
- 24 we've installed in Bethel to replace the
- switchgear that was in the plant. We've installed

1	a 900 kW EWT in Bethel.
2	The average load in Bethel is about 4
3	megawatts, so it's it's kind of just a little
4	blip on the screen compared to some of our other
5	communities.
6	And we installed a heat recovery module to
7	separate the engine cooling jacket water from the
8	water that gets circulated around town.
9	The ask for this project would be to
L O	replace the entire power plant. There are six
L1	2.2 megawatt diesel generators in that power
L2	plant. AVEC is currently procuring and installing
13	a 2.8 megawatt unit in a separate module for
L 4	reliability purposes.
L5	And we'd also like to replace the 10-inch
16	piping that goes throughout the community. You
L7	can see it here on pile foundations. A lot of
L8	those piles are sinking or jacking. And a lot of
L9	the they call it couplings throughout the
20	systems leak and need to be repaired on a regular
21	basis.
22	It would be nice wind is a great
23	resource in Bethel, and we would like to put in up

If all of that was done, there is the

to 8 megawatts of wind on the Bethel system.

24

25

```
opportunity in the future to tie to possible other
1
        locations. There's -- they're not all AVEC
 2
 3
        communities, but there are communities like
        Akiachak and Akiak there on the same side of the
 5
        Kuskokwim.
               There's other communities -- Napaskiak,
 6
 7
        Kwethluk, Tuluksak -- that are on the other side
 8
        of the Kuskokwim, so that would be probably some
 9
        further difficulty to get across the Kuskokwim
        with a tie line. But things to look at in the
10
11
        future.
12
               Other tie lines that would be a big ask
        are up on the Kobuk River. I had mentioned
13
14
        the flying in fuel to Shungnak. It's usually
15
        about a 50/50 shot whether we can get a barge in
16
        there on any given year.
17
               So, building a larger power plant that
18
        could source power to Shungnak and Kobuk via a tie
19
        line -- that red line would be a proposed tie
20
        line.
21
               There's an existing tie line between
22
        Shungnak and Kobuk now -- excuse me -- that's
23
        owned by the State. It was built many years ago.
```

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That too has right-of-way issues. It has some

anchors that are pulling, some piles that are

24

25

1	jacking, and it needs, you know, some good TLC in
2	order to get it back in firm, resilient condition.
3	So, any project for a tie line up there
4	would also include a rebuild or renovation of that
5	existing Shungnak/Kobuk tie.
6	For the new power plant replacements, one
7	of the templates that we would like to look at
8	using is what we built in Teller: that for any
9	community up to about a 500 kW average load, has
10	automated switchgear, three generation units in
11	it, it could be all built in one single module and
12	shipped after being factory tested.
13	The unit that you see there is in Teller.
14	It was built down in Ship Creek and tested before
15	it was put on a barge to go up to Teller.
16	Other larger power plants would require
17	building on site, like we've done Emmonak, Togiak,
18	St. Marys, those sorts of things.

Continued bulk fuel replacements. This is a project that was completed in Togiak. The power plant is on the far right. The AVEC power plant is -- I mean the tank farm is behind the power plant. And then there's a corporation tank farm and city tanks and dispensing area all completed under the same project through project management

- 1 with AVEC.
- I talked about leveraging technology. The
- 3 renewable readiness, getting power plants ready
- for renewable infrastructure, is important. And
- 5 just improving engine dispatch and reliability by
- 6 putting in automated switchgear, converting
- 7 generation to three phase, building three phase
- 8 power distribution.
- 9 I heard when I first stepped on to this
- 10 conversation people talking about broadband
- 11 technology and dispersal of high-speed Internet
- 12 across Alaska, and we are anxiously awaiting that
- fine day, whether it be through low earth orbit or
- 14 fiber optic going into individual communities.
- 15 However it gets there, we are anxiously awaiting.
- 16 There are some avenues for broadband
- 17 technology. Rather expensive at this point. Not
- necessarily 100 percent reliable. We still have
- 19 blackout times.
- There's some communities that still are
- 21 not reached. I mentioned the folks out on St.
- 22 Lawrence Island, Nunivak Island. A lot of places
- 23 up the Upper Yukon area don't have any sort of
- Internet access at this point. They're relying on
- 25 satellite technology.

