

A special meeting of the Board of Aldermen was held Monday, November 28, 2022, at 7:00 p.m. in the aldermanic chamber.

Vice-President Michael B. O'Brien, Sr., presided as well as recorded.

Prayer was offered by Alderman June M. Caron; Alderman Tyler Gouveia led in the Pledge to the Flag.

Let's start the meeting by taking a roll call attendance.

Vice-President Michael B. O'Brien, Sr., called the roll.

The roll call was taken with 10 members of the Board of Aldermen present: Alderman O'Brien, Alderman Sullivan, Alderman Jette, Alderman Clemons, Alderwoman Kelly, Alderman Comeau, Alderman Dowd, Alderman Gouveia, Alderman Caron, Alderman Thibeault.

Alderman Klee, Alderman Moran, Alderman Lopez, Alderwoman Timmons, Alderman Wilshire, Mayor James W. Donchess, and Corporation Counsel Steven A. Bolton were recorded absent.

Vice-President O'Brien to turn the meeting over to Chairman of Budget Review Committee Richard A. Dowd.

## **PUBLIC HEARING**

**R-22-074**

### **AUTHORIZING THE MAYOR AND CITY TREASURER TO ISSUE BONDS NOT TO EXCEED THE AMOUNT OF ONE MILLION FIVE HUNDRED THOUSAND DOLLARS (\$1,500,000) FOR TURBINE WORK AND VARIOUS REPAIRS AND IMPROVEMENTS TO THE JACKSON MILLS AND MINE FALLS HYDROELECTRIC FACILITIES**

Chairman Dowd

Is someone here that's going to give us an overview? Mr. Sullivan.

Matt Sullivan, Community Development Director

Thank you Mr. Chair, members of the Board. For the record, Matt Sullivan, Community Development Division Director. I'm joined this evening by Deb Chisholm, the city's Sustainability Manager and also our resident expert in City Hall on the city's hydroelectric facilities here in the city representing the \$1.5 million request to bond improvements to both the Jackson Mills turbine and the Mine Falls hydroelectric turbine as well.

Before we get into the specifics of the request and talk a little bit about the background here, I did want to pass it off to Ms. Chisholm to provide just a very high level overview of the two facilities that we'll be discussing this evening to provide you with some context. Again for new members of the Board, we thought that a brief discussion of this would be helpful. There have been prior bond requests in front of this body but it's been several years and so we always felt it's a good reminder to demonstrate what our Division is working on, particularly in the context of hydroelectricity and our sustainability efforts. So with that, I'm going to pass it off to Deb to talk a little bit about these two facilities that we're discussing this evening.

Deb Chisholm, Sustainability Manager

Hi. Good evening. Deb Chisholm, Sustainability Department Manager, formerly known as Waterways Manager and a Hydro Manager. Really quick, the city does actually own two hydroelectric facilities. Only city in the State that actually has two hydro facilities that are up and running right now - Jackson Mills if you're familiar with the Margaritas restaurant and the dam that runs across the river towards the library. One facility there and the other facility - the Mine Falls facility over near Mine Falls Park where there's a boat launch over near Stellos Stadium. So those are the two that we're here to talk about tonight very briefly.

The city has not owned them very long. We acquired the Jackson facility in 2015 and the Mine Falls facility we purchased in 2017. The current way that things operate with the hydroelectric facilities is we hire a contractor to actually do the operation and maintenance of both of those facilities. I don't have any idea how to actually operate either one. I don't even know where the on/off switch is on those. But as you can see from the pictures, they're fairly

considerable facilities. I have lived in Nashua most of my life and did not even know that we had these facilities until about a decade ago. So that was a little bit embarrassing for me when I took on this role but they were both built in the '80s. Now 1980s doesn't seem all that long ago but the way that the equipment goes, that equipment is quite aged at this point.

