STATE OF NEW HAMPSHIRE
PUBLIC UTILITIES COMMISSION

June 18, 2020-10:10 a.m.
[Remote hearing conducted via Webex]

RE: DG 20-049
LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP., D/B/A LIBERTY UTILITIES: 2020 CAST IRON/BARE STEEL REPLACEMENT PROGRAM RESULTS
(Hearing on the Merits)

PRESENT: Chairwoman Martin, Presiding Commissioner Kathryn M. Bailey Commissioner Michael S. Giaimo

Jody Carmody, Clerk
Eric Wind, PUC Remote Hearing Host

APPEARANCES: Reptg. Liberty Utilities (EnergyNorth

Natural Gas) Corp. d/b/a Liberty
Utilities:
Michael J. Sheehan, Esq.
Rptg. Office of Consumer Advocate:
Christa Shute, Esquire
Reptg. PUC Staff:
Lynn Fabrizio, Esq.

Court Reporter: Susan J. Robidas, NH LCR No. 44
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P R O C E E D I N G S
CHAIRWOMAN MARTIN: Good morning,
everyone. Nice to see some of you again.
We're here this morning in Docket DG 20-049,
which is Liberty Utilities 2020 Cast
Iron/Bare Steel, CIBS, Replacement Program
Result. I first need to make some findings
because we're doing this remotely.
Utilities Commission, I find that, due to the
state of emergency declared by the Governor
as a result of the COVID-19 pandemic, and in
accordance with the Governor's Emergency
Order No. l2 pursuant to Executive Order
2020-04, this public body is authorized to
meet electronically. Please note that there
is no physical location to observe and listen
contemporaneously to this hearing which was
authorized pursuant to the Governor's
Emergency Order. However, in accordance with
the Emergency Order, I am confirming that we
are utilizing Webex for this electronic
during this hearing through this platform, and the public has access to contemporaneously listen and, if necessary, participate. We previously gave notice to the public of the necessary information for accessing the hearing in the Order of Notice. If anybody has a problem during this hearing, please call (603) 271-2431. In the event the public is unable to access the hearing, the hearing will be adjourned and rescheduled.

Okay. And I know Mr. Wind went through most of the ground rules at this point. So just a reminder: Make sure you mute yourself if you're not talking; put your hand up to be recognized unless you're making an objection; speak slowly, it really does help. And if you need a recess, please let me know.

We'll start with roll call
attendance of the Commission and then take appearances. When each commissioner states their presence, please also state where you are located. And if anyone is with you, please identify them.
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residential ratepayers. I am in my home in Concord, New Hampshire. Currently my niece is in the room with me.

CHAIRWOMAN MARTIN: Okay. And Can you identify her?

MS. SHUTE: Katie Diehl.
MS. FABRIZIO: Good morning,
Commissioners. Lynn Fabrizio, staff attorney for the Commission, on behalf of Staff. And with me today are Randy Knepper, who will be a witness in today's proceeding. Steve Frink and Anthony Leone are on the wings if questions arise for them. Thank you.

CHAIRWOMAN MARTIN: All right.
Thank you. For exhibits we have Exhibits 1 through 6 premarked for identification. Are there any other preliminary things we need to address before we swear in the witnesses?

MR. SHEEHAN: Just to be clear,
there are no confidential matters in this docket, in this hearing, which is helpful.

Otherwise we are ready to proceed.
CHAIRWOMAN MARTIN: Okay.
Excellent. Thank you for confirming that.
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All right. Ms. Robidas, would you swear in the witnesses.
(WHEREUPON, CATHERINE A. MCNAMARA, BRIAN R. FROST, ROBERT A. MOSTONE RANDALL S. KNEPPER were duly sworn and cautioned by the Court Reporter.)

CATHERINE A. MCNAMARA, SWORN
BRIAN F. FROST, SWORN
ROBERT A. MOSTONE, SWORN
RANDALL S. KNEPPER, SWORN
CHAIRWOMAN MARTIN: All right. Are we proceeding with this as a panel, with Staff and the Company doing cross or -- I mean doing direct first?

MR. SHEEHAN: We had a brief conversation with Staff, and the preference would be to have -- to conduct it sort of like a regular in-person hearing, with the Company witnesses testifying, cross, Commissioner questions, and then when they're done Mr. Knepper will testify. I think that was okay with Staff as well.

MS. FABRIZIO: Yes.
CHAIRWOMAN MARTIN: Okay. All
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right. Then Mr. Sheehan, you can proceed. MR. SHEEHAN: Thank you.

DIRECT EXAMINATION

BY MR. SHEEHAN :
Q. I'll start with Ms. McNamara. Ms. McNamara, can you please identify yourself and your position with the Company and your involvement in this proceeding?
A. (McNamara) Yes. My name is Catherine McNamara. I am a rates analyst in the Rates and Regulatory Affairs Department, and I prepared testimony in the calculation of the revenue requirement we're asking for today.
Q. And Ms. McNamara, your testimony appears in the original filing the Company made, which has been marked as Exhibit 1, beginning at Bates Page 31; is that correct?
A. (McNamara) Correct.
Q. And do you have any changes to that testimony that you'd like to put on the record today?
A. (McNamara) I do not.
Q. And if $I$ were to ask you the same questions that are in writing orally today, would your answers be the same?
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A. (McNamara) Yes.
Q. And do you adopt that as your sworn testimony here this morning?
A. (McNamara) I do.
Q. Just a couple preliminary questions for you, Ms. McNamara .

What your testimony provides is, as you said, the calculation of the revenue requirement that the Company is seeking approval of this morning; is that correct?
A. (McNamara) Yes.
Q. Can you just tell us at a high level what was the total cost that you started with to calculate the revenue requirement -- that is, the total CIBS cost for which we're seeking recovery?
A. (McNamara) The incremental investment in CIBS was $\$ 14,885,261$.
Q. And where within the Company did that number come from to land on your desk?
A. (McNamara) Information provided by Brian Frost and Robert Mostone.
Q. And then you performed the necessary calculations to turn that investment into a
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written requirement; is that correct?
A. Correct.
Q. And what is the annual revenue requirement that we are seeking approval of today?
A. (McNamara) The annual revenue requirement is $\$ 6,161,925$, which is an incremental revenue requirement of approximately 1.6 million.
Q. And 1.6 is the addition to the CIBS revenue requirement that's being addressed today; is that right?
A. (McNamara) Correct.
Q. And have you calculated a bill impact of that 1.6 incremental increase, what the bill impact would be for a typical residential customer?
A. (McNamara) I have. A typical residential customer using approximately 809 therms per year would be $\$ 7.03$, or a .60 percent increase.
Q. Seven dollars per what time frame?
A. (McNamara) Year.
Q. Okay. Have the -- has the Company's filing been audited by Commission's audit division?
A. (McNamara) Yes, it has.
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[WITNESS PANEL: McNAMARA|FROST|MOSTONE]
Q. And has the audit division completed its work and issued a final audit report?
A. (McNamara) Yes, they issued a final audit report, and there were no findings in that audit report.
Q. And is it your understanding that that final audit report is what's been marked as Exhibit 3 in this matter?
A. (McNamara) Yes.
Q. And as you said, there were no findings, if you will, in that audit report; is that correct?
A. (McNamara) Correct.
Q. Thank you.

Mr. Frost, turning to you. Please introduce yourself, your position at the Company and your general involvement in this docket.
A. (Frost) Good morning. My name is Brian R. Frost. I am an Engineer III for Liberty Utilities. I developed the CIBS program, led design and led the team that compiled the results for the CIBS year-end filing.
Q. Brian, there's often some comments every year
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about the massive spreadsheet that sort of forms the core of the CIBS filing. Is that mostly your work?
A. (Frost) Yes, it is my work.
Q. Okay. You filed -- in the original filing your testimony, along with Mr. Mostone, appears in Exhibit 1, beginning at Bates Page 1; is that correct?
A. (Frost) Correct.
Q. And for the portions of that testimony, do you have any corrections to identify this morning?
A. (Frost) No, I do not.
Q. And if I were to ask you the questions in the written testimony, would your oral answers be the same today?
A. (Frost) They would be the same.
Q. And do you adopt that as your sworn testimony today?
A. (Frost) I do.
Q. Mr. Mostone, same questions for you. Please introduce yourself, your position with the Liberty and your involvement with this filing.
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A. (Mostone) Good morning. My name is Robert A. Mostone. I'm the director of Gas Operations at Liberty Utilities Service Corp. of New Hampshire, and my direct filing is with Brian Frost's in the joint direct testimony.
Q. Are there any changes to the portions of the testimony for which you are responsible that we identified as Exhibit 1?
A. (Mostone) No, sir.
Q. And do you adopt the written testimony as your sworn testimony here this morning?
A. (Mostone) Yes, sir.
Q. Mr. Frost, since you filed your original testimony, Staff, Mr. Knepper, has filed testimony. Have you had a chance to review Mr. Knepper's testimony?
A. (Frost) I did review Mr. Knepper's testimony.
Q. And Mr. Mostone, I think you may need to turn your mic off.

Mr. Frost, Mr. Knepper's testimony, as he often presents in CIBS cases -CHAIRWOMAN MARTIN: Never mind. It went away. He just went on mute.

BY MR. SHEEHAN :
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Q. Mr. Frost, did you read Mr. Knepper's testimony?
A. (Frost) I did.
Q. And is it correct to say that generally Mr. Knepper's testimony was an overview of the CIBS program from his perspective, pointing out certain aspects of the program as it developed during the last construction season?
A. (Frost) Yes. It includes notes of the program developments since last construction season.
Q. And his testimony also contains two basic recommendations at the end regarding future reporting requirements and a recommended deadline for completion of the CIBS program. Did you read that?
A. (Frost) I did read that.
Q. Regarding the deadline, Mr. Knepper recommends that the Commission require the Company to complete removal of remaining CIBS by 2024.

Can you tell me approximately how many more miles of CIBS are remaining? And this
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is the CIBS that is, $I$ believe it's less than 10-inch diameter is the category. How much of that is remaining in our system, approximately?
A. (Frost) Last week I ran some reports in the Company's mapping program. There are 56.63 miles of cast iron and bare steel mains left on the maps; 4.3 miles of that is 10-inch nominal diameter and larger. And the Company does often maintain there's a small plus or minus due to mapping backlog as projects get mapped.
Q. And of those 50 or so miles remaining, is it fair to say that most of those miles are in the downtown areas of the cities in the Company's service territory?
A. (Frost) Yes. That mileage is predominantly located within the downtown core urban areas of Concord, Manchester and Nashua, New Hampshire.
Q. Given that fact, are there issues with a firm deadline of 2024 to complete removal of those miles of CIBS?
A. (Frost) I would think that establishing a
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firm deadline would present challenges. It could also present challenges that might not be in the best interest of the ratepayers. For example, the City of Nashua recently took out a large bond to repave every street within the city over a number of years. The Company tries to coordinate projects because coordinating projects with cities and other utilities typically results in lower project costs.

Additionally, the City of Manchester is finalizing a consent agreement to do a municipal sewer separation on the east side of the Merrimack River. This will cause replacement of many sewers and pipes that Liberty had maybe in conflict. The Company would have concerns that replacing pipes, only to have them be in the way of the sewer construction a year or two after they're installed, could be troublesome. Staff in the past has recommended that the Company phase work so that this type of conflict and replacement of facilities that are less than five years old, are not beyond their normal
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life, does not occur because that's wasteful. Q. So a follow-up on, for example, Manchester. The work that they will have to do for their sewer separation is over a number of five to ten years; is that correct?
A. (Frost) Yes. The city has given us very high-level projections that they want to stretch it out over a period of ten years.
Q. And am I correct in summarizing the issue you raise is if you replaced CIBS this year on a street that is going to be torn up in four or five years for that project, you would end up replacing the pipe twice?
A. (Frost) It's not a given that the pipe would be replaced twice. However, during sewer construction, typically the trench width for sewer construction is large, and the depth is larger than gas construction. So therefore, oftentimes gas piping is in the way and needs to be relocated before sewer construction to prevent the integrity of the gas piping from being compromised.
Q. So you're saying you may not have to remove it. You may simply have to move it, which is
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also a costly endeavor; is that correct?
A. (Frost) In this type of construction, Liberty typically does not move live gas pipes. What we would do is we would be replacing it. Again, because to prevent customer outages, we would install a new pipe, tie over all customers to the new pipe and then cut dead the old pipe, similar to CIBS work.
Q. And as for the factor you described in Nashua, the reason a city-wide paving project impacts you, impacts the Company, is working with that paving project will allow us to share paving costs with the city; is that fair?
A. (Frost) Correct. When coordinating with cities, we can typically share paving costs. The city get a volume discount on paving much better than what Liberty gets. Also, we can typically restore the trenches with a binder mix of asphalt, which is a rougher, less refined asphalt mix that is slightly less expensive.
Q. In addition to these two high-level concerns regarding a firm deadline, are there also
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issues of the quantity of work that needs to be done within the inner cities that arise if you were trying to force what may be too fast a schedule on their replacement?
A. (Frost) The Company has concerns that they would like to explore the quantity. If the Company was to replace a large quantity of pipe per year in a single city, it could result in having traffic detours upon traffic detours due to many streets in the same area having construction at the same time. One item to note is that of the remaining mileage that $I$ discussed earlier, we have 6.7 miles in the city of Concord in that list; in the city of Manchester there's 31.8 miles; and in Nashua, approximately 17.2. And those are all rounded numbers. Therefore, there isn't a balanced number for construction to be phased in. The Company can't say, per se, do five miles per city per year and then end the program at an even rate. At some point the pipe in Concord and in Nashua is going to be replaced, and construction will only be able to occur in the city of Manchester. And the
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Company hasn't fully explored the effects of that.
Q. Do the cities have ultimate veto authority as to whether you can perform a particular construction project at a particular location in a particular year?
A. (Frost) I would not characterize it as "veto authority." However, they're responsible for approving the Company's detour and traffic plans. I think the issue that could arise would be that the Company would not be able to complete satisfactory detour and traffic plans if we had too many crews in such a small area.
Q. Is there a recent example in Nashua of the city taking action that caused the Company to not do a project it had planned to do?
A. (Frost) Correct. This year we've had to shift work on Main Street in Nashua.

Recently, with the current events, the city of Nashua and the Company came to an agreement to stop a cast iron replacement project on Main Street so that the city could install barriers for outdoor dining to help
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the community and the restaurants in that area.
Q. This is both for you, Mr. Frost, and Mr. Mostone. Is the Company nonetheless still committed to removing all leak-prone pipe as soon as is practically and economically feasible.
A. (Mostone) That is correct. The Company is looking to remove the pipe as quickly as possible.
Q. And Mr. Mostone, as the director of gas operations, at a high level can you repeat what I think are the well-accepted benefits of removing these leak-prone pipe in our system?
A. (Mostone) The benefits of removing the pipe, first of all, is the safety of the public. Getting leak-prone pipe out of the system, the integrity of the system will be much tighter. And with the months of digging up areas, it definitely will mitigate, be less involved. As far as the system, it will be a tighter system for the overall system.
Q. Is it fair to say that leak-prone pipes are a \{DG 20-049\} [HEARING ON MERITS] \{06-18-20\}
common source of the leaks that the Company has to address on either a true or kind of emergency basis during the course of the year?
A. (Frost) Yes. During the winter months especially, the leak-prone pipe has potential for leakage with ground movement, and we are constantly monitoring that through our survey program. And we are doing much more repairs on Grade 1 emergencies during the winter months.

CHAIRWOMAN MARTIN: Mr. Sheehan, you're on mute.

MR. SHEEHAN: I'm sorry.
BY MR. SHEEHAN:
Q. Mr. Frost, last question. Your testimony documents the work done in the last program year. It in great detail describes every project, how many feet, how much it cost, whether it was over or under budget, et cetera, et cetera, and comes to the total numbers that you conveyed to Ms. McNamara. Is it your opinion that those costs incurred by the Company last year were prudently
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incurred and were a prudent exercise as this program requires?
A. (Frost) Yes, I believe they were prudent costs that increased pipeline safety.
Q. Thank you.

MR. SHEEHAN: I have no further
questions for these two witnesses.
CHAIRWOMAN MARTIN: All right. Thank you.

Ms. Shute.
MS. SHUTE: I do not have any
cross. Thank you.
CHAIRWOMAN MARTIN: All right. Ms. Fabrizio.

MS. FABRIZIO: Thank you, Madam Chair.

CROSS-EXAMINATION
BY MS. FABRIZIO:
Q. I would like to start with a few questions for Ms. McNamara for purposes of clarification of just a number of points in her testimony.

Ms. McNamara, have there been any changes in how you calculated the fiscal year \{DG 20-049\} [HEARING ON MERITS] \{06-18-20\}

2020 CIBS revenue requirement in comparison to how you calculated the fiscal year 2019 revenue requirement?
A. (McNamara) No.
Q. Thank you. And are the only inputs that changed the amount of rate base -- sorry. Are the only inputs that changed the amount of rate base and the property tax rate?
A. (McNamara) Well, the annual spending changes.

I'm not sure if $I$ fully understand that question. But incremental spending our investment is updated, which is part of the rate base. And there's a rate base calculation and a property tax rate. Does that answer what you're looking for?
Q. Yes. Thank you. And how did you determine the rate base amount to use in your revenue requirement calculation? Could you just walk us through that?
A. (McNamara) So are you referring to the year-end rate base of 40 million or the 14 million?
Q. The 14 million.
A. (McNamara) So that information was provided
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by Mr. Frost, and we used it based on his FY 2020 actual costs that were on the gigantic spreadsheet that people referred to. And when it came to carryover costs, we only included 5 percent, which was the limit that was previously allowed.
Q. Thank you. And how do you calculate the property tax rate? And does the fiscal year 2020 rate compare -- how does it compare to 2019?
A. (McNamara) So we're using the property tax rate from 2019 is 2.71 percent, and in 2018 it was 2-1/2 percent. And the information we pulled for plant in service and depreciation come from the annual report, Page 9 I believe it is.
Q. Okay. Thank you. And how much of fiscal year 2020 CIBS revenue requirement is to recover CIBS spending in calendar year 2019?
A. (McNamara) Could you repeat that question? Sorry.
Q. We talked about the CIBS fiscal year. How much of the 2020 CIBS fiscal year revenue requirement is to recover specifically CIBS
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spending in calendar year 2019?
A. (McNamara) I don't have that specific breakdown. But generally speaking, we need to end construction on the gas company usually sometime in the winter. And any of the costs that flow through March of the next year are typically for construction that happened in 2019.
Q. Thank you. That's helpful.