1	And the satellites that are in the air
2	right now, it's pretty low on the horizon. It can
3	be pretty sketchy for communications.
4	If Internet broadband Internet came to
5	all of our communities, it would be important for
6	AVEC to have the infrastructure in place for the
7	routers, the firewalls, the data storage,
8	collection, all the Internet things to make it
9	communicate effectively.
10	And it's a pretty small ask for a
11	community, but when you add it up, it gets up
12	close to a half a million dollars. So, that would
13	be another item where we would look for assistance
14	in funding in order to build out just the
15	equipment that we need inside each community in
16	order to take advantage of broadband once it's
17	available.
18	So, in summary, funding considerations,
19	looking forward for the next five or six years. I
20	guess I'd caution when Denali Commission was
21	started up in 2001, it did take a little while to
22	do the planning and the site control, the
23	permitting for all those things. But by 2005, we
24	had many multiple projects, tank farms, power
25	plants, wind interties all being constructed at

- 1 the same time.
- 2 So, look forward if there is a substantial
- 3 amount of infrastructure funding that gets
- 4 channeled through Denali Commission to rural
- 5 Alaska, gearing up for projects like that again.
- 6 But leveraging technology and leveraging
- funding, important aspects of what Denali
- 8 Commission can do.
- 9 There is quite a few folks that play not
- just in the energy infrastructure but everything
- is intertwined up in rural Alaska. So, making
- 12 those partnerships work and leveraging the funding
- 13 to get larger projects done.
- 14 And, again, just a recap on the big
- projects that I mentioned. The Bethel system
- improvements and the Kobuk River interties would
- 17 be some larger ticket items that could be looked
- 18 at.
- 19 And that's all I have. I can either take
- 20 questions now, if there are any, or wait until
- 21 after Curtis is done and maybe we can banter back
- and forth.
- I can do whatever you'd like.
- 24 CHAIR BOYLE: Commissioners, I'll
- let you decide.

- 1 Would you like to ask questions now, if
- 2 you have any?
- 3 MS. KITKA: Just want to say
- 4 excellent presentation. We've appreciated the
- 5 partnership with your group.
- 6 MR. STAMM: Thank you.
- 7 CHAIR BOYLE: All right.
- If we don't have any questions, Curtis, I
- 9 guess I will hand things over to you.
- 10 MR. THAYER: Okay.
- I'm going to share a screen, hopefully,
- 12 over here.
- Do you have to do anything on your end?
- 14 CHAIR BOYLE: Yeah, I think I do.
- MR. THAYER: Yeah. I'm disabled.
- 16 CHAIR BOYLE: I think I have to
- 17 make myself the host again or Bill has to give you
- 18 host privileges.
- 19 One second. I'm sorry.
- MS. KITKA: Aren't we learning new
- 21 skills?
- 22 MR. THAYER: I learned it on Teams.
- I just don't know it for Zoom.
- MS. KITKA: I -- I'm the opposite.
- I can do Zoom, but Teams, I'm going, "Oh, no."

1	CHAIR BOYLE: All right.
2	Curtis, I think you should be ready to
3	rock.
4	MR. THAYER: Okay. Okay. I think
5	I'm ready to go.
6	On a little bit of an AEA overview. I do
7	apologize. Tim Sandstrom was supposed to be here,
8	but he had an unexpected family emergency and had
9	to leave a little early today. So, I'm going to
10	hopefully pick up where he left off on some of
11	this.
12	Little bit about Alaska Energy Authority.
13	You know, it was created by the legislature in
14	1976 as a public corporation governed by a board
15	of directors.
16	And, you know, we have a mission statement
17	of reducing the cost of energy in Alaska, but it
18	really goes beyond that as far as redundancy and
19	reliability.
20	And we also do statewide energy policy and
21	program development.
22	We're broken up into six buckets.
23	Renewable energy, we own Bradley Lake. Largest
24	hydro project in the state. Produces about 10

percent of the energy in Cook Inlet or on the

25

1	railbelt. Just completed a \$47 million project
2	there on diverting water into the lake.
3	And then we have power cost equalization;
4	rural energy, where the bulk of my time will be
5	spent; and then renewable energy, we do grants and
6	loans; and then energy planning itself.
7	AEA active projects and services. These
8	are just what it says, active projects across the
9	state. This not only represents our PCE
10	communities but also where we have bulk fuel and
11	power system upgrades ongoing. Not to mention a
12	lot of our renewable energy program, our REF
13	funding, and a lot of and some VEEP
14	efficiencies. Also includes some wind, bio mass,
15	a lot of hydro in Southeast and here in
16	Southcentral Alaska.
17	And currently we have about over 30 active
18	projects with just on power houses and bulk
19	fuel with the Denali Commission.
20	With rural energy, just do want to touch
21	base a little on the power cost equalization.
22	I really want to appreciate AFN and Julie
23	Kitka for stepping up and doing something that
24	nobody was willing to do. And that was