So back a couple of years ago, we did come in front of the Board. Some of you were there at the time to bond \$6.2 million for a turbine upgrade project. So the Jackson Mills facility has one turbine generator. It's a one megawatt facility. The Mine Falls has actually two turbines in it for a total of three megawatts. The one at Jackson has been operating. It's still the same turbine that was installed in the 1980s. It's still operating great. We were trying to be proactive by replacing that turbine. We've been very diligent about doing the operation, maintenance, upkeep of that facility but as I had explained to Matt a little bit earlier, it's like you let your grandma's car. She gives it to you. It doesn't seem to have a whole lot of miles on it but once you get it, then you start realizing it takes a little bit of extra money to keep things up and running.

So both of those facilities have some agent equipment. Again, the turbine at Jackson is the one that we had selected to move forward with replacing before it actually broke. So we are in the process of doing that now. We were hoping that we were going to have replaced it last year but FERC, the Federal Energy Regulatory Commission, had some other ideas for us. They are still in the process of reviewing our application to do that replacement. So while we're waiting, we're incurring some additional costs. I don't want to get too far into the financial weeds of that. But both of those facilities when they're fully up and running, generate in a year about 15,000 megawatts of power. That is enough to just to give you a comparison that could generate enough power for about 2,000 homes for a year. So it's a fairly considerable amount of power generation that goes on with those two facilities.

#### Matt Sullivan, Community Development Director

And I'll start by just providing an overview of what the intended use of this \$1.5 million of request is and Deb will interject as any points are missed on my end of it. Deb began to allude to the fact that our permitting process to the federal government has been substantially delayed. Despite timely permit submissions and indications from the folks at the federal level, that process has been delayed by a year at this point and is likely going to be delayed for many months beyond this current point. However, we do intend to move forward with the replacement project in the summer of 2023 but we await the permit notification from the federal government. We're working hard through our congressional representation to try to move the federal reviewers along. But based on COVID and other delay circumstances, that permit has taken time to be granted and received by the city.

With that delay comes several unanticipated consequences. I want to point out, it's actually a little deep in this slide but we've purchased a turbine. We have a replacement turbine. It's sitting in the Czech Republic currently. It's built - custom built for us. We've actually had great consternation about whether or not we should move that turbine to the United States based on circumstances in that section of Europe. Little interesting getting forced measure letter based on war between Russia and Ukraine. So it's been a very interesting time for us but nevertheless, the turbine sits and costs are incurred. Those costs relate not only to the warranty, to shipping that's a bit of an unknown, but also to securing a contractor to actually perform the work. As you all know, the volatility of the construction market both from materials and labor perspective has been incredible over the past few years. So based on current estimates, our construction contract that we had secured a year ago has now increased in price by about \$900,000 in total. Adding in these other expenses of storage, shipping, our warranty extension, and additional electrical interconnection costs based on that delay, we've estimated at about \$1.2 to \$1.3 million of additional expense that will need to be incurred as part of the project based on this delay through the federal permanent process.

I do also want to comment on the fact that we are requesting a 30 year bond. That was a deliberate approach that was discussed with CFO Griffin and the Mayor. This is truly a generational improvement at the turbine. This is an improvement that will not need to be hopefully read on within that 30 year period of time. This is the really the heart of the facility and we don't anticipate anything beyond minor repair work during that period of time. But really that's the core of the request that we're making this evening. That's the extension costs for the Jackson Falls turbine replacement.

We're also requesting as part of this \$1.5 million authorization some additional funds to begin some of the design and permitting work and moving the ball forward really on what we anticipate will be some upgrades needed to the Mine Falls relicensing as part of the Mine Falls relicensing. I had a great conversation with Deb just sort of retouching on what that involves today. Primarily the improvements here are aimed at fish passage. There really are let's say five to six critical bullet points below this upstream and downstream fish passage bullet but these are all regulatory requirements by US Fish and Wildlife Service that are required as part of any permanent or relicensing process that we do with the turbine facility. So what we're really trying to do is position ourselves so that we can have a set of

permanent documents and at least begin the conversation with our consultants to start that relicensing program in earnest. Deb did you want to add anything to those comments on what the scope of improvements are?