Does Liberty intend to file a full rate case using calendar year 2019 as a test year, to your knowledge?
A. (McNamara) That's my understanding.
Q. And how will CIBS spending in calendar year 2019, and included in calculating the fiscal year CIBS 2020 revenue requirement, be reflected in the full rate filing?
A. (McNamara) So assuming that this increase that we're requesting goes through, none of the spending would be included in our calculation for the test year for the rate case that we would file this year because we would have already recovered it. So we would remove it from the calculation in the rate
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case.
Q. All right. Thank you. I think that's all I have for Ms. McNamara. So I will turn to Mr. Mostone and Mr. Frost, and I'll leave it up to both of you to decide who responds just in case I'm not clear on who has the responsibility.

So in your testimony at Bates Page 9 and at Lines 1 through 6 -- so it's your joint testimony -- you state that the Company reduced scope on a number of projects late in the year when it became apparent that construction crews would not be able to finish the entire CIBS plan.

How many projects -- how many planned projects were not started and how many projects had their scope reduced in the course of the CIBS year?
A. (Frost) There were ten projects that were reduced; seven of those were reduction-only, and three projects were not completed.
Q. And were they not completed due to time in winter?
A. (Frost) Correct. They were not completed to
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time. It takes some time to spool down a construction project, get all the new pipe tied back into the existing gas system and have all customers hooked up to the completed work. So we had to make a decision where the break point was.
Q. Okay. Thank you. And how many of the planned projects were never started?
A. (Frost) As I stated, three.
Q. Oh, I thought I heard three were completed. So three were not started, and three were not completed?
A. (Frost) No. I stated there were ten projects that either contained scope reductions or were not started.
Q. Oh, okay.
A. Seven projects had scope reductions and three were not started.
Q. Thank you. That was my misunderstanding.

And could you explain what led to an actual per foot cost of $\$ 384$ compared to an estimated cost of $\$ 299$ for CIBS year 2019?
A. (Frost) I think we described during the testimony there are some factors that the
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Company -- it's hard to quantify at the estimating phase. The cities and towns often place, at the time of construction and during construction, place special requirements upon the Company, such as work stoppages due to traffic. That was described as permit hour restrictions. The Company sometimes encounters asbestos-containing materials in the ground. That's typically found in Nashua and Hudson. We also had a little bit of asbestos encountered in Concord because the historical steam system that we've been working around in this past year is coated with asbestos. And those types of things occurred.
Q. Okay. Thank you. That's helpful.

And when some of those barriers to continuing work occurred as you've just listed, had the Company been aware of potential problems that might have led to some of those issues at the time it was planning the projects?
A. (Frost) We've discussed in prior hearings that the Company tends not to quantify those
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scope items because of the safety hazard of taking out cast iron and bare steel pipe.

You know, it's a recognized -- those pipe materials are recognized as a safety risk in a gas distribution system, and it's recognized that they need to be taken out of the ground. Therefore the Company -- since the project is destined to move forward, the Company did not think it was prudent to spend additional quantifying funds to do such things as environmental studies where we would, say, dig test holes all over the city during work because we're going to encounter these materials no matter which way.
Q. Okay. On that note, does the Company tend to do any preliminary footwork, say, talking with targeted town officials, or officials in targeted towns, I should say, to learn about such issues beforehand -- for example, the sewer projects that might end up interrupting a CIBS replacement or might end up facilitating a CIBS replacement -- or asking the town officials about environmental issues during the Company's planning process? Is
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there any outreach such as that?
A. (Frost) Yes. The Company liaises with towns on a weekly and bi-weekly basis. We also do a level of research, a records research. That's a generally accepted engineering practice for environmental contamination. However, as I explained, we don't do field research which involves test pitting. The records research often indicates, you know, possible contamination. And the Company does try to incorporate the results of records research into its project estimating.

However, typically, records are good on say a street level or a neighborhood level versus a foot-by-foot level of installed pipeline.
Q. And your weekly or bi-weekly meetings with town officials, is that specifically for projects that are underway?
A. (Frost) During the year the types of topics discussed tend to vary with the construction season. During the winter months when there's snow, we'll typically discuss forward-looking plans. During the summer months of the actual construction plan, we
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typically discuss ongoing projects.
Q. So no outreach is made in the planning stage just to coordinate with the towns. That's what I take from your discussion.
A. (Frost) Outreach is made during the planning stage. That's the forward-looking part. Often the towns tend to hold back permit restrictions until they have received a traffic plan just before construction. The Company does try to predict, based on past history, traffic impacts. However, the cities and towns tend to hold back final traffic decisions until the weeks before construction.
Q. Okay. Thank you.

What process does the Company have in place to oversee project construction and oversight of spending?
A. (Mostone) As far as oversight, as inspectors out on jobs typically, you know, we keep it under the one-to-four ratio. And they monitor each job and location on a daily basis.
Q. Okay. Thanks.
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And is there a view of costs as they develop as well at the same time?
A. (Mostone) Yes, we have a -- we are monitoring costs and reviewing each one if something pops up. We estimate the cost of each job prior to, and then we also have a -- we monitor the cost as the job is being done. If there's any add-ons or anything else that happens as the project is, they have to have it signed off by the inspector and the supervisor out in the field to have any add-ons or overages.
Q. So is that your role?
A. (Mostone) It's not necessarily my role. It's necessarily the supervisor's role. They have to get approval from the supervisor. If there's something in question, then the construction manager gets involved with it and there will be a discussion with him. And if it's to go up, then it would go to me on that piece of it if it escalates higher. Most of it gets resolved with the supervisor, and then there's someone there that -(connectivity issue). You know, there's
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things in the ground that could happen that they find that's going on. And you want the main to go in one direction and you have to offset something particular as an example, and the costs would be a little bit higher.
Q. Thank you. That's helpful.

In prior CIBS proceedings, we've heard that the Company testified that it intended to complete its CIBS replacement by year-end 2024. We know that has changed. So now what does the Company project for an expected completion date?
A. (Mostone) The Company is projecting to extend it. I don't have the exact date in mind yet. We're still looking into putting a team together to actually look at what we have left and projecting out how it's going to work, as far as the city and towns and working with everybody here. As Brian stated earlier, the cities, a lot of it being replacements, Manchester, Nashua and Concord are going to be a heavy traffic area. So we have to work closely with them on making sure. Of course we want to work with the
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cities and towns as they're doing their own construction, which keeps the costs down. So we'll be looking at that also at the same time.

So as far as the date, exact year, I don't have that yet right now, but we are looking at it.
Q. And does the indefinite date at this point, does that impact safety concerns?
A. (Mostone) Yes, it does. At Liberty we are concerned with that. We do want to get the pipe out as quickly as possible. But we also want to do it in a safe manner so we don't cause any other issues with the cities and towns or the public. So yes, we are -- we try to get them out as quick as possible.
Q. Okay. Thank you. I think I'll address this to both Mr. Frost and Mr. Mostone. What are your reactions to the CIBS reporting requirements that Mr . Knepper has recommended in his testimony?
A. (Frost) I believe that some of the CIBS reporting that Mr . Knepper's recommended is acceptable. I think that both parties could
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work together on the due dates of the reports. The spreadsheet referenced as Attachment $A$ in this docket, the large spreadsheet, I believe that that has gotten a little too large. It often contains many numbers that don't provide a lot of value. The Company's spent a lot of time developing all those numbers, and it seems that all parties sometimes get frustrated with the quantity of numbers and trying to pick out the numbers that matter, getting them lost in the thousands of other numbers on that spreadsheet. I think one night I was working on it, and I calculated there was -- I did a calculation of how many cells were in the spreadsheet that I was checking, and it was in the thousands.
Q. And is the information that's included in that massive spreadsheet, is that information the Company retains for its own records, generally speaking?
A. (Frost) Yes, the Company does maintain the results of that spreadsheet within its computer system. The Company also maintains
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archives of the spreadsheet. However, at its base, the numbers that really matter to the Company are the total number of services completed, the total cost of the projects and where the projects occurred and the total amount of main replaced and an estimate versus actual. Some of the other stuff about how much was paid in degradation fees, how much direct costs versus estimated, loaded costs versus estimated, the number of services by construction method, some of those totals seem to be more superfluous than of value.
Q. Thank you.

Turning to Mr. Mostone, your testimony references variances that you characterize as "slightly elevated" as well as "successfully managed." At what level would a cost variance rise above the level of more than "slightly elevated" in your mind?
A. (Mostone) Sorry. I'm on mute.

So, slightly above cost levels, are we pertaining to the construction when we're putting something in the ground and the cost
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has increased because of that? So I want to just understand the question better.
Q. Sure. I'm referring to the Company's references to "slightly elevated" cost variances on project costing as included in the record. Just generally speaking. Maybe I could rephrase and ask a different question.

What would you consider a less than successfully managed project in terms of costing?
A. (Mostone) Okay. I guess the cost, the increase in costs, you're talking like percentages I would imagine. So anything over about 10 percent higher would be kind of general. We don't want to see anything higher than that. You know, we do have overages that something can be around 20 percent. And those are generally -- you know, we review those and try to get our estimates better when we're working on projects. But as things come up and they arise, that's where the increases come from.
Q. And have you had a number of over fairly high
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cost overruns this past year?
A. (Mostone) We had some in 2019, 2020, and we've made adjustments to that. A lot of it's been, again, what we find in the ground and what we have to do for that. There's all different scenarios that do happen that keeps the cost up. Some of it's working with the cities and towns to -- you know, for the -you know, what's going on with their projects and trying to work with them. You know, we got, for instance, in Manchester, we got to backfill each night when we have some something open. We just can't plate it and leave it. We have to dig out each day, which costs time. In certain jobs that we can't do that, that the city doesn't allow it, we have to -- it takes time for the digging, which adds cost to the projects.
Q. Okay. Thank you. I think that completes my questions for Messrs. Frost and Mr. Mostone. CHAIRWOMAN MARTIN: All right. Thank you.

Commissioner Bailey.
COMMISSIONER BAILEY: Thank You.
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INTERROGATORIES BY COMMISSIONERS:
BY COMMISSIONER BAILEY:
Q. Just a few more questions, Mr. Mostone, on the cost overrun question. You say, "A lot has to do with what we find in the ground." But in the testimony it says in Hudson you expected asbestos. So why wouldn't you assume that every pipe in Hudson has asbestos and estimate as if it did and then come in under budget rather than over budget?
A. (Mostone) We have a general knowledge of an area in Hudson, especially where we have asbestos, and we look at the mappings and see. If we do have something where we know there's known asbestos, we do try to take that into consideration. But there's times where we don't know how much and, you know, where exactly it is. So it's very difficult to just estimate the whole length of a project at a time and how much you're going to deal with. Depth of main, depth of the asbestos is always in consideration. So it is a rough estimate. And then the
environmental changes towards how we have to
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extract it is also a consideration when you're in the area.
Q. Do you assume that all the pipe in Hudson has asbestos?
A. (Mostone) We assume it does. But we have a map that shows if we've done some construction in the area in the past and we haven't encountered it. If we do think that there's an area that doesn't show that it had it, then we go in there. And when we start digging in the main, you may start in the first 100, 200 feet you don't see anything, and then all of a sudden we pull it out and we have to get it mitigated at that time. So it does happen.
Q. I think Mr. Frost has something to add.
A. (Frost) Good morning, Commissioner. I think one of the challenges is that a lot of times the Company is working with spot reports regarding the asbestos. On a technical level, the asbestos was generally used as fill material in those areas. So we'll have spot environmental reports from environmental services and the Company records saying that
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at house number 30 on this street asbestos was found, at house number 50 it wasn't found. And we have to make a lot of -- it's kind of reading tea leaves to quantify the amount of asbestos. In areas where nobody has dug in the past 50 to 60 years, records do not exist.
Q. But my question is why not assume the worst, the most expensive scenario in your estimating?
A. (Frost) Oh, understood. That I would think would present challenges, too. Sometimes it's better to control the construction process going upwards to a degree rather than give the impression that the project is supposed to cost a large amount at the outset. The Company tries to estimate a realistic number if no problems or only the anticipated problems are covered so that we can keep an eagle eye on the amount of extras that come up during the job.
Q. But as you said, you can't do anything about the extras that come up during the job. So I still don't understand. I think what you're
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saying is that if you overestimate the job, the spending will creep up to that much even if it doesn't need to? Is that why you're reluctant to overestimate and come in under budget?
A. (Frost) I wouldn't say the spending is going to creep up necessarily. But that is the slight concern, that $I$ want to make sure that the jobs are -- you know, that the supervisors in the field, the expectation is that they need to meet the numbers based on a good-faith average estimate plus or minus 10 percent. And it would need to be documented fully why the estimates were to go elsewhere, or the actuals were to go elsewhere.
Q. But you're 30 percent over this year on your cost per foot.
A. (Frost) Yes, it does indicate the need for work on estimating.
Q. Okay. Can somebody tell me what's left, what streets are left in Concord? Because it seems like Concord's been torn up for the last five years, and $I$ can't believe there's
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anything left in Concord to do. But you said there's 6.7 miles remaining in Concord.
A. (Frost) Right now we are working on South State Street. North State Street has some left. The other -- there are some small pockets on the north end of the city in the neighborhood there north of Centre Street. And there's other pipes that's kind of -- I'd characterize it as "scattered streets." The majority of Concord is plastic pipe these days. Concord is, of the three large cities, is the best.
Q. When do you think that the 6.7 miles left in Concord will be complete?
A. (Frost) I would imagine, if the Company continues at its current rate and makes no changes, the Company could complete that in two to three years. It depends on where the Company wants to take the program and spread out the remaining construction that we talked about, phasing and working with each city. Part of the mileage in Concord is on Main Street, which is larger than 10-inch, which Mr. Knepper's testimony indicated a
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desire for Staff not to be within the replacement program.
Q. A desire for what not to be in the replacement program?
A. (Frost) Mr. Knepper noted a recommendation, and I'm finding the quote. Okay. On Bates Page 10 of Mr. Knepper's program, he noted the exception of mains equal to or greater than 10-inch nominal diameter not be included within the CIBS replacement program. On a technical basis, typically the larger diameter mains have a thicker wall thickness. And the Company has historically taken efforts to seal the joints between those pipes. The seal is kind of like gluing the pipes back together, so their leakage rate is a lot less than other cast iron mains. So I think that is the technical basis for that cut-off in diameter.
Q. So you didn't replace the cast iron in Main Street, Concord, when it was ripped up several years ago?
A. (Frost) No, we did not replace that cast iron. I'm not aware of the history behind
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that because I was not working with the CIBS program at Liberty when the decision was made.
Q. Okay. Tell me a little bit about Nashua and what you expect in five to ten years. I think Main Street -- well, not this year, obviously, because of the barriers that you mentioned. But when do you expect to get some progress in Nashua?
A. (Frost) I would imagine in Nashua, a five-year timeline would be very achievable.

I think the challenges with establishing a hard and fast date, the Company can be substantially complete, maybe with a few stragglers. But a hard and fast, you know, a hundred percent, you know, might be challenging. Or maybe it wouldn't make sense, you know, as we discussed, that if the city was to say that we've got this last piece over here out, you know, one to two years. It might make sense to wait that one to two years to get the last streets and to work in an orderly manner.
Q. And what about Manchester?
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A. (Frost) Manchester has the most cast iron and bare steel remaining. I can see that being challenging due to the amount of mileage that can be done per year and Manchester's sewer project. Off the top of my head, I'm having a hard time, you know, on the spot projecting that due to the amount of pipe.
Q. Mr. Mostone, you acknowledge that there are some safety concerns. Can you give me an idea about --

CHAIRWOMAN MARTIN: Excuse me, Commissioner Bailey. I'm sorry to interrupt. Commissioner Giaimo has his hand up.

COMMISSIONER GIAIMO: I do. And just before we left Manchester, could I interject a quick hypothetical?

CHAIRWOMAN MARTIN: Yes.
BY COMMISSIONER GIAIMO:
Q. Okay. Mr. Frost, I thought I heard you say that the expectation is the town, the city of Manchester could take between five and ten years to finish its sewer project?
A. (Frost) Yes. Correct.
Q. Okay. And I think all of us understand and
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appreciate why you would want to coordinate and prevent a redundancy of digging and re-digging. But where I'm struggling is if you wanted to do that, and there's a main on Street $A$ in Manchester that's going to have a sewer project -- that needs to have a CIBS replacement, but it's expected that the city will make that one of its last priorities on its sewer project and says, okay, we'll get to that in nine years or ten years. Is that a situation where the Company is actually going to suggest that the CIBS replacement doesn't happen until 2029?
A. (Frost) I think in a case like that, the Company, you know, longstanding within the CIBS program, has completed risk assessments on its main where we try to identify mains that have a leakage history and replace those first. I think we'd make an evaluation of the leakage history of the main, and if for safety reasons it had to be replaced sooner, we would replace it sooner. If it was not presenting a safety hazard, we would defer it. And additionally, we often work with the
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cities, where the city will also maybe adjust their schedule to match the condition of our facility.
Q. So the Company's comfortable that it's actually had detailed discussions with the cities of Manchester, Concord and Nashua, that it feels like it appreciates the expectations of the cities with their projects, so as to make them most efficient and effective with respect to CIBS as well?
A. (Frost) I believe we do a good job with the cities overall with trying to keep an open line of communication. Trying to juggle the total public interest is what it is, really.

COMMISSIONER GIAIMO: Okay. Thank you.

Commissioner Bailey, sorry to interrupt, but I thought it might be best for the flow of the hearing to tackle Manchester while we were talking about Manchester. Thank you.

COMMISSIONER BAILEY: No problem.
Interrupt anytime. I just didn't see you.
So thank you, Chairwoman Martin, for letting
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me know.

BY COMMISSIONER BAILEY (CONT'D):
Q. So let's talk about the leak rate before $I$ go back to the question for Mr. Mostone.