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actually -- actually power cost equalization, get

25

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1 a final answer on -- on -- on the whole issue of
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- 2 the three-quarters vote and the future funding of
- 3 this.
- 4 It was very important as this has been a
- 5 key component of a statewide energy plan since
- 6 1985. It assists 82,000 Alaskans, 192
- 7 communities. We had -- in FY '21, it's a little
- 8 over \$30 million.
- 9 The PCE endowment was capitalized in 2000,
- 10 and, actually, the funding this year -- the fund
- 11 stands at \$1.1 billion of which 150 million was
- the earnings of the fund, which is a lot better
- than the prior year of 48 million.
- So, we're able to do a lot with some
- 15 cascading waterfall effect, so to speak, on that
- 16 funding.
- 17 Power -- rural power system upgrades. As
- you know, 197 communities are eligible for power
- 19 system upgrades.
- Our whole goal is to approve power
- 21 systems, efficiency, safety, and reliability. We
- have aging infrastructure and operation and
- 23 maintenance. There's no way to deny that.
- Of active projects, we currently have
- 25 seven active full -- full projects, and we will be

1	building three units here in Anchorage to ship out
2	to rural Alaska this summer.
3	We have 16 maintenance improvement
4	projects going on, and we anticipate or we
5	the deferred maintenance is over \$300 million.
6	And that's a number that I think is a conservative
7	number, and we've actually used that working
8	within the administration and the legislature.
9	In the last three years, we've received
10	funds from the State to match primarily with
11	Denali Commission to maximize and to try to try
12	to lower that amount.
13	As a matter of fact, in the governor's
14	fiscal budget this year for FY '23, there is
15	\$10 million which is double the request of last
16	year to the legislature which we hope with
17	with your partnership, we will be able to turn
18	that into close to \$30 million with the federal
19	match on projects for rural Alaska so we can start
20	to see this deferred maintenance number go down
21	dramatically.
22	Hang on a second. Sorry. I'm frozen in
23	the wrong way. Hang on.
24	Sorry. There we go.
25	With the RPSU projects we're funding for

1	FY '23, according to statute and and the
2	processes, we've identified four communities that
3	could be used for the FY '23 capital request.
4	We also keep a list of 25 active projects,
5	but as funding becomes available, some of those
6	will switch.
7	But we have identified an additional
8	ones with Beaver and Buckland and and different
9	ones. And as I mentioned, there's \$10 million the
10	State is putting up this year with Federal Receipt
11	Authority of 18.5.
12	Bulk fuel upgrades. There's already
13	400 there's 400 rural bulk fuel facilities.
14	Again, our goal was to be code compliant for
15	storage facilities for prevention of spills.
16	Definitely aging infrastructure, erosion.
17	A lot of things of what Bill had said.
18	Active projects, we currently have 8 full
19	projects, 18 in the maintenance and improvement.
20	And one thing is we're leveraging and
21	working with Coast Guard on the regulatory efforts
22	to capture the assessments and to prioritize
23	projects. They are the regulatory agency. They

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are the one that we would rather work with them,

and so we've been making an effort with that.

24

25

1	And the deferred maintenance and it's a
2	very scary number in rural Alaska is about
3	800 million for all the tank farms.
4	So, between the two of them, it's
5	\$1.1 billion in deferred maintenance in rural
6	Alaska. It's not something that's that it's
7	a number that you're not aware of maybe.
8	But it's definitely a number that we're
9	trying to get out there with the legislature and
LO	pushing that fact, you know, that we need to make
L1	a definite investment into rural Alaska.
L2	And we appreciate the federal partner that
L3	you've been or as you've been as a federal
L 4	partner for us, and I'm glad to see the State has
L5	been and the administration's stepping up to
16	help try to fill that gap.
L7	You know, it wasn't too long four or
18	five years ago where there wasn't money
L 9	available for bulk fuel and power houses, and
20	we're starting to see that shift in the
21	legislature.
22	Our projects for requiring funding, again,
23	we've identified four for FY '23. Some of those
24	actually coincide with Bill's.
25	And then our next BFU priorities going