Deb Chisholm, Sustainability Manager

I can give you some details. As Matt has indicated, US Fish and Wildlife, NOAA - National Marine Fisheries Service, the New Hampshire Department of Fish and Game, they all have a say when there is some sort of approval that has to go on with a hydroelectric license or in the case of the Jackson facility, we actually have a license exemption. But to place an amendment on that exemption to replace the turbine also requires the federal agencies - what I call the fish agencies - it requires their approval. So they have us a bit over a barrel when it comes to actually getting their approval to move forward with anything.

So it's a bit of what I consider and have suggested to them to be a bit of an unfunded mandate where they're requiring us to make changes that in some circumstances, we think we can go a little bit longer without having to make some of the changes and they disagree. But that being said, we've got upstream and downstream passage of a fish and American eel that needs to be improved at both locations which, you know, based on current day funds can cost upwards of \$2 to \$3 million at each facility. So we're hopeful that we've done the negotiating that we needed to do with the fish agencies to not necessarily negotiate out what needs to be done because they are quite adamant and implementing similar programs throughout the country with other hydro facilities. But we've got them to allow us to sort of stretch things out if you will. So we've been able to sort of get the timing set so that we're not in here asking you for a big giant lump sum that we can come in and do this sort of bit by bit. So the replacement of the turbine at Jackson was really, albeit not the first bond that we had requested, we had requested a bond to actually make the purchase of one of the facilities but that \$6.2 million was simply for the replacement of the turbine and some of the work that was done at Mine Falls.

Back in 2021, one of the turbines at Mine Falls went through a complete overhaul to the tune of about \$500,000. But the idea was once we got that turbine back up and running, that it would have a little bit of extra life that would last us so that we could time any of the replacement of this equipment so that it wasn't all coming down all at once.

Matt Sullivan, Community Development Director

And then to that end just to close our formal presentation I suppose, I did want to comment quickly on some of the financials behind this request. If I were sitting in your seats, I would be wondering, you know, we're hearing a lot about expenses related to these facilities and certainly there is a renewable energy benefit but how are the facilities actually operating from a revenue versus expenses perspective? I wanted to just give a sample of that before opening up to questions Mr. Chair.

One of the challenges here that I should point out before I get into these numbers is that we've only had these facilities online in our ownership for between seven years and five years. So our data are limited. Obviously, we're looking at averages but generally our operating expenses, and that's really the management of these two facilities, is about \$430,000 annually. I want to point out that that's really two components to that cost. One is that we have a fixed cost with our contractor. The other is that when we collect more revenue, our contractor actually does better. So the more volume that we're collecting from revenue, the more that they're receiving as well and so that's variable year to year. It's not entirely a fixed cost.

We currently have three bonds in place for the facilities and in total that's paying about \$800,000 a year in debt service. That number is very variable from year to year. We have not actually paid \$800,000 a year to my knowledge to date but we expect that that would be really the stable value for at least a five to six year period based on the bond that we're proposing this evening. The average revenue collected from Mine Falls based on a five year sample is about \$980,000 to a million dollars and then from Jackson, which is obviously the one megawatt turbine, that's about \$480,000. So about half the revenue being collected there. So you can see we come in at the positive. The facility is operating in the black.

I want to point out as well that since the 2017 acquisition, the most recent acquisition of the facility, we've actually net revenue about \$1.6 million and so these facilities are running profitably. Although we are intending to or requesting additional debt service to pay for improvements to continue their operation generally not only are we getting this incredible renewable energy benefit and really fulfilling an element of our new energy portfolio, we're also collecting monies that are then returned back to the general fund inevitably to benefit the Nashua taxpayers as well as we continue to run these as profitably and efficiently as possible.

Mr. Chair with that I'd be happy to take any questions or Deb could answer any questions.

Chairman Dowd

Before we start when we get into budget, I'd ask that if the two of you could stay because I'm going to ask for clarifying questions. Right now mostly for the public listening. If there are any more detailed questions, we'll ask them during Budget. I have a couple of things – clarifying in mind.

So the one thing I just will make sure is that if for any reason we don't spend all the money from the bond, we just won't sell the rest of that bond. Correct?

Matt Sullivan, Community Development Director

Great question. We do fully anticipate to spend all of the money that's requested as part of the bond. I may have under emphasized it but the permitting design work that will be necessary for some of the Mine Falls relicensing work will certainly take up and expand the full amount of the bond. We do not intend to under expanding out of bonding.