It looked like the leak rate in 2018 was higher than it has been in a long time. Can somebody explain why that is after all this replacement?
A. (Frost) The leak rate, we went through it in the last docket. There is some weather variability to leak rates. Typically in winters where there's a lot of freezing and thawing or extremely cold weather, the leak rate will go up on the cast iron main population. I'm not sure where that -- one of the observations that Staff made in their testimony in last year's docket was that the Company's leak rate testimony was statistically insignificant -- the Company thought that it was statistically significant. Staff did not. I'm not sure - -
Q. Did the leak rate come down in 2019 when we didn't have such a cold winter?
A. (Mostone) As far as broken mains on the cast
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iron leak-prone pipe, yes, it did overall. But as we are checking other areas during our leak survey program, we have a very low tolerance of, you know, percentage of gas, how our grading system is. And yes, we do have areas in Nashua, especially where we have picked up some leaks mostly on our dresser couplings that's on a coated steel system. And technically what's happening there is they leak during the winter months with the cold because of the rubber around the dresser couplings and the age of it, and we have to go back in and seal those. In the past, those leaks were considered Grade 3 leaks; now they're considered Grade 2 leaks, and we're required to fix them within six months of year end. So you're actually seeing some of that going on, and that's why you're seeing the leak rate go up a little bit. But the system itself, the rating or the grading and amount of leaks especially during this winter has gone down significantly on the cast iron system of the leak-prone pipe.
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Q. So did you say that the leaks that you found recently are not on the cast iron/bare steel pipes?
A. (Mostone) No. I don't have the numbers in front of me, but we've had -- the amount of Grade 1s that we had through this past year was less than previous years. And some of the leaks that we've had on our dresser couplings or what have you in the Nashua area in particular, that increased in the winter of 2019-2020 from winter of 2018-2019.
Q. So how concerned are you? Give me an assessment of the risk of not immediately replacing these pipes in Nashua?
A. (Mostone) So the repair there is, what we're doing -- this is on our coated seal system, 60-pound system in general -- we encapsulate the dresser coupling and we cut it out. So it's almost like a permanent repair. It's something that we are looking at to alleviate within time. But, you know, the leak itself actually goes away when the frost comes out of the ground. It doesn't persist. A lot of times that's what happens. So we actually
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have to pin the leak during the winter months and make sure we have it, and then the crews go out and do the repairs in the off -- you know, after the frost is out during the summer and we can get permits for them because they're graded low.
Q. I heard you say that that was on the coated steel system. I'm interested in the risk, your risk assessment of the remaining cast iron/bare steel pipes in Nashua and Manchester and Concord and how long you think that they can exist as they are.
A. (Mostone) So that's a tough question to answer, as far as how long. We constantly are monitoring the system and we're checking. As we dig, you know, we observe what the condition of the pipe is. If there's something that needs to be addressed right away, we immediately get engineering involved and recommend the main being replaced. As far as the piping itself goes, you know, we do a monitoring setup where we're out and monitoring the mains at times and making sure that there's no leaks and they're being
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repaired right away as soon as we get them. But it's tough to say how, you know, how long the cast iron going to last in the ground that's already been in there a hundred years. So...
Q. I think Mr. Frost has something to add.
A. (Frost) Thank you, Commissioner Bailey. I can say, to provide more information to you, as the CIBS program has gone on over these years, the Company, working with Staff, does document every leak that is on cast iron pipe. We document it in our mapping system so that we can typically, with leaking pipes, replace them within one to two years if they show an active leak history that develops. We've also seen as the program goes on that we're replacing more pipes that don't have a leak history even though they are cast iron or bare steel. During the early days of the program, maybe it could be characterized as more of a fire-type thing, where you're only replacing pipes that have a very bad leak history. The Company, you know, currently now is able to replace, as part of
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their program, a lot of pipes that need to come out of the ground because they present a risk higher than plastic pipe. However, they don't have a documented leak history because the population with the documented leak history is smaller than the Company's total replacement effort. Does that help?
Q. A little, but it leads me to my next question. So if you have a leak history on the remaining cast iron/bare steel pipes, what does that look like in Nashua, where I think you've had a couple of incidents this year? And I don't know if it has to do with these CIBS pipes or not. But seems like a couple times in Nashua over the past year there have been some leaks where people had to be evacuated.

So what does the leak history look like on the remaining CIBS pipes in the three Cities that we're talking about?
A. (Frost) I mean it's hard to categorize what it looks like. I think the Company manages it. Yes, we've had leaks. Also during the winter, as Mr. Mostone mentioned, we're
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driving around every day during the winter trying to find leaks, you know, the day they develop. We have a program where in the cast iron/bare steel areas we drive a
leak-detection truck. It just goes on a continuous circuit driving through the city every couple of days. And I'm not familiar with the incidents you described. The only -- the part that I'm most familiar with is the total replacement amounts and then how much of that total replacement amount could be considered streets that had a strong history of prior leaks versus the total replacement amount. And I'm really happy about that, that the Company is able to get ahead versus just treading water, you know, trying to run around just putting out the fires. We're able to get ahead and modernize the infrastructure because our replacement rate is higher than the degradation of the facility.
Q. So are you saying, then, that the leak history on the remaining CIBS is not severe enough to cause you concern and that you'll
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get to it in time before there's a real problem?
A. (Frost) I believe that with continued monitoring and with quick action on pipes that show degradation and with establishing a realistic end date, you know, within I think the five- to ten-year mark that we discussed, with maybe an allowance to discuss, as Mr . Knepper brought up, the large-diameter cast iron and to discuss straggler streets that are shown not to present an immediate safety hazard, that the Company would be reliably managing this.
Q. Okay. Just one more question. In your testimony you talked about you either -11.13 miles were either replaced or abandoned. So can you tell me what it means, "abandoned"? You just take it out of service and it's no longer necessary and you count that as part of the CIBS replacement program?
A. (Frost) Yes. A perfect example was on Smyth Road in Manchester. There is a 60-pound gas main on Smyth Road that's coated steel that provides a feed into the city that was
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installed I believe within the last 50 or 60 years. There was also an approximately hundred-year-old cast iron pipe on Smyth Road. So what the Company did for the portion of that street where the pipes were running parallel was we abandoned the cast iron main and put the customers onto the steel main. The steel main was installed at a later date. So that would be an example of abandonment where the Company was able to get cast iron out of the ground without full expenditure of replacing the pipe.
Q. Okay. Thank you.

COMMISSIONER BAILEY: That's all I have, Madam Chair.

CHAIRWOMAN MARTIN: All right.
Commissioner Giaimo.
COMMISSIONER GIAIMO: Good morning.
I'm going to wait for people to nod their heads so that $I$ know they're hearing me. Great. Thank you.

BY COMMISSIONER GIAIMO:
Q. So Staff at one point last year suggested the discontinuance of the step adjustments for
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the CIBS program, but also made a couple of observations. I want to know if the Company agrees with the observations. Specifically, in a recommendation they said public safety risks due to leaks and pipe failures have been substantially reduced, as evidenced by a significant decline in system leaks, and the regulatory burden and expenses will be reduced by eliminating the CIBS annual step adjustments. Are those statements true? Does the Company believe those statements to be true?
A. (Mostone) Yes, the Company believes those statements to be true.
Q. Okay. Thanks.

Mr. Frost, you said that you re-ran the numbers and there's approximately 56 miles left of CIBS. And then you said plus or minus, but then I don't think you said plus or minus what. I'm just wondering, what's your confidence in it actually being 56 miles?
A. (Frost) Good morning, Commissioner Giaimo. The numbers $I$ referenced were from an extract \{DG 20-049\} [HEARING ON MERITS] \{06-18-20\}
of the Company's mapping system last week. The Company, you know, as construction is completed, it can take a few months for all records to be finished and then the finished maps to be completed in the electronic system I use. So that was kind of where I had said plus or minus.

The testimony in this case, it described mileage where the Company has -- when we started the CIBS program, we froze the amount of cast iron mileage and have been subtracting the year-end replacement on a fiscal basis. So that's why I noted that there might be slight differences in the reason that those occurred.
Q. Okay. That's fine. Mr. Frost, would you say it's fair to make this observation: That as the total miles of CIBS replacement has occurred, the costs have gone up as a function of various things, but one of those is that you've taken out the low-hanging fruit and that it's more and more difficult and more and more problematic the pipes that you have to deal with now? Is that fair? Is
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that fair to say?
A. (Frost) Yes. Yes, one of the issues is in the early years of the cast iron program -in my career with the gas company, cast iron has been going on my whole career, replacement. A lot of the smaller diameter pipes that cost less per foot to replace is more leak-prone. So that pipe tended to rise to have a higher leak history at the outset of cast iron programs; therefore, correct, the low-hanging fruit population.
Q. Okay. That's helpful. And is estimating these more challenging replacements more difficult as a result of the complexity of the projects?
A. (Frost) I mean, there has been difficulty with estimating. There's a lot of wild cards out there when some of the cities and towns won't give us final requirements until they officially issue a permit right before construction. So a lot of times they'll give us general guidance, or the Company can make -- can use as historical data. And I do use historical data with estimating. There's
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been wild cards with working amongst city projects, such as the Concord steam conversion. Not that we were working the project together; however, we had to juggle -- or the City of Concord had to juggle us with contractors doing the steam work concurrently on similar streets. That often happens in the other cities, too, where the municipality is juggling Liberty's construction with other parties' construction affecting us.
Q. Thanks for that. So when I read the testimony, many things jumped out. But there were two that really jumped out at me as potential concerns, and one was the low estimate, the underestimating of projects, and the other was the inability to get certain things done early or at least on time. So $I$ want to ask some questions to probe that a little more.

I'll start with were there seven -- how many projects were delayed? Seven were delayed due to weather, is that right, due to the winter season?
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A. (Frost) Seven that had reduced project scope.
Q. And then was it three that were not -- no, three were not started at all. How many were delayed because winter, for lack of a better term, snuck up on you?
A. (Frost) Well, I think that population of ten. What happens on the Company side is that before we begin a project, we need to make sure that we have enough time left in the construction season to substantially complete it so that it's a prudent expenditure. We also need to make sure that the in-progress projects will reach a point where the gas system is safe for winter. I would think, looking in my testimony, the amount of mileage completed, I believe the Company substantially completed the mileage that it intended to. So that is one good part there that should be noted --
Q. So let me interrupt you there. I think -off top of my head, I'm not looking specifically at the page, but I think it was --
(Court Reporter interrupts.)
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Q. I said I'm not looking specifically at it, but I believe that 12.6 miles of projects was proposed, but something like 11.1 was completed.

So Mr. Frost, in your mind, that's substantial completion? It's about 88 percent of the total projects that were supposed to be in place were actually put in place.
A. (Frost) Thank you for calculating that that's the 88 percent figure. I was about to calculate that. While not ideal, I would describe that as successful. The Company has had prior years, where I've been involved with the program, where $I$ think the amount of completion has been less. So I was satisfied to have approaching 90 percent completion. I take -- as alluded to, I'm less involved with the construction management side. However, I was pleased from a design side.
Q. Okay. So with respect to your planning, when you -- you like -- you want projects in place and completed by Thanksgiving, early

November, mid-October, to ensure that it gets
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done before the winter makes the construction season impossible? I'm just trying to get an understanding. What's your planning? What do you work back from?
A. (Mostone) So that is the plan. We try to get as much as we can done by Thanksgiving. But as projects go on and we have delays here and there, they run into the December months. But our goal is to have everything out before Thanksgiving. We've had some overages on that that brings us into December. But a lot of it is because of late starts. It could be something with the cities or towns requesting us at a later date, trying to get everything done. The one thing we do not want to do is leave -- we try not to leave any cast iron that's already encroached on in the ground. So we push to try to get it out as quickly as we can. And it does run into the December month.
Q. Right. And all the more reason you might -(connectivity issue)
(Court Reporter interrupts.)
CHAIRWOMAN MARTIN: Commissioner,
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can you restate your question? Ms. Robidas is having trouble hearing.

BY COMMISSIONER GIAIMO:
Q. Your prior answer explains why the Company would not start a project and defer it completely for a year because of compressed time frames; is that right?
A. (Mostone) That's a possibility. We do look at that. So if we do have a project that's getting late in the year, we may work with the city and towns to find out what their protocols are, if they're paving, if they're doing things also. But we did that last year, where we saw some projects that were getting off way too late, and we didn't want to run into winter months because we don't know what to expect on weather. So yes, we will shut them down. With that being said, we also add projects during the year, too, and we look at other projects that may be smaller that we can get done instead. So we do look at all avenues at that point.
Q. So thank you for that answer.

The CIBS program has been functioning
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for Liberty for what, like 13 or 14 years now? Does that sounds right? Or 12, 13 years now?
A. (Mostone) I believe that's correct, yes.
Q. And you said that the benchmark is being within 10 percent of budget. But what I thought I heard was, you know, you're at 15 percent over this year and last year was 13 percent. Is 10 percent a reasonable goal, or does the Company just need to do a better job of sharpening its pencil?
A. (Frost) This is Brian here. I think the Company has demonstrated, you know, on an overall program basis, costs, you know, within that limit.

Another thing that has come up over the years and within this hearing is that the Company's estimating process tends to look at each project within the whole program, and it tends to look at a lot of history and average rules for each city. Typically when I
estimate projects, I'll estimate each
individual project, but I'll apply historical experience with environmental and permitting
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restrictions to each of those projects rather than going into a deep dive and approaching each project as, say, a new day or whatnot. So I think the total program number indicates 10 percent, you know, plus or minus as a goal.
Q. I just want to make sure I understand. The plus or minus is 10 percent; right? The objective is to stay under 10 percent, or within 10 percent under or over budget and not to be more or less 10 percent; right?
A. (Frost) I think in a program like this, 10 percent would be hitting -- you know, plus or minus 10 percent would be good;

15 percent, you know, indicates an issue if the overall program -- or it may start indicating an issue if it starts going towards 20. That's more of an issue.
Q. Okay. I guess I'm not trying to be argumentative, but you've been forecasting this program for a dozen years. And I guess I would think ideally the Company should be shooting for hitting the estimate on the nose, not plus or minus 5 percent from a
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10 percent overage standpoint. So I'll pause there and let you comment on that if you'd like.
A. (Frost) Thank you for the observation. Yeah, it's hard to respond. I can say that me, I take a lot of these, the observations from Staff and the Commissioners, and incorporate them into future program years. And I will take the observation that we need to look at estimating back to the team.
Q. Thank you, Mr. Frost. I appreciate that.

COMMISSIONER GIAIMO: Madam Chair, I appreciate the responses of the witnesses, and that's all the questions I have.

CHAIRWOMAN MARTIN: All right.
A lot of my questions have been answered, but I have a few left.

BY CHAIRWOMAN MARTIN:
Q. I read in the testimony of Mr. Knepper that a number of the pipes in question are at the point of 100 percent wall loss and 24 -hour leaking.

Can you give me a sense of what portion of the remaining pipes are in that condition \{DG 20-049\} [HEARING ON MERITS] \{06-18-20\}
and whether or not, as I heard earlier, part of the consideration for Liberty is whether it's economically feasible? And that goes into the timeline. But for those that are in that condition, are they on a different timeline regardless of where they're located?
A. (Frost) Yes, those pipes are on a different timeline. I had noted that the Company evaluates its leaks continuously and strives to replace pipes that show an abnormal or a leak history as soon as possible. We wouldn't be deferring pipe with a leak history.

One other item of note regarding the samples that Mr. Knepper referenced. The Company often extracts those samples at locations where it has measurements to the old pipe. Often those locations are points where the Company in the past, you know, maybe in the prior year or two, had installed a temporary repair clamp. The temporary repair clamps are made to last, you know, probably up to 30 years to seal those leaks. So I think that should also be considered.
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The Company does have leaks. However, some of these samples might be cut out from areas where the Company responded to those leaks and repaired it in a generally accepted manner in the industry.
Q. Do you have a sense, though, of the percentage of the 56 miles that might be in that condition?
A. (Frost) It's hard to -- I couldn't quantify a percentage because $I$ guess $I$ don't have $X$-ray vision to know what the pipe looks like. A lot of these pipes operate at low pressure, which means that when they're buried, if they were buried in an area where there was groundwater or there was sufficient ground pressure, that gaps wouldn't be actively leaking out of the pipe even if it had a hole in it.

The Company surveys all of these mains continuously during the winter. They also provide summer follow-up surveys to find the leaks when they occur and repair them. It would be impossible to give a mileage percentage of that.
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(Court Reporter interrupts.)
Q. There was mention of a Keene replacement that didn't appear in the prior planning in the Knepper testimony as well. Can the Company respond to that and give an explanation?
A. (Frost) I'm extremely sorry. I didn't catch the question fully.
Q. No worries. There was mention of a Keene replacement that was not included in the prior planning in the Knepper testimony. And I was wondering if the Company could respond to that and explain.
A. (Frost) Would it be too much trouble to ask for a Bates page reference?
Q. Well, my notes say Bates 9, but that could be for the next question. Let's check that.

Mr. Knepper, do you have that and could confirm? That would help.
A. (Knepper) Yup, Bates Page 9.
Q. Okay.
A. (Knepper) I guess it beings on Bates Page 8 if you're looking for it.
A. (Frost) Okay. Now I understand. Sorry. You meant Keene replacement. I had heard steam \{DG 20-049\} [HEARING ON MERITS] \{06-18-20\}
[WITNESS PANEL: McNAMARA|FROST|MOSTONE]
replacement.
Q. Oh, sorry. No, Keene.
A. (Frost) We had a -- the state was doing a steam project in Concord. I'm very sorry.

Yes, we did include a single project in the Keene operating area because Keene's cast iron pipe was added into our risk model for fiscal year 2020, and the rates were consolidated under another case.
Q. Okay. Can you tell me the average number of miles done per year in this program for the three prior years?
A. (Frost) Okay. I'm looking at testimony as referenced before for fiscal year 2020. This year it was, $I$ believe, 11.1 miles, approximately. There was another decimal point there. In fiscal year 2019, the CIBS program replaced -- I'm looking at a graph -just under 10 miles on this graph. In fiscal year 2018, it appears on the graph between 11 and 12 miles.
Q. Okay. Thank you.

You mentioned that some of the work that would be delayed beyond the 2024 timeline was \{DG 20-049\} [HEARING ON MERITS] \{06-18-20\}
related to a Nashua paving project. I can't remember if you gave this information about the specific timeline for that.
A. (Frost) I think I described that a good goal would be approximately five years. We also discussed about the difficulty of having a hundred percent. There may be stragglers. Typically the cities, all the major cities, will give us a look ahead. They'll give us a plan to coordinate construction that's out one to two years, and then as the construction season approaches, the cities' plan starts to get more certain to a hundred percent certainty. The City of Nashua has set forth a goal to repave the city, and they got authorization for bonding for that; however, they have not set forth an execution plan year by year on how they're going to do that. And the Company only gets data typically for one year and then maybe the follow-on year is uncertain.
Q. Okay. Thank you.

You made a comment about construction.
At some point construction in Nashua and
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Concord will occur. I didn't follow you. Were you saying that those two cities would be doing it at the same time, or what was your meaning there?
A. (Frost) Yes, the Company typically needs to spread out its construction work. We typically try to allocate construction equally among each city. It's not exactly equal, but we try to spread it out more or less. The amount of pipe remaining in both Concord and Nashua is a lot less than in the city of Manchester. Right now it appears that over 50 percent of the remaining pipe is in the city of Manchester, and Nashua has a higher percentage of pipe remaining than Concord. That's what $I$ was trying to allude to, that if we continue construction, we would run out of CIBS pipe in Concord first and then in Nashua.
Q. Okay. Thank you for that.