- forward is looking at Minto on down. And, again,
- 2 those are evaluated every year as funding becomes
- 3 available.
- 4 And there are conversations that we are
- 5 having with the administration to actually see how
- far we can get down in a priority list with
- 7 federal funding.
- 8 And then the 1.5 Federal Receipt
- 9 Authority -- which is the same request of last
- 10 year -- will hopefully parlay that into the
- 11 Federal Receipt Authority of about 7.5.
- 12 And that's what's in the governor's
- proposed budget going forward.
- 14 This particular -- this is a -- and I
- apologize. We -- this is a new program for us.
- 16 But this is -- we did 3D modeling of the power
- 17 houses. We did that in conjunction with a grant
- 18 from -- from the Denali Commission. And then we
- 19 hope to take this to the next step and do bulk
- 20 fuel -- do additional bulk fuel with it.
- 21 But let me just start it up here. It's
- 22 just a quick --
- 23 CHAIR BOYLE: Curtis, I'm sorry.
- 24 Can I jump in?
- MR. THAYER: Sure.

- 1 CHAIR BOYLE: Can I -- is it -- are
- 2 you sharing your screen?
- 3 Because I'm not getting anything.
- 4 MR. THAYER: I am sharing my
- 5 screen.
- 6 CHAIR BOYLE: Is that just me, or
- 7 is anybody else lacking?
- MS. HALL: We're lacking.
- 9 MS. AMBERG: I was about to ask
- 10 him --
- MS. KITKA: -- can't see what's
- 12 going on.
- MR. GALLAGHER: Curtis, you look
- 14 great.
- 15 MR. THAYER: Thanks. But it was
- 16 not for me to look at.
- 17 MS. KITKA: You know what?
- We weren't distracted. We were just
- 19 listening carefully.
- 20 CHAIR BOYLE: All right.
- MR. THAYER: Where is it?
- 22 Hang on a second. I have tech support
- here.
- MS. KITKA: Well, while you're
- doing it, thank you, Curtis, for -- on the power

- 1 cost equalization.
- 2 But I do want to clarify with the
- 3 governor's office on their suit -- note for people
- 4 that they didn't appeal that decision on that
- 5 because they basically were trying to find out was
- 6 it sweepable or not.
- 7 So, once we won that and stuff -- and so
- 8 we're very grateful he didn't appeal.
- 9 MR. THAYER: Well, thank you.
- 10 I -- Tyson's here on behalf of more of the
- 11 administration.
- But I have to tell you, from -- from our
- perspective as far as administering the program
- and -- and we dealt with this, as you know, a
- 15 couple years ago -- the same situation without the
- three-quarters vote, it was very nice to have that
- going forward for administering the program.
- 18 I'm going to try this again here.
- 19 CHAIR BOYLE: We got it.
- MR. THAYER: Okay.
- I had pretty pictures and everything
- before on the others.
- This is an overview of Google Earth and
- 24 AEA and drone imagery. This is an inventory and
- assessment project that captures 3D imaging.

1	We have this for all 197 power houses, and
2	it's enhanced training and provides remote
3	assistance.
4	We're able to to look at a particular
5	power house, zoom in on it when we're on the
6	with with the circuit writers and the people
7	actually in the village when there's a problem.
8	Here's the Newhalen power house.
9	And every one of those dots represents a
10	manual or a particular bit of information of oil
11	and filter change.
12	So, we can actually help not only when
13	we travel to rural communities, but actually being
14	here in Anchorage to help them identify
15	problems with particular generators or questions
16	that they might have.
17	This has also imbedded documents for
18	operation and maintenance, as well as we have
19	instructional YouTubes and design documents. Just
20	as we saw, examples of how to change an oil
21	filter, for example.
22	And then we're trying to we're starting
23	this this technology right now. This was done
24	over the last 18 months to capture the 197
25	communities.