You mentioned that three projects had not started. Can you just give more explanation for that?
A. (Frost) Okay. I'm looking at the spreadsheet
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here, and I'd like to start in Nashua. There was a project on Concord Street in Nashua that I'm unfamiliar with that the Company was not able to get a permit. That was a state road. And New York -- New Hampshire DOT, I'm sorry, would not issue a permit because the expected construction schedule would go into the winter. On Lake Street there was -Before you move on from that -- I apologize for interrupting. When did you ask for that permit?
A. (Frost) I made the initial request for that permit during the winter, the prior winter. New Hampshire DOT did not resolve it. I made multiple follow-ups on a monthly and then bi-weekly basis.
Q. Okay.
A. (Frost) Ledge Street in Nashua, that is a sizable project that also involved -- was being coordinated with a regulator station installation. And the Company was not able to fully complete that, and it did not make sense to get into the gas system at that point. I'm not familiar with the one project
in Concord that was not begun.
Q. Mr. Mostone, are you familiar with that project?
A. (Mostone) The Ledge Street project? No, I'm not.
Q. No, the third project that was not started.
A. (Mostone) That was the Ledge Street project?
Q. I don't think so. Mr. Frost just mentioned the Lake Street project.
A. (Mostone) South Spring project, I'm not familiar with that, off top of my head. Don't know.
Q. Is that the project, Mr. Frost, the South Spring in Concord?
A. (Frost) Correct. South Spring Street, Concord.
Q. So you don't know why that wasn't started?
A. (Frost) No, I do not. I typically hand off the designed CIBS program to the Company's construction management department.
Q. Okay. You mention that you abandon pipes. Do you have to get agreements related to that before you can abandon them?
A. (Frost) We would request a road opening
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permit to complete the work, to complete excavation to tie over the services. Is there a specific agreement that you're wondering about?
Q. No. Am I understanding correctly that you're leaving -- you're abandoning the pipeline in the roadway?
A. (Frost) Yeah, the pipe is left in the ground.
Q. I guess my question is do you have to get agreements from whomever you have been given access by, whether it be the municipality, landowner?
A. (Frost) Yes. Typically municipalities allow the pipes to be abandoned in place. At times New Hampshire DOT, if it's an especially large pipe, would require it to be filled with grout, which is similar to concrete. It is not concrete. But we would work with the owner of the right-of-way to figure that out.
Q. All right. Thank you.

CHAIRWOMAN MARTIN: I think all my other questions have been answered. So we can go back to Mr . Sheehan in follow-up.

MR. SHEEHAN: I do have some.
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Thank you.
REDIRECT EXAMINATION

BY MR. SHEEHAN :
Q. On the last topic about the projects that were not started, is it common for the Company to plan for more projects than it completes in each CIBS year?
A. Yes, it is common to do that. Also, to answer the question on that a little bit more, $I$ don't know the exact reason why, but it could be because of the length of the project and crew availability up in that area at the time.
Q. And is it also fair to say that having planned for more projects to be completed affords the Company some flexibility to adjust? As I think someone mentioned, if one project doesn't get a permit, then you can quickly move to another one that's already planned; is that correct?
A. (Mostone) Yes, that's correct. We try to move over to try to get another project done if something's detained for whatever reason. The only issue that we do have with that is \{DG 20-049\} [HEARING ON MERITS] \{06-18-20\}
the amount of fitters to open from inside to outside. If they're working on a project that they're thinking is going to happen, they start earlier than the main crews. So they're doing what we call "pre-piping" ahead of time on a similar project. So if we do move, we have to get them over, and that does slow projects down in that area because they haven't -- they may not have started the pre-piping process in that area.
Q. So you're saying you can switch to a new project, but it's not an overnight task. There's a fair amount of pre-planning for such a change; is that correct?
A. (Mostone) Yeah, that's correct. We try to prioritize with them and tell them, you know, where we're going to start. And they'll go up -- they actually start their projects in the middle of winter to get ahead of the main construction crews, you know, to try to get -- (connectivity issue)
(Court Reporter interrupts.)
A. (Mostone) We call them fitters. What they try to do is try to get ahead of the main
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construction crew, so then the pipes inside the homes and outside -- we call that pre-piping so they can get ahead of the schedule. So when the main crews come in and start laying main and start services, it's all a quick tie-over to get them gas and running to complete the projects on a scheduled time. So when we do move, it does create a little bit of a havoc to get the crews moved that are over and coordinate with customers to get in to do this. That's part of their process. They have to coordinate and get in and schedule with customers for the piping inside.
Q. Different topic. Mr. Mostone, you mentioned the inspectors that you have on site, and you said you had a one-to-four ratio. Can you explain that in a little more detail?
A. (Mostone) So we're required to have a minimum of one-to-four ratio, meaning one inspector to four crews. We typically try to do better than that. We go down to, you know, it's either a one-to-three or even lower. You know, we typically like to get the
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[WITNESS PANEL: McNAMARA|FROST|MOSTONE]
one-to-two. But at times, with vacations and other things going on, we can't always control that. So the minimum that we go to is the one-to-four.
Q. And that means that an inspector would have two, three or four projects that they are working on in any given day; is that fair?
A. (Mostone) That's correct.
Q. And is it fair to say you will assign, or someone will assign that inspector to projects that are geographically close together?
A. (Mostone) Correct.
Q. And so this inspector's job is to touch base with each project, an hour each, a half-hour each, whatever is the appropriate way of keeping an eye on what's going on in the project.
A. (Mostone) Yes. They try to see -- they go to each project on a daily basis. If we're doing a tie-over, they're required to be at the job to monitor any major things that could tie in to the existing main.
Q. And I think it came up in the context that
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this inspector would be the first person, decision maker, if you will, who would see a need for a change in what the plan was and start the process of either approving it him or herself or running it up the flagpole to get approval for whatever that change might be; is that correct?
A. (Mostone) That's correct. We have to have a signed change order at the time if something is deviating from the original plan.
Q. So that is a process that starts in real time when the need for the change arises. There's a company person there or a few minutes away that could start that review and approval process.
A. (Mostone) Right.
Q. There were several questions about the safety of the remaining pipe in the ground. Mr. Mostone, can you, at a quick level, explain what the three levels are in our system, what each of the three are, and what the Company's obligation is to respond to each of those?
A. (Mostone) So are we talking leak grading?
Q. Correct.
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A. So a Grade 3 leak is considered a non-hazardous leak. We have to monitor it. And it's not necessarily repaired within a time frame. Grade 2 leaks are monitored and also replaced within six months or by year's end. And Grade 1 is an emergency leak that's considered hazardous and needs to be repaired immediately.
Q. And of course the Company finds these leaks through its surveys or through customer or Civilian reports of the smell of gas; is that fair?
A. (Mostone) That's correct.
Q. And as for the pipe samples that come out of the ground with, as the phrase is, "a hundred percent wall thickness loss -- (connectivity issue)
(Court Reporter interrupts.)
Q. Bob, I think you need to mute yourself while I'm talking. I think the echo's coming from your end.

So some pipes that have holes in them are not really leaking because the surrounding soil, mud, whatever, can actually
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prevent them leaking, especially on the low-pressure pipes; is that fair?
A. (Frost) Yes. This is Brian. That is a fair assessment, that we sometimes find pipes that have a hole in it during the course of construction. However, the Company has not found leaks going into the soil. We've also cut out pipe samples which have been previously repaired within a couple of years before they were cut out.
Q. Of course we need to replace those pipes anyway. But I think I understand your testimony, Brian, to be it is the reported leak history that the Company relies on in prioritizing which pipes should come out first; correct?
A. (Frost) Correct, it is the reported leak history.
Q. And last, Brian, if you could open your spreadsheet, Attachment 2 to your testimony, which begins or appears at Bates 30, and scroll over horizontally to Column B, as in boy, and M, as in Michael, titled "Loaded Cost Variance Percentage." Let me know when
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you're there.
A. (Frost) I am in that column of the spreadsheet.
Q. Can you tell me what you are trying to show, what it means, the phrase "loaded cost variance percentage"?
A. (Frost) The loaded cost is the sum of the direct contractor cost on the job plus the Company's overhead burdens. This is trying to show the difference between the original estimate filed with Staff and the finished construction costs. That also includes an estimate of carryover costs.
Q. We have not talked about carryover costs much today, which is fine. But if you could give us a brief description as we go through this.
A. (Frost) Carryover costs are typically
incurred for paving or degradation fees that are not completed in the year that the pipe is installed. Sometimes due to when construction finishes, it is too cold out to finish repaving the street, so those costs would be incurred in the following year.

Additionally, the City of Manchester
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charges degradation fees on the total finished pavement patched. So Manchester degradation fees are not billed until the second year.
Q. So if we look at the columns on this page, the one $I$ was pointing to, the ones to the left are those other costs you described. There's an estimated direct cost, BH; actual direct, BI and the variance there. And then there's the estimated loaded cost, BK; actual, $B L$; and variance is BM. So the BK, estimated loaded cost, is in effect your estimate before any construction begins; is that fair?
A. (Frost) You are correct.
Q. Now if we scroll down in those columns to line, looks like 48, 49 and 50, where it returns to a blue shaded area. Do you see that?
A. (Frost) I do.
Q. You have to scroll all the way to the left to find out what those blue shades are. And those are -- the bottom of the blue shaded said "Fiscal Year 2020 CIBS Program Totals";
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is that right?
A. (Frost) It is the total for all areas.
Q. And I think the number Commissioner Bailey started with is where the variance between estimated and actual shows 15 percent and the average cost per foot shows the $\$ 299$ to \$384; is that right?
A. (Frost) It does.
Q. And so in this particular line, 15 percent is the variance between the estimated and the actual loaded costs for the program, the dollars that are at issue in this case. That's not fair. Strike that question.

Scroll down further, and the last two shaded blue lines are 76 and 79. One of them has a minus 17 percent and the lower one has 8 percent. Can you tell us what those are?
A. (Frost) The minus 17 percent, that is the variance between what the Company incurred for actual carryover costs within the fiscal year 2020 program versus estimated at last year. And the 8 percent is the total cost variance of the program if you add up work completed this year and expected future
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carryover costs plus the variance of carryover work completed this year.
Q. So the minus 17 is an indication that the estimates for the carryover cost was higher than the actual; correct?
A. (Frost) That is correct. The Company incurred less carryover cost than it anticipated. It was able to hold the line on that cost.
Q. And so is it fair to say that the 8 percent variance is the overall financial picture of the project when you're looking at estimate versus actual?
A. (Frost) On a total-wide program expenditure, 8 percent is the variance.
Q. And if we -- I'm not going to have you go through prior years. But is it fair to say that in recent years the variances have been less than that? You have had years of four or five or six or even minus four percent variances; do you recall that?
A. (Frost) Yes, I recall that. The Company has been very successful in managing the overall program costs. I believe in prior years
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Staff has noted the Company's success with managing the program on an overall basis. However, Staff has also asked for, at times, a microscopic basis. And on the microscopic level there is a fair amount of variance.
Q. And by that do you mean that if you look at it project by project, some will be at budget, some will be significantly over, and some will be significantly under? Is that fair?
A. (Frost) Yes, Mike, that is correct. Additionally, we talked a lot in these questions about how the variance is calculated in multiple different ways based on original estimate, based on incurred costs plus expected carryover costs, variances of carryover costs against expected carryover costs. Just many different types of variance calculations. However, the total program variance calculated in fiscal year 2020 is 8 percent.
Q. Thank you.

MR. SHEEHAN: Those are all the questions I have, Chairwoman.
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CHAIRWOMAN MARTIN: All right. Thank you.

Ms. Fabrizio, do you want to do your direct on Staff?

MS. FABRIZIO: Yes. Thank you, Madam Chair. I will introduce Randy Knepper as Staff's witness.

DIRECT EXAMINATION
BY MS. FABRIZIO:
Q. Mr. Knepper, could you please state your full name for the record. You are on mute, Randy.
A. (Knepper) I'm unmuting. I'm just not as quick as you, Lynn.

Yeah, I'm Randall Knepper. I'm the director of safety, and I'm in room -- I don't even know what room -- Room 32 at the Commission. And I'm by myself right now.
Q. Thank you. And what is your position at the Commission?
A. (Knepper) I'm the director of Safety and Security.
Q. And in that capacity, were you the lead analyst responsible for examining Liberty's CIBS program results this year?
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A. (Knepper) By default, yes.
Q. And did you prepare testimony filed on behalf of Staff on June 12th, 2020, marked as Exhibit 2 in this docket?
A. (Knepper) Yes.
Q. And you attached Staff's audit report as part of your testimony in Exhibit 2, but that is also entered as Exhibit 3; is that correct?
A. (Knepper) Yes.
Q. And are there any corrections to your testimony that you would like to make at this time?
A. (Knepper) No.
Q. If I were to ask you the same questions that are included in your testimony, would the answers be the same today?
A. (Knepper) Yeah.
Q. Thank you.

CHAIRWOMAN MARTIN: Ms. Fabrizio, are you finished introducing the witness and laying the foundation?

MS. FABRIZIO: Yes.
CHAIRWOMAN MARTIN: Okay. I just want to check with Ms. Robidas.
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Ms. Robidas, could you use a break?
COURT REPORTER: I'm good right now. Thank you.

CHAIRWOMAN MARTIN: You're okay right now?

COURT REPORTER: Yup.
CHAIRWOMAN MARTIN: Okay. Then let's proceed.

MS. FABRIZIO: Okay. Thank you.
BY MS. FABRIZIO:
Q. Mr. Knepper, we've heard a lot of numbers this morning. First of all, I'd like to ask you, how many years has Liberty CIBS program been in place?
A. (Knepper) So the Liberty CIBS program has been in place for 12 years. And of all the people here, the one person that's been here constant is me.
Q. Okay. And we've heard statements regarding project cost variances. We've heard a couple of numbers: Plus or minus 10,15 percent, 8 percent. In your review of the Company's spreadsheet attached to your testimony on Bates Page 20, what is the percentage
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variance regarding low-cost planned projects that were completed without reduction in scope?

And maybe I can step back there. And if you could provide your understanding of the earlier discussion of variances and how you read the Company's results.
A. (Knepper) Lynn, I want to make sure I understand your question. Are you referring to my Bates Page 20 on my testimony?
Q. Yes. You attached the spreadsheet to your testimony, so that was easiest for me to refer to.
A. (Knepper) Okay. So my Bates Page 20, I believe, is a spreadsheet of just bare steel only. And that just lists -- that is not the -- it's not a financial thing. All it lists is of the samples that were brought in over the 12 year period, what the ages were, the history and the conditions of the bare steel that have been brought to us. Are you referring to a different one?
Q. Yes, I must be. I'm referring to the giant spreadsheet that we've been looking at --
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A. (Knepper) So the giant spreadsheet that I'm aware of is in Exhibit 1 of Liberty's testimony, and I believe it's Bates Page 30. And I have the benefit of having a large printout and I can read those column numbers and I can read those numbers. So, you know, for those who want to follow it, they're going to have to really zoom in on that Bates Page 30 because it's very small.
Q. Okay.
A. (Knepper) So now that $I$ have the right page and the right reference, can you repeat your question for me?
Q. Sure. We've heard statements from the Company today that the overall variance is plus or minus 10 percent on project cost. We've also heard a figure of 15 percent today. Based on your review of the spreadsheet that we're now all looking at, how would you assess the cost variance of the CIBS program?
A. (Knepper) Well, I think it's difficult to kind of do the overall because when you -- if you look at the seven uncompleted projects,
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they show up as negative variances; so that's going to reduce the overall amount. I believe that's also consistent with the audit findings, the final audit findings. I mentioned that in Section 2. And so when you're looking at those numbers on an overall basis, I find it's kind of difficult. If you look at even the carryover costs that are included, some of them are not totally included because they haven't gotten bills for degradation fees and things like that. And that's part of that 8 percent number they use.

So I tend to look at it on a project-by-project basis. I don't know if they call that a "microscopic" level, but I call it on a "individual" level. So those are the ones that $I$ tend to look at to see, you know, for a given project, did you vary from what you thought you were going to do. And I do agree with Staff's testimony -or the previous testimony. I think it is over 2,000 cells that we asked for. The reason we asked for 2,000 cells on this data
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is because of all the things that you've heard today -- you know, I can't get started until later. And so then we want to know the actual start date and end date, and that becomes a column. That becomes a thing. We want to know how much are degradation fees, because when we initiated this program, degradation fees weren't even part of this, right; they weren't getting any degradation fees. When we initiated this program, carryover costs weren't a major portion of it because a majority of the projects were getting done in a single year; they've now become a major portion. So in the beginning we were probably not hitting sections where there was a lot of extra costs, such as ledge or asbestos. So all those things have kind of grown over the years, and the spreadsheet now has the data with it. And even then, they still cause a lot of questions. So my assessment is, you know, it's not for me to -- you know, 1 look at their numbers, and they look at as an overall -15 percent is the number that I look at for
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the overall cost, which I think they listed between the estimated loaded cost versus the actual loaded cost. That's kind of what the number is. If you look at it on a division basis, looks like the Nashua division was 5 percent, and that had, you know, two projects within that were well over; you know, one was 151 percent one was 146 percent. The Manchester was 15 percent. And I think in Concord it was 38 percent over in the Concord division. So those were the ones that $I$ kind of focused on.
Q. Okay. On Bates Page 7 of your testimony you refer to 27 percent. So what is that based on?
A. (Knepper) Bear with me, Lynn. I'm flipping through pages.
Q. I have it marked as Bates Page 7.
A. (Knepper) Yes.
Q. And it looks like Lines 15 through 17.
A. (Knepper) Yeah. That's basically just sourcing it from their testimony, from Robert Mostone's and Brian Frost's testimony. And I reference it in my footnote where I got that,
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Note 7.
Okay. Thank you.
So you have recommended that the Commission require Liberty to set a target goal of end of year 2025 to complete its CIBS program -- that's at Bates Page 10 of your testimony, with an exception for mains equal to or greater than 10-inch nominal diameter and mains associated with the Keene system. Why have you chosen 2025 as a target?
A. (Knepper) So in the past, Liberty, in many years, has said 2024. If you look at previous years' CIBS dockets, I think it's been at least three dockets that they've mentioned 2024 as the target. I don't think that's achievable by them anymore, but I do think 2025. So I can tell you how I get there and derive that number.

So they have about 55 miles of cast iron and bare steel left in their system. I do not include Keene because Keene was never really part of the CIBS program from inception. It was never part of the conceptual thing, so I'm not including the
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6.75 miles. If you were to include it, we'd need to see, you know, are you operating the system? Is it going to natural gas? We'd have to see a whole conversion plan associated with it to look at that.

So of that 55 miles that's left, there's
about, I think -- I don't know if these numbers are consistent with what Brian said. But according to reports that they filed with us, there's about 1 mile that's 14- and 16-inch, and there's about 3.7 miles that are 10-inch and 12-inch. So it's a very small portion, between 4 and 5 miles. I kind of excluded that. That gets you down to about 50. At the end of this year, they're probably going to get 7 to 8 miles done. That's my estimate based on what $I$ see on crew activity in some of the discovery questions. So that reduces that down to about 42. Through municipal projects historically over this 12 -year period, they've been replacing somewhere around 2 miles on average. But $I$ anticipate that going down a little bit. So if you were to
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say 1.75 miles for the remaining 5 years, that gets another 7 to 8 miles. That's done outside of the CIBS, what you call the CIBS program. Remember, the CIBS program is for internally-driven projects, right. They're not for externally driven projects. Externally projects that are done by municipalities, the Company should be taking advantage of those and replacing them. This is as if the municipality was not going to do any work and the Company's initiating the program, or the replacement program on their own. And if you do that, you're down to about 35 miles. And you divide that by five years, right. We're talking about 2021, 2022, 2023, 2024 and 2025. That's about 7 miles a year. I think that's achievable.
Q. And does pushing the program back to 2025 create a delay that poses a significant risk to public safety?
A. (Knepper) Well, I think a one-year delay from what we were kind of -- remember, this is a targeted end date. This isn't a hard and fast. I don't know where they label this
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"hard and fast." But it's a targeted end date. And I don't think so. If you look at this large spreadsheet, you'll see there's pipes in there that have been in the ground, and they've been removed, since 1892. So those are 128 years they've been in the ground. At this point in time, $I$ think an extra year is probably not going to increase it.

We do note that the leak rates are going down. I would expect them to go down as they replace more. And so $I$ think we're getting to the end of the system, the end of the program. And I think they can start to replace -- you know, certainly if they want to do more, they can.

But I do think they need some sort of guidance because $I$ don't think we want to continue this on for the next 10 years or 20 years. This has been going on for quite a long time to get some of this aged, leak-prone pipe out.
Q. Thanks. And you refer to CIBS mains equal to or greater than 10 inches in diameter not
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posing the same level of risk. What would be a reasonable target to replace those?
A. (Knepper) I don't think it's a targeted date. I think it's going to be -- because there's very few streets that that's on. It's not scattered throughout. There's 12-inch here on Main Street in Concord. There's 10-inch on North State Street and South Street in Concord. There's a few places in Nashua near their plant that they have some 16-inch and 14-inch. So you're looking at very, very specific streets and segments. So I think you can look at those on an individual basis of when it makes sense to replace them. Those are going to be very, very expensive projects to replace because you can't just easily replace 16 -inch with plastic like they can do with a 4-inch or 8-inch or 6-inch. And, you know, those are ones that I would probably just monitor and not put an end date to.

We specifically asked, like on the Main Street program in Concord -- you know, Main Street's been redone with brick pavers and
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extended curbs to replace the gas main years ago at the time the construction was done. And at that time Liberty did not feel it was a priority.
Q. So you are not suggesting that 10-inch or greater mains should never been replaced, merely that they should not be -- they don't need to be part of the accelerated recovery CIBS program; is that right?
A. (Knepper) So the CIBS program's gone away, right. So the reason $I$ kind of say 10-inch and above is because typically they'll leak at bell joints. And I would say the majority of those bell joints have already been attended to by Liberty. So now the only other thing is with cast iron, the other way to have the gas leak is when it breaks. So when that cast iron fractures or breaks, the gas can leak. But when you get to those size pipes of 10-inch, 12-, 14- and 16-inch, they're much thicker materials and so they tend not to break as much. And we've not recorded many gas main breaks on those. We look at that data that Liberty submits to us.
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And because of those reasons we don't tend to see it.
Q. Okay. Thanks. And you've also excluded the CIBS mains in Keene as part of your assessment of an optimal target end date. Why is that?
A. (Knepper) Yeah, because I don't think Keene was really ever part of the program. And when you look at the testimony that they have, I think it's -- let me get to the Bates page number. Bear with me for a second. It would be in Exhibit 1, Bates page -- trying to look at -- well, let's just look at Bates Page 50. If you were to go and look at that in Exhibit 1, and you look at Line 11, Keene's not really in there when you look at the miles of cast iron replaced and you're trying to do this tracking. So it doesn't make sense to even include it because it distorts all data and all the associated stuff. I kind of think Keene's separate, on its own.
Q. Okay. Thank you. You have recommended that the Commission require certain reporting
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requirements from the Company regarding its CIBS activities. Could you briefly explain what you're looking for?
A. (Knepper) Yeah. So now that the CIBS program was terminated last year by the Commission as we alluded to, this large spreadsheet is probably the number one thing we get, as well as the spreadsheets that Ms. McNamara puts together that kind of gives you the financial impact. Those two things kind of tell us the most.

And so if you were to go to cold turkey and not get any of that information, and you're still spending, I don't know, upwards of $\$ 20$ million to year to $\$ 25$ million a year, I think it's reasonable to, instead of just taking that out and only replacing it with what we get for the E22, which is just a single line item for very little description, I think you either continue with this or you have a modified something in between. And so I made suggestions as to the Commission asking for a modified E22.
Q. Thanks. And the Company has indicated in
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this proceeding some concern regarding the administrative burden of the reporting that Staff would like to see from the Company. Do you have similar concerns?
A. (Knepper) I don't consider this detail of this type of spreadsheet an administrative burden. The things when I refer to administrative burdens are not having to file the marketing report, not having to do these cast iron/bare steel cutouts anymore, not having to give us a preliminary plan with all the GIS and all the layers and all the leak history associated with it, to then have a tech session, to then have a finalized plan, to then have a hearing like this and to have the order posted and testimony and discovery and -- those are the administrative burdens that $I$ was referring to.
Q. Okay. And your recommendation is that the Commission set a replacement target goal year end 2025. Do you believe there should be any incentives or penalties related to that target date?
A. (Knepper) I don't know if there should be --
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well, I'm not a big fan of incentives. I think -- I don't think they need to be incentivized any more. That's why we terminated the program. But penalties, it all depends upon if you -- if they're not doing things properly. And so I think if we continue to see the milages -- you just heard that the last three years was around 11 miles a year, and that's between municipal and self-initiated work. If we see those numbers stay constant or in and around that, I don't think we need any penalties, no.
Q. Okay. Thank you. And do you generally support the Company's request here for recovery of the CIBS program cost for 2020?
A. (Knepper) Yes.
Q. Okay. Thank you.

MS. FABRIZIO: I have no further
questions for Mr. Knepper.
CHAIRWOMAN MARTIN: Okay.
Ms. Robidas, are you still okay to keep going?

COURT REPORTER: Yes, thanks.
CHAIRWOMAN MARTIN: Okay. Thank
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you.
Ms. Shute.
MS. SHUTE: I don't have any cross.
Thank you.
CHAIRWOMAN MARTIN: Okay. Mr. Sheehan.

MR. SHEEHAN: Thank you. I have a few questions.

CROSS-EXAMINATION
BY MR. SHEEHAN:
Q. First, Mr. Knepper, and you did say it in the middle of your testimony just now, but to make clear, the CIBS program and all of the components that comprise the CIBS program no longer exist as of the Commission order a year ago; is that correct?
A. (Knepper) That's correct.
Q. And that was a recommendation of Staff, not the Company, to terminate the CIBS program; correct?
A. (Knepper) That's correct.
Q. And in fact, the Company objected to it for a number of reasons, and the Commission ultimately decided to terminate the program.
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My first series of questions regarding your proposed target date, you heard Mr. Frost and Mr. Mostone talk about the many factors that should be considered when setting a target date, such as the Manchester sewer project, the Nashua paving goals and the traffic concerns of trying to do too much work in a city. Do you disagree that any of those are factors that could impact the ability to meet any target date?
A. (Knepper) I think they can, yes. The east side of Manchester sewer and water separation project has probably been discussed for, I don't know, 20 years. And it's going to be dependent upon federal funding. So as you well know, those kind of municipality projects get stretched out and delayed. And for a long period of time they were looking for different technologies so they wouldn't even do that type of work. So I do think if they actually go through, yeah, you should try to coordinate as much, and you should do as much planning, so that if you do move something, it will not be in the way later
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and you wouldn't have to do duplicate replacements or movement. And that depends upon where they are. So I don't want to wait forever for this, quote, unquote, sewer separation project because that's been, I don't know, an ongoing project that I've been aware of since I started.

So the Nashua one. Each town always has cities and towns and paving priorities and things like that. And you should be doing that as well. To me, that's all kind of coordination that you guys do. I think you're doing it now. But I don't want it to be said that it was a final hard and fast. It was -- I think I used the word "targeted" I think is what I used. And that doesn't mean it's an absolute. And if you're hearing a straggler or two that you're talking about, I don't think Staff's going to object to those kind of things. It's just kind of what are you targeting, what are you trying to do and get a replacement rate I guess. So from what I heard was, from earlier testimony today, was five years. And it seems to kind
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of coincide with the same number that $I$ had put in my testimony.
Q. Do you have any specific information about the Manchester project of recent that says it's a go or a no-go, or is it just general knowledge that it's been in the works forever, and from your perspective, who knows when it will actually happens?
A. (Knepper) I think the latter, what you just said.
Q. So if the Company has information that it's more likely to proceed, it would be wise to at least wait some time to see in fact what the city is going to do and work around those plans, even if it were to push the finished date out beyond 2025 by a few years. Would that be wise?
A. (Knepper) I think that's wise. But again, I don't know if they are -- at what stage of completion are they at. Are they at the 90 percent completion of drawing drawings and bidding it and that kind of stuff? I'm guessing they're probably at the trying to get federal money stage. But I don't know.
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But I do think the Company should definitely factor that into consideration, yes.
Q. And would it have been wise for you to factor that in to determine where they were on that project before setting a 2025 target date?
A. (Knepper) Well, I don't have the specifics, so... I didn't have the specifics of the project when $I$ wrote my testimony. So if there is specifics, yeah, I think you should definitely factor that in. If they tell you they're going to be working on this street this year and they're going to be working on this street the next year and what that is, definitely you should factor that in.
Q. And if they received whatever permissions or approvals they need to do the whole project and it's a ten-year project, would it be reasonable to make sure you're not putting in pipe today that's going to have to be moved on year seven?
A. (Knepper) I'd have to kind of look at the specifics before I answer that question. I don't know. I mean if you're talking about delaying all 40 years -- 40 miles, I'd say
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no. Talking about what amount and where, I'd have to take that into consideration before I answer that question.
Q. And do you disagree with the Company's testimony that the cities impose requirements sometimes apparently -- well, they impose requirements such as hours of the day or the like that makes projects more difficult to complete as timely as first anticipated?
A. (Knepper) Yeah, we've noticed that when we're in the field doing inspections, that cities are imposing more and more costs on to these projects which is driving up those rates.
Q. And so slowing things down; correct?
A. (Knepper) I couldn't hear you, Mike.
Q. And slowing things down.
A. (Knepper) Yeah. If they say you can't start -- like in Nashua, I believe, they'll say things like you can't start until after the morning rush and then you've got to be done before the evening rush, which means you can't start normally at 7:00 a.m. I now start at 9:00 and I got to be finished by 3:00. That reduces the amount of work hours
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in a day, and that means you have to go back the same day and you can't get what you could get done if they didn't impose those kind of requirements.
Q. And in that example, I think Mr. Mostone referenced it, the practice -- I think it's a requirement of the Company to fill the hole every day at the end of the work day. So if you have a nine to three window, you have to show up at nine, dig the hole, do the work and stop the work in time to fill the hole back up before three; is that correct?
A. (Knepper) Right. I also think they know what streets those are going to be on. So you're working on Main Street. You would know that that would be imposed versus some other side street where there isn't much traffic.
Q. Yeah. I mean, we all know it's coming. But it's just a factor that will increase as we do more and more of the final streets in downtown. Is that fair?
A. (Knepper) Yup. I believe that's another reason why the costs are increasing. They're getting to the more arterial, more the heart \{DG 20-049\} [HEARING ON MERITS] \{06-18-20\}
of the heart of the city, and the more costlier projects.
Q.

Did you figure the delays associated with those kinds of things when you stated your 2025 target?
A. (Knepper) I think that, yes, because I'd already reduced going from 10 miles a year to 11 miles a year down to 7. So I think the answer is I think that's all -- if I were to factor that in, I would say that would be part of that consideration. I can't hear you.
Q. Thank you. I marked a few exhibits from last year, Staff's recommendations from earlier in the year that Mr. Frink wrote recommending termination of the program, Mr. Frink's testimony which had some of that same information, and an excerpt of testimony from last year's hearing. I don't need to go through those in detail, but they're there if any of us need to refer to them for the following few questions.

First, do you agree that administrative burden was one reason for Staff's
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recommendation to terminate the CIBS program?
A. (Knepper) I believe that's what he mentioned on those, one of the reasons, yes.
Q. Yeah, I think you just recited a few minutes ago the components of that administrative burden; correct?
A. (Knepper) Yeah. It may not be word-for-word but --
Q. Understood.
A. (Knepper) -- but the gist.
Q. Last year there was a comparison to what happened with Northern Utilities a decade ago when their program was terminated. Do you recall that?
A. (Knepper) Yeah, that's part of -- I'd have to kind of -- I didn't really focus on that. So you'd have to point me to the page that you're referring to if you want me to comment.
Q. Sure. It is in --
A. (Knepper) Is it Exhibit 4 or 5?
Q. Yeah, Exhibit 4, Mr. Frink's testimony, Bates Page 10. Are you there?
A. (Knepper) Yeah, I'm getting a delay from you.
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I don't know if you're getting a delay from me. But I'm there.
Q. Okay. Second line -- well, the first line described Northern's program in one sentence. Second sentence, the program went for ten years through 2020. Do you see that? Sorry. Through 2000.
A. (Knepper) Which line?
Q. The second full sentence, I'll just read it slowly. "Northern was allowed to recover bare steel replacement costs through annual step adjustments for ten years, with the last bare steel step adjustment occurring in 2000." Do you see that?
A. (Knepper) I see that.
Q. And then the rest of that sentence, "After which Northern's bare steel replacement program continued until all bare steel was eliminated from its distribution system in 2018." Correct?
A. (Knepper) I see that, yeah.
Q. So their accelerated recovery version of the program ended in the 2000 , and they spent another 18 years removing the balance of
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their bare steel; is that correct?
A. (Knepper) That's correct.
Q. Okay.
A. (Knepper) And it wasn't really until there was a mandate by the Commission to say get it done by 2018 that they got it done by 2018. So if there wasn't any mandate, I would assume that it would have extended even further.
Q. The other piece that I marked was an excerpt from testimony last year. I just cut a few pages. This is Exhibit 6. And the pages I excerpted begin at Bates 4, which is Page 95 of that testimony. Let me know when you're there, please.
A. (Knepper) I'm there.
Q. The question at the top of the page is me, and then Mr. Frink gives an answer for a period. And then $I$ ask another question summarizing what part of the current CIBS process would no longer happen, other than the yearly rate increases. And Mr. Frink starts to give an answer. If you scroll to Page 96, he defers to you. And then you
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begin answering on Page 96 of the transcript, Bates 5. Do you see that?
A. (Knepper) I do. Looks like Line 13.
Q. Correct. And bear with me a second. At the end of Bates Page 96 and into 97 you describe the spreadsheet and all the data in it and the report. And you say, quote, "I view all of that as not having to be done." Do you see that?
A. (Knepper) Yup.
Q. And then you say, in effect, what you need for information going forward is, quote, "'We replaced nine miles,' close quote. They don't have to say, 'I replaced 550 feet on Blodget Street or whatever.'" And then later in that paragraph you have a sentence that begins with "And so." And everyone can see that.

But you're basically saying let the Company do it, and we don't need to be getting all the information and micromanaging that process. Is that a fair characterization?
A. (Knepper) Yeah. But I think if you look at
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the -- to me it says we're not of like minds, Mr. Frink and myself. He believes from a financial side of the equation he needs to have all that information.
Q. But it's your testimony in this docket, Mr. Knepper, that's proposing the new information to be provided; correct?
A. (Knepper) Opposing new information being provided?
Q. Proposing.
A. (Knepper) Yeah, I think it's reasonable to go from just saying we're going to spend \$25 million over 11 miles to be able to give more detail to that, a description of it and where you're going to go and how many services and some basic information. Do I need to know the dates, the ages of things? Probably not. Do I need to have all the cost estimates and variances? Probably not. But I do think we need to have something more than in a single line. And I think that's what $I$ was trying to express in my testimony. I don't know if I gave it justice or not, but that's what $I$ was looking to do.
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Q. Certainly without the program, the way the Company would recover CIBS cost is through a rate case where it would provide information like it does for all its other capital projects supporting the rate case. And of course it's for the Commission to decide whether that information is sufficient to establish the prudency of those costs. Is that fair?
A. (Knepper) Yeah. And I would expect if we don't get this on an annual basis for the amount of dollars, that'll probably be the first question you get during a rate case is, "Please provide similar information in these 2,000 cells on a project-by-project basis." So I think we'll either get it upfront or we'll get it at the end at a rate case level. We'll probably get the detail that we need to be able to analyze the prudency.
Q. And it would be fair to say that -- well, strike that.
A. (Knepper) I lost you again, Mike. Sorry. CHAIRWOMAN MARTIN: Mr. Sheehan, I think you're on mute.
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MR. SHEEHAN: Yes, I'm sorry. BY MR. SHEEHAN:
Q. I think my last question is, and I think you answered it, the Company is requesting a certain rate adjustment in this case as outlined in Ms. McNamara's testimony. And I think you said that Staff has no objection to that particular request. Is that fair?
A. (Knepper) That's fair.
Q. Thank you.

MR. SHEEHAN: I have no further questions.

CHAIRWOMAN MARTIN: All right.
Thank you. Commissioner Bailey.
COMMISSIONER BAILEY: Thank You. INTERROGATORIES BY COMMISSIONERS: BY COMMISSIONER BAILEY:
Q. I'm really sorry, but I'm a little bit confused. So we have the spreadsheet that is in the Company's testimony. That's Attachment A. And we have a different spreadsheet in your testimony, Mr. Knepper. That's Attachment 7. And they're not exactly the same thing; right? Looks like it's --
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A. (Knepper) Let me look at what Attachment 7 is.
Q. Attachment 7 is what you -- I think it's a response to a data request that you recommended. That's the reporting information that we could require.
A. (Knepper) Yeah. So let me kind of go over that, if $I$ can clarify that a little bit.
Q. Okay.
A. (Knepper) So in Attachment 6A, when we asked the Company what kind of information we would get for this year's program, I highlighted a single row. And it said basically --
(connectivity issue)
(Court Reporter interrupts.)
A. (Knepper) Said $\$ 9$ million in capital expense, approximately. And that's it. And so that was just to kind of emphasize it. And then in 6B I listed the kind of information that we get from an E22 currently. And you can see it doesn't -- you know, it just talks about growth. It does say replacement. And it doesn't give a lot of detail. So what I'm trying to do in Attachment 7, when we asked
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the data request, the discovery request to get more information on those E22s, Liberty then provided a spreadsheet on Bates Page 106. And that starts to put a little bit more definition to those numbers. And that's what $I$ was trying to say is that kind of detail would be helpful. But again, we would ask that the Commission order some sort of detailed report like that. Or they can just use the existing format that they have now, that's currently -- that they've been using for 12 years.
Q. Sorry. I'm having trouble getting my mouse between screens and unmuting and looking at the information in your testimony.