1	And then what we're doing is this is
2	where we want to use the same technology for bulk
3	fuel facilities. This is Scammon Bay. Provides
4	information on the operation and maintenance of
5	the actual facility that the operator's familiar
6	with.
7	And it's just not a classroom exercise.
8	Granted this is not obviously this is up for
9	replacement. But you can go in there. And as you
10	see those particular dots those dots provide
11	the necessary information.
12	That's tank gauging with a YouTube on
13	gauging the procedure. Manual tank gauging
14	procedure. So ball valve. Again, it's pretty
15	detailed.
16	And we hope within the next 12 months a
17	lot depends on COVID to have this work done.
18	And this is where we're sharing this information
19	and what we're working with the Coast Guard on.
20	And this new effort was funded let me
21	shut this off here was funded with the help of
22	Denali Commission funding.
23	I just want to make sure: Are you seeing
24	the PowerPoint at all now?
25	CHAIR BOYLE: Yes.

1	MR. THAYER: Okay. Sorry.
2	Another another thing I think is
3	important is the training and technical support,
4	which is a partnership, again, we have with you.
5	Not only do we do it with the electrical
6	emergencies, but it gives you an idea of our
7	circuit writer and our bulk fuel training on site,
8	as well as our technical assistance.
9	We've been logging this on a pretty
10	regular basis. You'll see that not all
11	communities are on here. It's because they're
12	they're self-sufficient. And and thanks to
13	AVEC and others, they're self-reliant in not
14	having to call us.
15	But with some of them, they got one phone
16	call. But in a few of those, they are very
17	frequent fliers in the sense that we assist them
18	quite a bit. Not only in travel. We've done six
19	trips to Tuluksak and have had 24 remote
20	assistance with them for 30. They are our
21	they
22	So, with those particular communities,
23	we're working very diligently to help them, assist
24	them, and and identify what they're ongoing
25	issues are.

1	Training is a big issue. And when I
2	say when we're able to train somebody up, they
3	have the they have the ability, they work in
4	the community, and then they have an opportunity
5	to move to a larger community or a different
6	community, and they take that opportunity.
7	So, that's an ongoing challenge that is
8	being experienced by the utilities and, again,
9	being experienced by the rural utilities, as well
10	as AEA.
11	One thing I've I'm not going to go into
12	the urban energy. That's that's not really for
13	this presentation.
14	But one thing I think is important to
15	note, and that is the Renewable Energy Fund. The
16	Renewable Energy Fund was established in 2008 to
17	incentivize the development of qualifying and
18	competitively selecting renewable energy projects.
19	Since the inception, there's been 244
20	grants in \$275 million. We have 99 projects in
21	operation and 27 in development.
22	And the governor and the legislature
23	approved 11 last year that were recommended by AEA
24	in what we call round 13, which was just a little
25	less than \$5 million. So, we now have a 38

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1 projects in development.
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- 2 And the governor, in his budget for
- 3 FY '23, has included an additional 15 million. It
- 4 is the largest influx of money into the renewable
- 5 energy program since 2014. So, the last eight
- 6 years.
- 7 And with that, we're currently in round
- 8 14. And by next Monday -- or next Tuesday --
- 9 excuse me -- the application deadline will be
- 10 closed, and we'll start evaluating and working
- 11 with renewable energy advisory committee on those
- 12 recommendations.
- And our goal is to have recommendations to
- 14 the legislature by next -- by April so they can be
- included in this year's budget.
- 16 And so if 11 projects with \$5 million --
- we anticipate that -- that this \$15 million could
- bring us over 30 projects.
- 19 Again, they have to be evaluated on their
- size, and we don't really know how many people are
- 21 actually going to apply.
- 22 But it is -- it is definitely -- once
- this -- this \$15 million goes in and these
- 24 projects that -- I think this time, probably we'll
- 25 be having another conversation with the Denali

- 1 Commission or these communities will as these
- 2 projects get fleshed out as they -- as the ones
- 3 that can move forward will move forward.
- So, with that, I'll just open it up for
- 5 any questions, along with Bill, on the
- 6 presentation.
- 7 I apologize that you didn't have a full
- 8 presentation, but I'll make sure that Garrett has
- 9 it.
- 10 CHAIR BOYLE: Thanks, Curtis.
- 11 Commissioners, any questions?
- MS. PITNEY: I was just curious how
- you got the drone footage. It's pretty cool.
- 14 MR. THAYER: We actually contracted
- 15 with a contractor.
- 16 And we have that same drone footage for
- 17 all 197 rural power houses. And we --
- 18 MS. PITNEY: Was it -- was it in
- 19 partnership with our unmanned aerial vehicle group
- 20 here that helped them get the air space approvals,
- or was it all line of sight?
- 22 MR. THAYER: All line of sight.
- MS. PITNEY: Good.
- 24 MR. THAYER: It was all line of
- 25 sight and on a budget.