So the information that they've been providing for years is the big, huge, giant spreadsheet that's in Attachment $A$ in their testimony. So Attachment 7 is a subset of that.
A. (Knepper) That's kind of what they propose for -- that's what they showed that's going on, activity that's going on right now.
Q. Okay.
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A. (Knepper) So right now there's no CIBS program going on, because this hearing's talking about last year's CIBS program. You can see that's a lot less than the 2,000 -cell spreadsheet, the 66 columns, call it 39 or whatever, associated with the 39 projects. This is a lot less. But it does give important information. It gives information about is it cast iron or is it bare steel. Gives you length. You know, gives you whether it's going to be abandoned and re-laid. And did give a cost estimate, and it told you kind of the scope of the work. So I think something like that is not burdensome to the Company to provide.
Q. Okay.
A. (Knepper) But I do think that the Company needs to be aware that if they don't keep this format that they have for this 2,000-cell spreadsheet, they can expect the Staff, during a rate proceeding when they come in for rates, to say we want it on a segment-by-segment basis. And we're going to be looking for similar information because
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Staff knows that they have the ability to extract that. And we also kind of think it does give a lot more of a telling story as to what did you plan, what did you do, when did you start, what did you accomplish, what were the reasons. And when you start putting that on there, the spreadsheet gets big.
Q. So if they were -- if the Commission were to order them to provide you the information in Attachment 7 in your testimony, and then a rate case came up, would they still need to provide the big 2,000-cell spreadsheet information if they're going to have to do that anyway?
A. (Knepper) Well, it's hard for me to -- I don't want to speak out of turn for Mr. Frink. But I would expect that would be a data request that they would ask for very early in the process.
Q. So your point is they might as well continue to file that 2,000-cell spreadsheet on an annual basis because they're going to have to produce it anyway. And so is it your recommendation then that we require that
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rather than what you have in Attachment 7?
A. (Knepper) I think if the Commission orders and it's made known, then they know they're going to have to do it. And whether it's upfront or not -- right now they -- but there would just be no -- I guess it would help the Staff because it gives you an idea as to how many bare steel services are remaining, how much -- which projects get done. Answers all those questions like, you know, there's 6 miles left in Concord and how much got done in Manchester and all those things to help in coordination with what you're talking about a city and sewer water project that the City of Manchester is considering and those kind of things.
Q. Is it possible that if you had time, you and Mr. Frink had time with the Company to look at the gigantic spreadsheet, that you could maybe trim it down a little bit and get rid of some of the columns so that it wasn't quite as massive and that it would satisfy both the requirement for you to keep track of the progress with CIBS and also satisfy Mr .
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Frink for the rate case?
A. (Knepper) I guess we could look at what kind of things -- I mean, I'm really looking at it, Commissioner Bailey, from an operational standpoint --
Q. Right.
A. -- and he's kind of looking at it from a financial aspect. And the two kind of intermingle. So I tend to look at stuff on a project-by-project basis. And so are you planning on replace 22 -inch.

So in my opinion, that one spreadsheet is not a huge burden. It is a burden more than nothing. But I think we're eliminating having a hearing, having to cut out samples, analyze them, having to -- you know, prior to this spreadsheet, they gave us -- you know, Brian Frost would give us plans that showed GIS, you know, where it starts and stops, and all the leak history that goes with it. There's many, many, many, many more pages than just that one spreadsheet. So I think if we eliminate all that other stuff, and the only thing remaining is this, $I$ would say
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that that's -- it can't -- it shouldn't be that much of a burden for them.
Q. And by "this," you mean the big spreadsheet?
A. (Knepper) Yes.
Q. Okay. So on the timing of when they should finish the CIBS project, I think that your basic position is they have 56 miles left. They've been doing about 11 miles a year. So they should be able to finish it in five years. Is that kind of where you got to --
A. (Knepper) I think so. I think that the original 2024 date's getting extended to 2025. So I think that it will. Now, whether it's down to the last foot and down to the absolute that I've gotten every single thing out, I don't think that's our concern. But our concern is without having a goal, it will get -- it will extend. And, you know, when I'm dealing with pipes that are well over -that were put in when horses were still on these streets, we need to remove those pipes.
Q. I understand. I am a little sympathetic to the Company's argument about not having to move the pipes twice. And I think what you
[WITNESS: KNEPPER]
said is work with the city, find out when they're going to do the sewer separation project in earnest. And to the extent that they can move them now and move them to a location where the sewer separation project won't be impacted, that would be the best thing. But if --
A. (Knepper) I would expect them to do that.
Q. But if the sewer separation project were happening, say completing in seven years from now, would you expect them to open the street up next year, replace five miles in Nashua [sic], and then I guess they would have to pay for all the paving, and then the city opens it up again in the next five years?
A. (Knepper) If you told me that was an absolute it was going to be done in seven years and you're going to make that commitment, that's one thing. What I find is that this project has been lingering for decades, and the answer is $I$ can't wait forever. And at some point in time we have to remove it.

Now, the other thing you need to take -to know is even the existing polyethylene
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pipe that they have replaced, let's say six years ago, if that's in the way, that's going to get moved. So either way they're going to be moving pipe if it interferes with the project. So I look at it and say, well, I'd have to look at it in context of how much of their pipeline system is going to be affected by this sewer water -- or sewer interceptor project. So you'd probably have to look at it in those terms.
Q. Okay. And if they did look at it earnestly in those terms, you can't really bind them to five years then. But you can -- we could say the target is five years, but work with the City of Manchester and get it done within no later than ten years or something.
A. (Knepper) I find if the Commission doesn't mandate or put a target on it, it just goes on forever.
Q. Okay.
A. (Knepper) And I think, in my opinion, what you initially heard from Liberty this morning was they wouldn't give you a date, wouldn't get there, and you had to kind of get it out
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of them town-by-town. And you kind of got out that they think they can do most of it in five years and that there's some stragglers. That's a lot different than at the beginning they just kind of said, well, we'll get to it on a practical basis when we can get to it. So I think the strongest point is if the Commission is doing that, it sets a tone that this is important to remove this, and it gives a targeted date. It's not an absolute. And it doesn't say every footage. But if we're down to that, we're going to be down to less than 5 miles, 6 miles out of the -which is going to be less than probably 2 percent of their system I think at that point in time, I'll be pretty satisfied.
Q. Okay. Great. Thank you very much.

COMMISSIONER BAILEY: That's all I have Madam Chair.

CHAIRWOMAN MARTIN: All right.
Thank you, Commissioner Giaimo.
BY COMMISSIONER GIAIMO:
Q. I have just a couple quick clarifications.

So, good afternoon Mr. Knepper. I want
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[WITNESS: KNEPPER]
a clarification. So last year it was Staff's recommendation and your recommendation that the CIBS project should be immediately terminated.
A. (Knepper) Yup.
Q. And the Commission decided and ordered that it would be deferred one year; is that correct?
A. (Knepper) Yup.
Q. Okay. What I'd like -- sorry?
A. (Knepper) The reason is because we gave advanced notice to the Company even before that, that we're winding down.
Q. Okay. I understand.

What I thought I also heard you say is that you're supportive and that you will continually encourage the Company to work with the cities in coordinating and getting things done as quickly as possible. Is that right?
A. (Knepper) Not only supportive, that would be my expectation.
Q. Okay. And I want to touch finally on what Commissioner Bailey was suggesting. And I'm \{DG 20-049\} [HEARING ON MERITS] \{06-18-20\}
wondering did you feel like there would be a meeting of the minds with respect to the reporting requirements, or are you so far apart with what you think the Company wants and what you need and what Mr. Frink may need that, you know, you can't resolve that and you would need the Commission to order that immediately?
A. (Knepper) Well, you know, when we asked them for this year when there wasn't a cast iron/bare steel program, right -- they're replacing main as we speak right now -- what do you have for associated information, they started out with that one line. That's it? Well, that kind of told me that absent this -- and then we had -- then they kind of got down to a little bit more detail, and then finally the third discovery question we got to it. And so, you know, $I$ was kind of afraid like we were going cold turkey, that we had a lot of data information coming in with a lot of dollars in expenditures associated with it, and then all of a sudden we're not getting anything. I didn't want --
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I wanted to make sure that does not happen.
Q. I understand that, Mr. Knepper. But you also said that it's a question of do we need the -- we're going to get the information now or we're going to get it before a rate case. Eventually you're going to get the information.
A. (Knepper) Right.
Q. The Company understands --
A. (Knepper) From my standpoint --
Q. Sorry.
A. (Knepper) From my standpoint, I could live with what's in Attachment 7. But I'm also not speaking for Mr. Frink.

COMMISSIONER GIAIMO: Okay. And I don't know to the extent it's appropriate, but maybe Mr. Sheehan could maybe think about that and incorporate something to that effect in his closing.

Okay. Thank you. That's all the questions I have.

CHAIRWOMAN MARTIN: All right.
Thank you. I don't have any questions
remaining. So back to you, Ms. Fabrizio.
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I do have a request. I'd like to ask another question of the Company related to Mr. Sheehan's redirect. So after Ms. Fabrizio is done -- (connectivity issue).

CHAIRWOMAN MARTIN: Yeah, I lost you for a second there. After Ms. Fabrizio is done, $I$ would like to ask one more question.

MS. FABRIZIO: Thank you, Madam Chair.

REDIRECT EXAMINATION
BY MS. FABRIZIO:
Q. Mr. Knepper, you are recommending that Liberty continue its replacement of its in-ground CIBS pipes; is that correct?
A. (Knepper) Yeah. I just want to make sure everybody's aware. When the program -- the CIBS program is over, I would like to replace leak-prone pipe, yes.
Q. Okay. And you are basically recommending that we simply not continue the accelerated recovery incentive that has been in place under the CIBS program; is that correct?
A. (Knepper) Yes, that's correct. And that's
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what the Commission decided last year.
Q. Okay. Thank you. I have no further questions.

BY CHAIRWOMAN MARTIN:
Q. Okay. My question is really related to the question about the sewer project. And Mr. Sheehan said if the Company had information that the sewer project is likely to proceed -- I would like to ask that question to the Company. If you have specific information that it is likely to proceed at a certain time frame, could you please provide that now.
A. (Frost) Good afternoon. Brian Frost here. The City of Manchester sent us a construction plan for the first major east side projects earlier this summer. It involves creating a main drain roughly in the area of Salmon Street and North Street. After that is complete, in the next one to two years they would move into neighborhoods. They have made -- the city has made a formal request for us to start considering replacement and movement of our pipes next year in that area.
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Q. Okay. Thank you. That's helpful.

CHAIRWOMAN MARTIN: Mr. Sheehan, do you have any follow-up based upon that question?

MR. SHEEHAN: I do not. Thank you.
CHAIRWOMAN MARTIN: Okay. Thank you.

All right. Let's see. I need to strike the I.D. on the exhibits. So without objection, I'll strike the I.D. on Exhibits 1 through 6 and admit them as full exhibits.

Is there anything else that any of the parties thinks we need to do before we go to closing?
[No verbal response]
CHAIRWOMAN MARTIN: Okay. Seeing none, let's get closing statements, beginning with Ms. Shute.

MS. SHUTE: Thank you, Chairwoman
Martin. The OCA supports the Staff's position. We feel that, given there's considerable remaining investment left to replace the remaining leak-prone pipe, the level of detailed reporting that's been
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requested by the Staff seems reasonable and appropriate. And I have no other statements at this time. Thank you.

CHAIRWOMAN MARTIN: All right.
Thank you.
Ms. Fabrizio.
MS. FABRIZIO: Thank you, Madam
Chair. Staff recommends approval of the proposed increase in annual revenue requirement for fiscal year 2020 CIBS program costs based on the audit of fiscal year 2020 CIBS costs and review of the Company's revenue requirement calculation. The CIBS replacement program is necessary to ensure public safety, a point that has been made repeatedly by both the Company and Staff throughout the existence of the program. Liberty has been targeting year end 2024 to complete the program but does not expect to meet that goal at this time. Staff recommends the Commission require Liberty to target year end 2025 to remove CIBS from its distribution system, with only a minor
allowance for large-diameter CIBS piping,
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which is generally less leak-prone and more costly to remove, and CIBS mains in Keene, as those mains are expected to be addressed through the Keene system conversion from propane air to natural gas. Because of the importance of the program, Staff recommends the Commission require Liberty to provide annual CIBS plans reporting for Staff review, as outlined by Mr. Knepper today, to be more limited than it was, as required under the settlement agreement program that has been terminated, but sufficient to enable Staff to track progress and for Staff to inform the Commission of any concerns regarding CIBS replacement planning. Thank you.

CHAIRWOMAN MARTIN: All right. Thank you.

And Mr. Sheehan.
MR. SHEEHAN: Thank you. First, we appreciate the support of Staff on the primary request in this proceeding, which is the rate adjustment. We spent a lot of time on a recommendation -- on Staff's recommendations that, going forward, part
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of -- no longer CIBS program from the PUC, but the internal CIBS program, if you will. So, first, we do appreciate the audit division's review of the filing and Staff's support of that piece of it.

What I'd like to say briefly on the future part of this is that the Company is committed to replacing CIBS as soon as is practical and possible, with appropriate consideration to cost. You will recall that we objected to the termination of the program. Since Liberty took over this franchise, it took a couple years to ramp up the CIBS program. But in fact we did, going from, $I$ don't know, 3 or 4 miles per year up to over 10 miles per year for a number of years. It was the annual -- in part, it was the annual rate adjustments that helped support those costs. I think we had 30-something crews out in the field last year. We feared, in part, that the loss of the annual adjustment would send the wrong message internally, that it's not a priority of the Commission anymore. I can tell you
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locally it's always been a priority, and we are always fighting internally for budget dollars to do what's best for our local company. So that's why we fought so hard. We believe in the program. We believe all the safety reasons for it as the number one reason. The emergent safety issues are largely gone. It's now putting out the last remaining smolders, if you will. The fire's been out, and now we just have a few embers remaining. And as Brian described, the remaining leak-prone pipe is not very leaky. So the Commission decided otherwise. That's fine. We're continuing as we would have anyway. We will run into these problems that we talked about today. So we're simply saying that 2024 is not realistic. It's always been a target, but we also knew that as we got to the end we would run into the problems that we're running into, the asbestos, the downtown projects and the paving projects and the like. So we don't think the Commission needs to impose a target date. We are already targeted as soon
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as possible. And Brian is doing the engineering to put a finer point on that as we get more details, for example, for the Manchester project. And I give the history to show that the Company has been committed to it, and we will remain committed to removing the CIBS.

As for the reporting, these projects are the only projects in the Company that receive this level of detail, and it's only because of the CIBS program that this evolved over the years. When we go to put CIBS pipe in rate cases in the future, we will present similar information that we always present in every rate case to support capital investment. It will not look like that big spreadsheet because we don't do that for any other project. And the Commission routinely approves capital expenditures on far less detail. To resolve the issue, as Commissioner Giaimo suggested, we will accept the recommended reporting that is in Mr . Knepper's testimony, which was the enhanced E22, if I have the name of that report
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correct. I think even Mr. Frost testified today that he can live with that as a reporting requirement going forward.

So with that, we thank everyone for their work on this and ask the Commission to approve the rate adjustment.

One last, final thought. I'm sorry. Last year's order terminating the program suggested that the Company, and I'm going to quote here, that the next step of CIBS, whether it's CIBS or something else, should be discussed in a rate case. And the quote is this: "By terminating the existing CIBS program, we are not precluding an alternative proposal in Liberty's next rate case. We continue to believe it is important to replace the cast iron/bare steel infrastructure and will consider an alternative proposal from the parties during the anticipated rate case," close quote. That's Order 26, 2667.

So this whole conversation over reporting and deadlines and targets we think belongs in the rate case that we intend to
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file this summer. And we will be making a proposal that will be in the neighborhood of a CIBS program. It won't be CIBS, but we're developing something that at least is somewhat analogous for the Commission's consideration. And we think that's where most of these conversations belong.

With that being said, as I said before, we'll accept the reporting requirements in Mr. Knepper's testimony. We ask the Commission not to set a target, and if one is to be developed, that that conversation go to the upcoming rate case. Thank you.

CHAIRWOMAN MARTIN: Okay. Thank you. And I just want to thank Ms. Robidas for being willing to continue.

With that, we will close the record and take the matter under advisement and get an order out as soon as we can. Thank you, everyone.

MR. SHEEHAN: Thank you.
MS. FABRIZIO: Thank you.
(Hearing concluded at 1:30 p.m.)
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C ERTITICATE

I, Susan J. Robidas, a Licensed Shorthand Court Reporter and Notary Public of the State of New Hampshire, do hereby certify that the foregoing is a true and accurate transcript of my stenographic notes of these proceedings taken at the place and on the date hereinbefore set forth, to the best of my skill and ability under the conditions present at the time.

I further certify that $I$ am neither attorney or counsel for, nor related to or employed by any of the parties to the action; and further, that $I$ am not a relative or employee of any attorney or counsel employed in this case, nor am I financially interested in this action.

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[^0]|  | access (3) | adjustments (5) | 76:7 | apparent (1) |
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| \$ | $\begin{array}{r} 5: 2,9 ; 79: 11 \\ \text { accessing (1) } \end{array}$ | $\begin{aligned} & 40: 3 ; 59: 24 ; 60: 10 \\ & 119: 12 ; 143: 18 \end{aligned}$ | $\begin{aligned} & \text { allow (3) } \\ & 19: 12 ; 40: 16 ; 79: 13 \end{aligned}$ | $\begin{aligned} & 28: 12 \\ & \text { apparently (1) } \end{aligned}$ |
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| 2000 (3) | 3:00 (1) | 129:11;134:13; | 97 (1) |  |
| 119:7,14,23 | 115:24 | 140:11 | 121:5 |  |
| 20-049 (1) | 30 (6) | $6.7 \text { (3) }$ |  |  |
| 4:4 | 43:1;44:17;71:23; | $20: 13 ; 45: 2,13$ |  |  |
| 2018 (6) | 86:21;96:3,9 | 6.75 (1) |  |  |
| $\begin{aligned} & 26: 12 ; 51: 5 ; 74: 20 \\ & 119: 20 ; 120: 6,6 \end{aligned}$ | $\begin{aligned} & \text { 30-something (1) } \\ & 143: 20 \end{aligned}$ | 6. $101: 1$ 60 (3) |  |  |
| 2018-2019 (1) | 31 (1) | 60 (3) <br> 11:18;43:6;59:1 |  |  |
| 53:11 | 9:17 | $603(1)$ |  |  |
| 2019 (12) | 31.8 (1) | 503:8 |  |  |
| 25:2;26:10,12,19; | 20:15 | 60-pound (2) |  |  |
| 27:1,8,11,15;29:22; | 32 (1) | 50-pound (2) 58 |  |  |
| 40:2;51:22;74:17 | 92:16 | $66(1)$ |  |  |
| 2019-2020 (1) | 35 (1) | 127:5 |  |  |
| 53:11 | 102:14 | 6A (1) |  |  |
| 2020 (18) | 38 (1) | $125: 10$ |  |  |
| 4:5;25:1;26:2,9,18, | 99:10 | 6B (1) |  |  |
| 23;27:16;40:2;74:8, | 39 (2) | 125:19 |  |  |
| 14;88:24;89:21; | 127:5,6 | 6-inch (1) |  |  |
| 91:20;93:3;109:15; <br> 119:6;141:10,11 | 4 | 104:18 |  |  |
| 2020-04 (1) |  | 7 |  |  |
| 4:15 | 4 (5) |  |  |  |
| 2021 (1) | 101:13;118:21,22; | 7 (15) |  |  |
| 102:15 | 120:13;143:15 | 99:13,18;100:1; |  |  |
| 2022 (1) | 4.3 (1) | $101: 16 ; 102: 2,17$ |  |  |
| 102:16 | 16:8 | 117:8;124:23;125:1, |  |  |
| 2023 (1) | $40(3)$ |  |  |  |
| 102:16 | 25:21;114:24,24 | $129: 1 ; 137: 13$ |  |  |
| 2024 (10) | 42 (1) | 7:00 (1) |  |  |
| 15:22;16:22;35:10; | 101:20 | $115: 22$ |  |  |
| 74:24;100:12,15; | 48 (1) | 76 (1) |  |  |
| 102:16;131:12; | 88:17 | 89:15 |  |  |
| 141:18;144:17 | 49 (1) | 79 (1) |  |  |
| 2025 (11) | 88:17 | 89:15 |  |  |
| $102: 16,18 ; 108: 21$ | $\begin{gathered} \text { 4-inch (1) } \\ \text { 104:18 } \end{gathered}$ |  |  |  |
| 113:16;114:5;117:5; | 104.18 | 8 |  |  |

## In Re:

DG 20-049 LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) 2020 CAST IRON/BARE STEEL REPLACEMENT PROGRAM RESULTS

HEARING ON THE MERITS June 18, 2020

SUSAN J. ROBIDAS, N.H. LCR
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|  | Page 21 | [WITNESS PANEL: McNAMAR |
| :---: | :---: | :---: |
|  | cts | 1 common source of the leaks that the Company |
| 2 th |  | 2 has to address on either a true or kind of |
|  | ho | 3 emergency basis during the course of the |
|  | whether you can perform a particula |  |
| 5 c | nstruction project at a particular loca | 5 A. (Frost) |
| 6 i | articular year? | ial |
| 7 A. | Frost) I would not | eakage with ground movement, and we |
| 8 a | hority." However | ntly monitoring that through our survey |
|  | proving the Company's detour and traffic | am. And we are doing much more repairs |
| 10 p | I think the issue | 10 on Grade 1 emergencies during the winter |
| 11 | uld be that the Company would not be | 11 months. |
| 12 to | complete satisfactory detour and traffic | 12 CHAIRWOMAN MARTIN: Mr. Sheehan, |
| 13 p | ns if we had too many crews in such a | 13 you're o |
| 14 | all area. | 14 MR. SHEEHAN: I'm sorry. |
| 15 Q. | re | 15 BY MR. SHEEHAN: |
|  | pation that caus the Com? | 16 Q. Mr. Frost, last questio |
|  | not do a project it had planned to do? | 17 documents the work done in the last progra |
| 18 A. | (Frost) Correct. This year we've had | 18 year. It in gre |
|  | shift work on M | 19 project, how many feet, how much it co |
| 20 R | cently, with the curre | 20 whether it was over or under budget, et |
| 21 of | shua and the Comp | 21 |
|  | agreement to stop a cast iron replace | 22 numbers that you conveyed to Ms. McNamara. |
|  | project on Main Street so that the city could | 23 Is it your opinion that those costs incurred |
|  | stall barriers for outdoor dining to | 24 by the Company last year were prudently |
|  | \{DG 20-049\} [HEARING | \{DG 20-049\} [HEARING ON MERITS] \{06-18-20\} |
| [WI | S PANEL: MCNAMARA\|FROST|MOSTONE] Page 22 | [WITNESS PANEL: McNAMARA\|FROST|MOSTONE] Page 24 |
|  |  |  |
|  |  | program require |
| 3 Q. | is i | A. (Frost) Yes, I believe they were prude |
|  | ostone. Is the Company | that increased pipeline safet |
|  | mmitted to removing all leak-prone pipe as | 5 Q. Thank you. |
|  | on as is practically and economically | MR. SHEEHAN: I have no furth |
| 7 f | sible. | estions for these two witnes |
| 8 A . | ostone) That is correct. The Company | CHAIRWOMAN MARTIN: All righ |
|  | king to remove the pipe as quickly as | hank you. |
|  | , | Ms. Shute |
| 11 Q | And Mr | 11 MS. SHUTE: I do not have any |
|  | erations, at a high level can you repe | ross. Thank you. |
| 13 | at I think are the well-accepted benefits | CHAIRWOMAN MARTIN: All right. Ms. |
| 14 of | removing these leak-prone pipe in our | 14 Fabrizio. |
| 15 S | system | MS. FABRIZIO: Thank you, Madam |
| 16 A. | (Mostone) The benefits of removing the pipe, | 16 Chair. |
| $17$ | first of all, is the safety of the public. | CROSS-EXAMINATION |
| 18 - | Getting leak-prone pipe out of the system | 18 BY MS. FA |
| 19 the | integrity of the system will be much | 19 Q. I would like to start with a few questions |
|  | ter. And with the months of digging up | 20 for Ms. McNamara for pur |
|  | as, it definitely will mitigate, be less | 21 clarification of just a number |
| 22 | olved. As far as the system, it will be a | her testimony. |
|  | hter system for the overall system. | Ms. McNam |
| 24 Q. I | Is it fair to say that leak-prone pipes are a \{DG 20-049\} [HEARING ON MERITS] \{06-18-20\} | 24 changes in how you calculated the fiscal year \{DG 20-049\} [HEARING ON MERITS] \{06-18-20\} |


|  |  |
| :---: | :---: |
| 2020 CIBS revenue requirement in comparison to how you calculated the fiscal year 2019 revenue requirement? <br> A. (McNamara) No. <br> Q. Thank you. And are the only inputs that changed the amount of rate base -- sorry. Are the only inputs that changed the amount of rate base and the property tax rate? <br> A. (McNamara) Well, the annual spending changes. I'm not sure if I fully understand that question. But incremental spending our investment is updated, which is part of the rate base. And there's a rate base calculation and a property tax rate. Does that answer what you're looking for? <br> Q. Yes. Thank you. And how did you determine the rate base amount to use in your revenue requirement calculation? Could you just walk us through that? <br> A. (McNamara) So are you referring to the year-end rate base of 40 million or the 14 million? <br> Q. The 14 million. <br> A. (McNamara) So that information was provided \{DG 20-049\} [HEARING ON MERITS] \{06-18-20\} | $1 \quad$ spending in calendar year 2019? <br> A. (McNamara) I don't have that specific breakdown. But generally speaking, we need to end construction on the gas company usually sometime in the winter. And any of the costs that flow through March of the next year are typically for construction that happened in 2019. <br> Q. Thank you. That's helpful. <br> Does Liberty intend to file a full rate case using calendar year 2019 as a test year, to your knowledge? <br> A. (McNamara) That's my understanding. <br> Q. And how will CIBS spending in calendar year 2019, and included in calculating the fiscal year CIBS 2020 revenue requirement, be reflected in the full rate filing? <br> A. (McNamara) So assuming that this increase that we're requesting goes through, none of the spending would be included in our calculation for the test year for the rate case that we would file this year because we would have already recovered it. So we would remove it from the calculation in the rate |
|  | 1 case. <br> Q. All right. Thank you. I think that's all I have for Ms. McNamara. So I will turn to Mr. Mostone and Mr. Frost, and I'll leave it up to both of you to decide who responds just in case I'm not clear on who has the responsibility. <br> So in your testimony at Bates Page 9 and at Lines 1 through 6 -- so it's your joint testimony -- you state that the Company reduced scope on a number of projects late in the year when it became apparent that construction crews would not be able to finish the entire CIBS plan. <br> How many projects -- how many planned projects were not started and how many projects had their scope reduced in the course of the CIBS year? <br> A. (Frost) There were ten projects that were reduced; seven of those were reduction-only, and three projects were not completed. <br> Q. And were they not completed due to time in winter? <br> A. (Frost) Correct. They were not completed to \{DG 20-049\} [HEARING ON MERITS] \{06-18-20\} |









| [WITNESS | S PANEL: McNAMARA\|FROST|MOSTONE] Page 57 | [WITNESS PANEL: McNAMARA\|FROST|MOSTONE] Page 59 |
| :---: | :---: | :---: |
|  | driving around every day during the winter | 1 installed I believe within the last 50 or 60 |
| 2 | trying to find leaks, you know, the day they | 2 years. There was also an approximately |
| 3 | develop. We have a program where in the cast | 3 hundred-year-old cast iron pipe on Smyth |
| 4 | iron/bare steel areas we drive | 4 Road. So what the Company did for the |
| 5 | ete | 5 portion of that street where the pipes were |
| 6 | continuous circuit driving through the city | 6 running parallel was we abandoned the cast |
| 7 | every couple of days. And I'm not familiar | 7 iron main and put the customers onto the |
| 8 | with the incidents you described. The | 8 steel main. The steel main was installed at |
| 9 | only -- the part that I'm most familiar with | 9 a later date. So that would be an example of |
| 10 | is the total replacement amounts and then how | 10 abandonment where the Company was able to get |
| 11 | much of that total replacement amount could | 11 cast iron out of the ground without full |
| 12 | be considered streets that had a strong | 12 expenditure of replacing the pipe. |
| 13 | history of prior leaks versus the total | 13 Q. Okay. Thank yo |
| 14 | replacement amount. And I'm really happy | 14 COMMISSIONER BAILEY: That's all |
| 15 | about that, that the Company is able to get | 15 have, Madam Ch |
| 16 | ahead versus just treading water, you know, | 16 CHAIRWOMAN MARTIN: All right. |
| 17 | trying to run around just putting out the | 17 Commissioner Giaimo. |
| 18 | fires. We're able to get ahead and moderni | 18 COMMISSIONER GIAIMO: Good morning. |
| 19 | the infrastructure because our replacement | 19 I'm going to wait for people to nod their |
| 20 | rate is higher than the degradation of the | 20 heads so that I know they're hearing me. |
| 21 | facility. | 21 Great. Thank you. |
| 22 Q. | So are you saying, then, that the leak | 22 BY COMMISSIONER GIAIMO: |
| $23$ | history on the remaining CIBS is not severe | 23 Q. So Staff at one point last year suggested the |
|  | enough to cause you concern and that you'll | 24 discontinuance of the step adjustments for |
|  | \{DG 20-049\} [HEARING ON MERITS] \{06-18-20\} | \{DG 20-049\} [HEARING ON MERITS] \{06-18-20\} |
| [WITNE | S PANEL: McNAMARA\|FROST|MOSTONE] Page 58 | [WITNESS PANEL: McNAMARA\|FROST|MOSTONE] Page 60 |
|  | to it in time | 1 the CIBS program, but also made a couple of |
| 2 | problem? | 2 observations. I want to know if the Company |
| 3 A. | (Frost) I believe that with continued | 3 agrees with the observations. Specifically, |
|  | monitoring and with quick action on pipes | 4 in a recommendation they said public safety |
| 5 | that show degradation and with establishing a | 5 risks due to leaks and pipe failures have |
| 6 | realistic end date, you know, within I think | 6 been substantially reduced, as evidenced by a |
| 7 | the five- to ten-year mark that we discussed, | 7 significant decline in system leaks, and the |
| 8 | with maybe an allowance to discuss, as Mr. | 8 regulatory burden and expenses will be |
| 9 | Knepper brought up, the large-diameter cast | 9 reduced by eliminating the CIBS annual step |
| 10 | iron and to discuss straggler streets that | 10 adjustments. Are those statements true? |
|  | are shown not to present an immediate safety | 11 Does the Company believe those statements to |
|  | hazard, that the Company would be reliably | 12 be true? |
|  | managing this. | 13 A. (Mostone) Yes, the Company believes those |
| 14 Q. | Okay. Just one more question. In you | 14 statements to be true. |
|  | testimony you talked about you either -- | 15 Q. Okay. Thanks. |
| 16 | 11.13 miles were either replaced or | 16 Mr. Frost, you said that you re-ran the |
|  | abandoned. So can you tell me what it means, | 17 numbers and there's approximately 56 miles |
| 18 | "abandoned"? You just take it out of service | 18 left of CIBS. And then you said plus or |
| 19 | and it's no longer necessary and you count | 19 minus, but then I don't think you said plus |
| 20 | that as part of the CIBS replacement program? | 20 or minus what. I'm just wondering, what's |
| 21 A. | (Frost) Yes. A perfect example was on Smyth | 21 your confidence in it actually being |
| 22 | Road in Manchester. There is a 60-pound gas | 2256 miles? |
| $23$ | main on Smyth Road that's coated steel that provides a feed into the city that was | 23 A. (Frost) Good morning, Commissioner Giaimo. <br> 24 The numbers I referenced were from an extract |
| $24$ | \{DG 20-049\} [HEARING ON MERITS] \{06-18-20\} | \{DG 20-049\} [HEARING ON MERITS] \{06-18-20\} |







| [WITNESS | NE] Page 81 | [WITNESS PANEL: McNAMARA\|FROST|MOSTONE] Page 83 |
| :---: | :---: | :---: |
|  | inside | ns and |
| 2 - | de. If they're working on a project | going on, we cant always |
|  | at they're thinking is going to happe | trol that. So the minimum that we go |
|  | start earlier than the |  |
|  | y're doing what we call "pre-piping" ahead | 5 Q . And that means that an inspector would have |
| 6 | time on a similar project. So if we do | or four projects that they are |
| 7 - | ve, we have to get them over, and that | day; is that fair? |
|  | projects down in that area because they | 8 A . (Most |
| 9 l | n't -- they may not have started the | 9 |
|  | -piping process in tha | 10 |
| 11 | you're saying | 11 projects that are geographically close |
|  | ect, but it's not an overnight | 12 together |
| 13 | There's a fair amount of pre-planning | 13 A. (Mostone) Correct. |
|  | ch a change; is that correct? | 14 Q. And so this inspector's job is to touch ba |
| 15 A. | ostone) Yeah, that's correct. We try to | 15 with each project, an hour each, a half-hour |
|  | ritize with them and tell them, you know, | 16 each, whatever is the appropriate way of |
|  | re we're going to start. And they'll go | in |
|  | -- they actually start their projects in |  |
|  | middle of winter to get ahead of the main | 19 A. (Mostone) Yes. They try to see -- they |
|  | struction crews, you know, to try to | 20 each project on a daily basis. If we're |
|  | -- (connectivity issue) | 21 doing a tie-over, they're required to be at |
|  | ru | 22 the job to monitor any major things that |
| 23 A. | (Mostone) We call them fitters. | 23 could tie in to the existing main. |
|  | try to do is try to get ahead of the ma | 24 Q . And I think it came up in the conte |
|  | \{DG 20-049\} [HEARING ON MERITS] \{06-18-20\} | \{DG 20-049\} [HEARING ON MERITS] \{06-18-20\} |
| [WI | S PANEL: McNAMARA\|FROST|MOSTONE] Page 82 | [WITNESS PANEL: McNAMARA\|FROST|MOSTONE] |
|  | construction crew, so then the pipes inside | inspector would be the first person, |
|  | the homes and outside -- we call that | ion maker, if you will, who would see |
| 3 p | -piping so they can | for a change in what the plan was and |
|  | edule. So when the main crews come in and | rt the process of either approving it him |
|  | art laying main and start services, it's | herself or running it up the flagpole to |
|  | a quick tie-over to get them gas and | approval for whatever that change might |
|  | nning to complete the projects on a | that correct? |
|  | heduled time. So when we do move, | 8 A. (Mostone) That's correct. We have to have a |
|  | ate a little bit of a havoc to get the | ned change order at the time if something |
| 10 | ews moved that are over and coordinate | 10 is deviating from the original plan. |
|  | customers to get in to do this. That's part | 11 Q . So that is a process that starts in real time |
| 12 | f their process. They have to coordinate | 12 when the need for the change arises. There's |
| 13 a | nd get in and schedule with customers for | company person there or a few minutes away |
| 14 | the piping inside. | 14 that could start that review and approval |
| 15 Q. | Different topic. |  |
|  | the inspectors that you have on site, and you | 16 A. (Mostone) Right. |
| 17 | said you had a one-to-four ratio. Can you | 17 Q. There were several questions about the safety |
|  | explain that in a little more detail? | 18 of the remaining pipe in the ground. Mr. |
| 19 A. | (Mostone) So we're required to have a minimum | 19 Mostone, can you, at a quick level, explain |
| $20$ | one-to-four ratio, meaning one inspector | 20 what the three levels are in our system, what |
| 21 | four crews. We typically try to do better | 21 each of the three are, and what the Company's |
| $22$ | an that. We go down to, you know, it's | 22 obligation is to respond to each of those? |
|  | ther a one-to-three or even lower. You | 23 A. (Mostone) So are we talking leak grading? |
| 24 | know, we typically like to get the | 24 Q. Correct. |
|  | \{DG 20-049\} [HEARING ON MERITS] \{06-18-20\} | \{DG 20-049\} [HEARING ON MERITS] \{06-18-20\} |