MS. PITNEY: Yeah. Got it. 1 2 MS. KITKA: Curtis, are you doing 3 any micro nuclear? MR. THAYER: We are not. ACEP is 5 doing -- ACEP is -- kind of had that. 6 We're part of the working nuclear group. 7 We're working, obviously, and watching what 8 happens at Eielson. 9 But not right now as far as the work that 10 we do here. 11 MS. PITNEY: So, just for 12 everybody's information -- and I can send this to 13 Garrett -- Alaska Center For Energy and Power, 14 which is the -- one of -- the research institute 15 here that really helps in the testing of different 16 technologies and optimizing wind diesel and --MR. THAYER: Uh-huh. 17 MS. PITNEY: -- and various things 18 19 has a -- on the -- February 1st and 2nd, has a 20 session on the nuclear power -- the small nuclear 21 power and its potential and how it would work. 22 And so I'll forward that to Garrett to get 23 out. 24 But I think, you know, if that small 25 nuclear power plant option works in Alaska, it's a

- 1 game changer.
- MR. GALLAGHER: And -- and Pat --
- 3 MS. PITNEY: Truly opens
- 4 up every -- every industry for us.
- 5 MR. GALLAGHER: I -- I agree
- 6 wholeheartedly with you.
- 7 I think one way or another, there'll be,
- 8 you know, legislation sought to enable that
- 9 activity in the state at the university.
- I know we're talking to a few different
- 11 legislative offices about it as well.
- 12 So, I don't know whose bill it will be,
- 13 but I -- somebody will have a bill on it.
- The other one that I try not to lose sight
- of is the Green Bank Bill. I know that's another
- exciting opportunity in this space as well and
- another piece we could probably leverage here at
- 18 Denali as well.
- 19 So, Curtis, you do a great job over there.
- Thank you.
- 21 That drone footage is really cool. That's
- 22 what I was going to ask about, too.
- MS. HALL: Curtis, this is Joelle.
- I was going to ask you: What's in your --
- what's in your budget increment this year that's

- 1 so -- where -- where were you plusing up from 4 to
- 2 15?
- 3 MR. THAYER: Well, just -- just to
- 4 put it in perspective, three years ago -- well, I
- 5 guess when I started -- we had no capital budget.
- 6 And then we were -- we have about \$20 million in
- 7 capital and federal receipts. And then last year,
- 8 we were at \$67 million.
- 9 And this year would be around 75- to
- 10 \$80 million capital, with Federal Receipt
- 11 Authority capturing some of the dollars.
- 12 And this is not including any money from
- the infrastructure bill as of yet. There's a lot
- of money in the infrastructure bill.
- 15 Interestingly enough, it's -- it's -- as
- 16 many of you have seen it, it's interesting that we
- 17 have \$200 million in it for hydro for the whole
- 18 country, yet we have 2.5 billion for electric
- 19 vehicle infrastructure.
- 20 And so some of those are out of areas.
- One thing I -- I will raise -- and it's a
- 22 concern of ours that we are -- that we're raising
- in some public comments that close at the end of
- this month. And that is -- is we have -- there's
- 25 money set aside for EV infrastructure in Alaska,

```
which is good. We've started a highway corridor.
1
               But there's no -- since none of --
 2
 3
        anywhere in rural Alaska's part of the national
        highway system, there's no funding available.
 5
               So, the hub communities even of Bethel and
        Nome and Kotzebue, if they wanted -- or
 6
 7
        Dillingham, if they want to take advantage of
 8
        that, there's not money available in a programming
 9
        sense.
               So, we're -- we're working on that so we
10
11
        can try to see if we can get some of the
12
        competitive money set aside for rural Alaska.
13
               So, those are some -- that -- that's a
14
        side note, but it is one of those pieces that
15
        we're working on.
16
               But I can get you a breakdown of our
17
        capital with our -- with our -- with our full
18
        Federal Receipt Authority.
19
               Because there's 20 -- we have -- I'm
```

\$40 million between the power houses and bulk fuel
with Federal Receipt Authority. We have
\$15 million from the Renewable Energy Fund.