| [WITNESS: KNEPPER] Page 117 | [WITNESS: KNEPPER] Page 119 |
| :---: | :---: |
| of the heart of the city, and the more costlier projects. <br> Q. Did you figure the delays associated with those kinds of things when you stated your 2025 target? <br> A. (Knepper) I think that, yes, because I'd already reduced going from 10 miles a year to 11 miles a year down to 7 . So I think the answer is I think that's all -- if I were to factor that in, I would say that would be part of that consideration. I can't hear you. <br> Q. Thank you. I marked a few exhibits from last year, Staff's recommendations from earlier in the year that Mr. Frink wrote recommending termination of the program, Mr. Frink's testimony which had some of that same information, and an excerpt of testimony from last year's hearing. I don't need to go through those in detail, but they're there if any of us need to refer to them for the following few questions. <br> First, do you agree that administrative burden was one reason for Staff's | I don't know if you're getting a delay from me. But I'm there. <br> Q. Okay. Second line -- well, the first line described Northern's program in one sentence. Second sentence, the program went for ten years through 2020. Do you see that? Sorry. Through 2000. <br> A. (Knepper) Which line? <br> Q. The second full sentence, I'll just read it slowly. "Northern was allowed to recover bare steel replacement costs through annual step adjustments for ten years, with the last bare steel step adjustment occurring in 2000." Do you see that? <br> A. (Knepper) I see that. <br> Q. And then the rest of that sentence, "After which Northern's bare steel replacement program continued until all bare steel was eliminated from its distribution system in 2018." Correct? <br> A. (Knepper) I see that, yeah. <br> Q. So their accelerated recovery version of the program ended in the 2000 , and they spent another 18 years removing the balance of <br> \{DG 20-049\} [HEARING ON MERITS] \{06-18-20\} |
| recommendation to terminate the CIBS program? <br> A. (Knepper) I believe that's what he mentioned on those, one of the reasons, yes. <br> Q. Yeah, I think you just recited a few minutes ago the components of that administrative burden; correct? <br> A. (Knepper) Yeah. It may not be word-for-word but -- <br> Q. Understood. <br> A. (Knepper) -- but the gist. <br> Q. Last year there was a comparison to what happened with Northern Utilities a decade ago when their program was terminated. Do you recall that? <br> A. (Knepper) Yeah, that's part of -- I'd have to kind of -- I didn't really focus on that. So you'd have to point me to the page that you're referring to if you want me to comment. <br> Q. Sure. It is in -- <br> A. (Knepper) Is it Exhibit 4 or 5? <br> Q. Yeah, Exhibit 4, Mr. Frink's testimony, Bates Page 10. Are you there? <br> A. (Knepper) Yeah, I'm getting a delay from you. \{DG 20-049\} [HEARING ON MERITS] \{06-18-20\} | their bare steel; is that correct? <br> A. (Knepper) That's correct. <br> Q. Okay. <br> A. (Knepper) And it wasn't really until there was a mandate by the Commission to say get it done by 2018 that they got it done by 2018. So if there wasn't any mandate, I would assume that it would have extended even further. <br> Q. The other piece that I marked was an excerpt from testimony last year. I just cut a few pages. This is Exhibit 6. And the pages I excerpted begin at Bates 4, which is Page 95 of that testimony. Let me know when you're there, please. <br> A. (Knepper) I'm there. <br> Q. The question at the top of the page is me, and then Mr. Frink gives an answer for a period. And then I ask another question summarizing what part of the current CIBS process would no longer happen, other than the yearly rate increases. And Mr. Frink starts to give an answer. If you scroll to Page 96, he defers to you. And then you |




1 rather than what you have in Attachment 7?
1 that that's -- it can't -- it shouldn't be
2 that much of a burden for them.
3 Q. And by "this," you mean the big spreadsheet?
A. (Knepper) Yes.
Q. Okay. So on the timing of when they should finish the CIBS project, I think that your basic position is they have 56 miles left. They've been doing about 11 miles a year. So they should be able to finish it in five years. Is that kind of where you got to --
A. (Knepper) I think so. I think that the original 2024 date's getting extended to 2025. So I think that it will. Now, whether it's down to the last foot and down to the absolute that I've gotten every single thing out, I don't think that's our concern. But our concern is without having a goal, it will get -- it will extend. And, you know, when I'm dealing with pipes that are well over -that were put in when horses were still on these streets, we need to remove those pipes.
Q. I understand. I am a little sympathetic to the Company's argument about not having to move the pipes twice. And I think what you
\{DG 20-049\} [HEARING ON MERITS] \{06-18-20\}
A. (Knepper) I guess we could look at what kind happening, say completing in seven years from now, would you expect them to open the street up next year, replace five miles in Nashua [sic], and then I guess they would have to pay for all the paving, and then the city opens it up again in the next five years?
A. (Knepper) If you told me that was an absolute it was going to be done in seven years and you're going to make that commitment, that's one thing. What I find is that this project has been lingering for decades, and the answer is I can't wait forever. And at some point in time we have to remove it.

Now, the other thing you need to take -to know is even the existing polyethylene
\{DG 20-049\} [HEARING ON MERITS] \{06-18-20\}


| [WITNESS: KNEPPER] Page 137 | [WITNESS: KNEPPER] Page 139 |
| :---: | :---: |
| 1 I wanted to make sure that does not happen. <br> 2 Q. <br> 3 I understand that, Mr. Knepper. But you also <br> said that it's a question of do we need  <br> 4 the -- we're going to get the information now <br> 5 or we're going to get it before a rate case. <br> 6 Eventually you're going to get the <br> 7 information. <br> 8 A. | what the Commission decided last year. <br> Q. Okay. Thank you. I have no further questions. <br> BY CHAIRWOMAN MARTIN: <br> Q. Okay. My question is really related to the question about the sewer project. And Mr. Sheehan said if the Company had information that the sewer project is likely to proceed -- I would like to ask that question to the Company. If you have specific information that it is likely to proceed at a certain time frame, could you please provide that now. <br> A. (Frost) Good afternoon. Brian Frost here. The City of Manchester sent us a construction plan for the first major east side projects earlier this summer. It involves creating a main drain roughly in the area of Salmon Street and North Street. After that is complete, in the next one to two years they would move into neighborhoods. They have made -- the city has made a formal request for us to start considering replacement and movement of our pipes next year in that area. |
| [WITNESS: KNEPPER] Page 138 | [WITNESS: KNEPPER] Page 140 |
| I do have a request. I'd like to <br> ask another question of the Company related <br> to Mr. Sheehan's redirect. So after Ms. <br> Fabrizio is done -- (connectivity issue). <br> CHAIRWOMAN MARTIN: Yeah, I lost <br> you for a second there. After Ms. Fabrizio <br> is done, I would like to ask one more <br> question. <br> MS. FABRIZIO: Thank you, Madam <br> Chair. <br> REDIRECT EXAMINATION <br> BY MS. FABRIZIO: <br> Q. Mr. Knepper, you are recommending that Liberty continue its replacement of its in-ground CIBS pipes; is that correct? <br> A. (Knepper) Yeah. I just want to make sure everybody's aware. When the program -- the CIBS program is over, I would like to replace leak-prone pipe, yes. <br> Q. Okay. And you are basically recommending that we simply not continue the accelerated recovery incentive that has been in place under the CIBS program; is that correct? <br> A. (Knepper) Yes, that's correct. And that's <br> \{DG 20-049\} [HEARING ON MERITS] \{06-18-20\} | Q. Okay. Thank you. That's helpful. <br> CHAIRWOMAN MARTIN: Mr. Sheehan, do <br> you have any follow-up based upon that question? <br> MR. SHEEHAN: I do not. Thank you. <br> CHAIRWOMAN MARTIN: Okay. Thank <br> you. <br> All right. Let's see. I need to strike the I.D. on the exhibits. So without objection, I'll strike the I.D. on Exhibits 1 through 6 and admit them as full exhibits. <br> Is there anything else that any of the parties thinks we need to do before we go to closing? <br> [No verbal response] <br> CHAIRWOMAN MARTIN: Okay. Seeing <br> none, let's get closing statements, beginning with Ms. Shute. <br> MS. SHUTE: Thank you, Chairwoman Martin. The OCA supports the Staff's position. We feel that, given there's considerable remaining investment left to replace the remaining leak-prone pipe, the level of detailed reporting that's been |


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| :---: | :---: | :---: | :---: |
|  | requested by the Staff seems reasonable and appropriate. And I have no other statements at this time. Thank you. <br> CHAIRWOMAN MARTIN: All right. <br> Thank you. <br> Ms. Fabrizio. <br> MS. FABRIZIO: Thank you, Madam <br> Chair. Staff recommends approval of the proposed increase in annual revenue requirement for fiscal year 2020 CIBS program costs based on the audit of fiscal year 2020 CIBS costs and review of the Company's revenue requirement calculation. The CIBS replacement program is necessary to ensure public safety, a point that has been made repeatedly by both the Company and Staff throughout the existence of the program. Liberty has been targeting year end 2024 to complete the program but does not expect to meet that goal at this time. Staff recommends the Commission require Liberty to target year end 2025 to remove CIBS from its distribution system, with only a minor allowance for large-diameter CIBS piping, |  | ger CIBS program from the |
|  |  |  | nternal CIBS program, if you will. |
| 3 |  |  | first, we do appreciate the audit |
| 4 |  |  | on's review of the filing and Sta |
| 5 |  |  | upport of that piece of it. |
| 6 |  | 6 | , |
| 7 |  |  | ure part of this is that the Company |
| 8 |  |  | , |
| 9 |  |  | possible, with appoprill |
| 10 |  | 10 | sideration to cost. You will recall th |
| 11 |  |  | objected to the termination of the |
| 1 |  |  | rogram. Since Liberty took over this |
| 1 |  |  | nchise, it took a couple years to ramp |
| 1 |  |  | CIBS program. But in fact we did, goi |
| 15 |  |  | from, I don't know, 3 or 4 miles per year up |
| 16 |  | 16 | to over 10 miles per year for a number of |
| 1 |  |  | ars. It was the annual -- in part, it w |
| 18 |  |  |  |
| 19 |  | 19 | support those costs. |
| 20 |  | 2 | 30 -something crews out in the |
| 21 |  | 21 | year. We feared, in part, that the loss of |
| 22 |  |  | the annual adj |
| 2 |  |  | sage internally, that it's not a priority |
| 2 |  | 24 | f the Commission anymore. I can tell |
|  |  |  | 20-049\} [HEARING ON MERITS] \{06-18 |
| [WITNESS: KNEPPER] |  |  |  |
|  | which is generally less leak-prone and more costly to remove, and CIBS mains in Keene, as those mains are expected to be addressed through the Keene system conversion from propane air to natural gas. Because of the importance of the program, Staff recommends the Commission require Liberty to provide annual CIBS plans reporting for Staff review, as outlined by Mr. Knepper today, to be more limited than it was, as required under the settlement agreement program that has been terminated, but sufficient to enable Staff to track progress and for Staff to inform the Commission of any concerns regarding CIBS replacement planning. Thank you. <br> CHAIRWOMAN MARTIN: All right. <br> Thank you. <br> And Mr. Sheehan. <br> MR. SHEEHAN: Thank you. First, we appreciate the support of Staff on the primary request in this proceeding, which is the rate adjustment. We spent a lot of time on a recommendation -- on Staff's recommendations that, going forward, part | 1 | ally it's always been a priority, and w |
| 2 |  | 2 | ee always fighting internally for budg |
| 3 |  | 3 | dollars to do what's best for our loc |
| 4 |  | 4 | mpany. So that's why we fought so hard. |
| 5 |  | 5 | We believe in the program. We believe all |
| 6 |  | 6 | the safety reasons for it as the number one |
| 7 |  | 7 | ason. The emergent safety issues are |
| 8 |  | 8 | gely gone. It's now putting out the l |
| 9 |  | 9 | maining smolders, if you will. The fire's |
| 10 |  | 10 | been out, and now we just have a few embe |
| 11 |  | 11 | maining. And as Brian described, the |
|  |  | 12 | remaining leak-prone pipe is not very leaky |
|  |  | 13 | So the Commission decided |
|  |  | 14 | herwise. That's fine. We're continuin |
| 15 |  | 15 | e would have anyway. We will run into these |
|  |  | 16 | problems that we talked about today. So |
|  |  |  | we're simply saying that 2024 is no |
| 18 |  | 18 | istic. It's always been a target, but w |
| 19 |  | 19 | also knew that as we got to the end we woul |
| 20 |  | 20 | run into the problems that we're running |
| 21 |  | 2 | into, the asbestos, the downtown projects an |
| 22 |  | 22 | he paving projects and the like. So we |
| 23 |  | 23 | don't think the Commission needs to impo |
| 24 |  | 24 | target date. We are already targeted as soon |
|  |  |  |  |


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| :---: | :---: | :---: | :---: |
| 1 | as possible. And Brian is doing the | 1 | file this summer. And we will be making a |
| 2 | engineering to put a finer point on that as | 2 | proposal that will be in the neighborhood of |
| 3 | we get more details, for example, for the | 3 | a CIBS program. It won't be CIBS, but we're |
| 4 | Manchester project. And I give the history | 4 | developing something that at least is |
| 5 | to show that the Company has been committed | 5 | somewhat analogous for the Commission's |
| 6 | to it, and we will remain committed to | 6 | consideration. And we think that's where |
| 7 | removing the CIBS. | 7 | most of these conversations belong. |
| 8 | As for the reporting, these | 8 | With that being said, as I said |
| 9 | projects are the only projects in the Company | 9 | before, we'll accept the reporting |
| 10 | that receive this level of detail, and it's | 10 | requirements in Mr. Knepper's testimony. We |
| 11 | only because of the CIBS program that this | 11 | ask the Commission not to set a target, and |
| 12 | evolved over the years. When we go to put | 12 | if one is to be developed, that that |
| 13 | CIBS pipe in rate cases in the future, we | 13 | conversation go to the upcoming rate case. |
| 14 | will present similar information that we | 14 | Thank you. |
| 15 | always present in every rate case to support | 15 | CHAIRWOMAN MARTIN: Okay. Thank |
| 16 | capital investment. It will not look like | 16 | you. And I just want to thank Ms. Robidas |
| 17 | that big spreadsheet because we don't do that | 17 | for being willing to continue. |
| 18 | for any other project. And the Commission | 18 | With that, we will close the record |
| 19 | routinely approves capital expenditures on | 19 | and take the matter under advisement and get |
| 20 | far less detail. To resolve the issue, as | 20 | an order out as soon as we can. Thank you, |
| 21 | Commissioner Giaimo suggested, we will accept | 21 | everyone. |
| 22 | the recommended reporting that is in Mr. | 22 | MR. SHEEHAN: Thank you. |
| 23 | Knepper's testimony, which was the enhanced | 23 | MS. FABRIZIO: Thank you. |
| 24 | E22, if I have the name of that report | 24 | (Hearing concluded at 1:30 p.m.) |
|  | \{DG 20-049\} [HEARING ON MERITS] \{06-18-20\} |  | \{DG 20-049\} [HEARING ON MERITS] \{06-18-20\} |
| [WIT | SS: KNEPPER] Page 146 | [WI | S: KNEPPER] Page 148 |
|  | correct. I think even Mr. Frost testified | 1 | certificate |
| 2 | today that he can live with that as a | 2 |  |
| 3 | reporting requirement going forward. | 3 |  |
| 4 | So with that, we thank everyone for | 4 | Shorthand Court Reporter and Notary Public |
| 5 | their work on this and ask the Commission | 5 | certify that the foregoing is a a true and |
| 6 | approve the rate adjustment. | 6 | notes of these proceedings taken at the nlace and on the date hereinbefore set |
| 7 | One last, final thought. I'm | 7 | forth, to the best of my skill and ability |
| 8 | y. Last year's order terminating the | 8 |  |
| 9 | program suggested that the Company, and I'm | 9 | attorney or counsel for, nor related to or |
| 0 | going to quote here, that the next step of | 10 | action; and further, that I am not a |
| 11 | CIBS, whether it's CIBS or something else, | 11 | counsel employed in this case, nor am I |
| 12 | should be discussed in a rate case. And the | 12 | The foregoing certification of |
| 13 | quote is this: "By terminating the existing | 13 | transcript does not apply to any |
| 14 | CIBS program, we are not precluding an | 14 | unless under the direct control and/o |
| 15 | alternative proposal in Liberty's next rate | 15 |  |
| 16 | case. We continue to believe it is important | 16 |  |
| 17 | to replace the cast iron/bare steel | 17 |  |
| 18 | infrastructure and will consider an | 18 |  |
| 19 | alternative proposal from the parties during | 19 |  |
| 20 | the anticipated rate case, " close quote. | 20 |  |
| 21 | That's Order 26, 2667. | 21 | Registered Professional Reporter |
| 22 | So this whole conversation over | 22 | N.H. LCR No. 44 (RSA 310-A:173) |
| 23 | reporting and deadlines and targets we think | 23 |  |
| 24 | belongs in the rate case that we intend to | 24 |  |
|  | \{DG 20-049\} [HEARING ON MERITS] \{06-18-20\} |  | \{DG 20-049\} [HEARING ON MERITS] \{06-18-20\} |


|  | 5:2,9;79:11 | 119:12;143:18 | allowance (2) | appear (1) |
| :---: | :---: | :---: | :---: | :---: |
| \$ | accessing (1) | administrative (6) | 58:8;141:24 | 73:3 |
|  | 5:6 | 108:2,6,8,17;117:23; | allowed (2) | appearances (2) |
| \$14,885,261 (1) | accomplish (1) | 118:5 | 26:6;119:10 | 5:21;6:15 |
| 10:18 | 128:5 | admit (1) | allude (1) | appears (5) |
| \$20 (1) | accordance (2) | 140:11 | 76:16 | 9:14;13:7;74:20; |
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| \$25 (2) | according (1) | 10:2;13:18;14:10 | 65:18;107:6 | apply (1) |
| 107:15;122:12 | 101:9 | advanced (1) | almost (1) | 68:23 |
| \$299 (2) | achievable (3) | 135:12 | 53:19 | appreciate (5) |
| $29: 22 ; 89: 6$ | 47:11;100:16;102:17 | advantage (1) | alone (2) | 49:1;70:11,13; |
| \$384 (2) | acknowledge (1) | 102:9 | 6:4,8 | 142:20;143:3 |
| 29:21;89:6 | 48:8 action | advisement (1) | along (1) | appreciates (1) |
| \$6,161,925 (1) | action (2) <br> 21:16;58:4 | 147:19 <br> Advocate (1) | $\begin{aligned} & \text { 13:6 } \\ & \text { alternative (2) } \end{aligned}$ | $\begin{gathered} 50: 7 \\ \text { approaches (1) } \end{gathered}$ |
| $11: 6$ $\$ 7.03(1)$ | $\begin{aligned} & \text { 21:16;58:4 } \\ & \text { active (1) } \end{aligned}$ | $\begin{array}{\|c} \text { Advocate (1) } \\ \text { 6:24 } \end{array}$ | $\begin{gathered} \text { alternative (2) } \\ 146: 15,19 \end{gathered}$ | $\begin{aligned} & \text { approaches (1) } \\ & 75: 12 \end{aligned}$ |
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