There's some -- there's some receipt authority
from the Volkswagon settlement as we close out

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trying to think. We've got close to 30-,

20

1	with that. There's some money in there for EV
2	infrastructure, which is to develop the plan to
3	qualify for the \$53 million that has to be State
4	funded. And then there's about \$2.5 million in
5	there for railbelt energy planning so we can look
6	at doing another diversion project at I mean
7	yeah Bradley called the Dickson Diversion and
8	trying to unconstrain some of the power lines.
9	Because if we can lower the cost of power
L 0	to Southcentral which is always a good thing
11	it also helps more money for with PCE endowmen
12	if we can lower the cost versus that formula.
13	So, there's projects and one thing I
L 4	I want I want to note here that it's been
L5	always been part of the presentations that I've
16	given lately.
L7	And that was the State ownership of
L8	Bradley saves the railbelt consumers over
19	\$20 million a year. And the intertie ownership
20	between Willow to Healy on the intertie has saved
21	Fairbanks over \$30 million a year. So, between
22	the ownership of those two, it's \$50 million.
23	And so when we look at the PCE and that
24	is \$30 million where the State has invested in
25	infrastructure which is paid continues to pay

1	dividends, PCE definitely the \$30 million, that
2	is their infrastructure, so to speak, for rural
3	Alaska.
4	And I think it's just important to note
5	and that's something I I think has taken some
6	time with some legislators to understand
7	especially the ones in Fairbanks that every
8	year, they get \$30 million benefit because they
9	can buy power cheaper in Southcentral and ship it
LO	to Fairbanks across a State-owned asset.
L1	MS. HALL: Uh-huh. Thanks.
L2	CHAIR BOYLE: All right.
13	Any other questions?
L 4	If not, thanks very much, Curtis. Thank
L 5	you very much, Bill. I appreciate you gentlemen
L 6	being here and kind of giving us a brief on where
L7	we've been and where we might be able to go as
L 8	partners together.
L 9	Thank you.
20	MR. THAYER: All right. Thank you.
21	MR. STAMM: Thanks for the
22	opportunity.
23	CHAIR BOYLE: All right.
24	Commissioners, two options here. We've
25	been on for close to an hour and a half. I can

1	let you go get about your evenings, or we can keep
2	trying to discuss items.
3	What would you prefer?
4	MS. PITNEY: I think I'd like to
5	postpone if that's or push this until the next
6	opportunity or schedule a different opportunity,
7	if that's okay.
8	But I I would go with the crowd if
9	people are are anxious to get to closure.
10	MR. GALLAGHER: I'm generally easy.
11	Garrett, do you have are there any
12	decision points that we're close to while we've
13	got us all that we could at least get you get
14	you working on some things, or is it worth
15	circling back up?
16	CHAIR BOYLE: I think it's probably
17	worth circling back up.
18	MR. GALLAGHER: Okay.
19	CHAIR BOYLE: I don't know if we
20	necessarily closed the discussion on workforce
21	development to your satisfaction, Joelle.
22	And maybe we can talk a little bit more in
23	depth about the State broadband plans before we
24	move forward on those.
25	MR GALLACHER. Okay That's good

1	with me.
2	CHAIR BOYLE: Okay.
3	Well, then I guess we can chat in two
4	weeks with ANTHC, IHS, and potentially Kolarik
5	(phonetic) or Norton Sound.
6	Excuse me.
7	MS. KITKA: Sounds good.
8	CHAIR BOYLE: Thank you so much,
9	everybody. I appreciate your time.
10	MS. HALL: Nice to see everybody.
11	MS. KITKA: Thank you for setting
12	these up. This is really important. So, thank
13	you.
14	MS. HALL: Appreciate it.
15	MS. PITNEY: Appreciate it.
16	(This proceeding was concluded at
17	5:23 p.m.)
18	
19	
20	
21	
22	
23	
24	
25	

1	CERTIFICATE
2	I, CARRIE JOHNSON, notary public for the State
3	of Alaska, and Shorthand Reporter, do hereby
4	certify that the foregoing proceedings were taken
5	before me at the time and place herein set forth;
6	that the proceedings were reported stenographically
7	by me and later transcribed by computer
8	transcription; that the foregoing is a true record
9	of the proceedings taken at that time; and that I
10	am not a party to, nor do I have any interest in,
11	the outcome of the action herein contained.
12	IN WITNESS WHEREOF, I have hereunto set my
13	hand and affixed my seal this 26th day of January,
14	2022.
15	
16	
17	
18	
19	Carrie Johnson
20	Notary Public, State of Alaska
21	My commission expires 07/12/2022
22	
23	
24	
25	