Chairman Dowd

So I've always been one that possession are nine tenths of the law. So is there an issues holding up the shipment of the – other than this bond - the turbine to us and does the warranty start when it arrives here or is the warranty already started?

Matt Sullivan, Community Development Director

The warranty has already started. So we're actually paying for an extension of the warranty. The problem with moving the turbine here is actually quite not practical. It's that we had a very difficult time finding a facility that could actually house this piece of equipment. I'm going to pass it to Deb in a second to confirm the measurements but this is a massive piece of equipment that needs to be stored in a climate controlled space. It actually has to undergo regular maintenance to ensure that its operating or it can operate at full capacity when it arrives here. But Deb could you fill in a little more detail there that I may have missed?

Deb Chisholm, Sustainability Manager

Yeah. The crate that the turbine comes in is apparently - I haven't seen it with my own eyes - but its 17 feet by 17 feet by 16 feet. Yeah I'm still - the logistics on that getting that through downtown Nashua I have no idea how that's gonna happen but I'll let you know when it starts coming. We can have a parade or something. Yeah, it seems remarkable but we did have trouble trying to find a local storage location - number one - that would fit something of that nature in a climate controlled area and we were also able to get the manufacturer to store it there at their facility. They're the ones who are doing the maintenance checks to make sure that everything is that the temperatures are properly controlled, that the turbine and the bearings that are in it are being are being used so that things aren't totally rusting out and freezing up. So I feel a little bit better knowing that the professionals are taking care of it while it's still sitting and waiting to be to be shipped. Actually technically from the calls that I had made, it was cheaper to actually have them store it than to have it stored here.

Chairman Dowd

Other than the fact that it's someplace that we can't get a hold of it easily.

One other question I have is just that the cost of electricity is increasing. Do we anticipate that we will generate additional revenue because of the increase in electricity when we sell the power to the grid?

Deb Chisholm, Sustainability Manager

Yes.

Chairman Dowd

Okay, good. Any other clarifying questions? I see Alderwoman Kelly,

Alderwoman Kelly

Thank you. I'm glad to hear that the turbine is being well taken care of. My question was around the permitting. You

said that you were having issues with that. Is that specifically what's holding us up from shipping it? And if so, when are we gonna get the permit?

Matt Sullivan, Community Development Director

If you can answer that second question, please, please do let us know. But no the receipt of the permit is actually not holding up the shipping of the turbine. It's simply this lack of physical location to store it. We're hoping to time it such that once we have notification that the permit will be approved, we will then initiate the shipping of the turbine across the ocean, have it delivered, and then have it trucked to the facility itself for installation. Hopefully, during the summer months where climate control is not as necessary. So it's not the permit itself that's actually holding it up.

As far as when we received the permit, we simply do not know. We're doing everything we can, including regular check ins with our consultants who have federal relationships and the federal reviewers themselves. Based on recent estimates, we're fairly confident that we'll have a permit for installation in summer of this year. But one of the critical things that that this potential authorization gets us is the ability to secure a qualified contractor to actually perform the work. One of the challenges is that this is not a - there aren't a lot of firms operating in this space and that is turbine installation. So within the New England area, it was really difficult for us to find a qualified contractor and more importantly to secure them based on other comparable projects that are being done in the region.

Although we may not know the certainty of when the permit will be approved, this authorization gives us the ability to enter into a contract with a contractor regardless of when that approval actually comes through.

Alderwoman Kelly

If I could just follow up?

Chairman Dowd

Follow up.

Alderwoman Kelly

Thank you. So does this bond account for a certain number of months sitting in that lovely facility where they're taking care of our very expensive turbine and what happens if we go over that?

Matt Sullivan, Community Development Director

Good question? I'd be happy to answer that. I can't answer it. It's a concern that we have. You know I'll be frank. One of the concerns that I have, and I think this Board would have, and certainly the Mayor has had is in the event that this permit is delayed for another two years, which we do not think is likely, I want to be clear about that. But in the event that that happens are we only going to see compounding costs based on what we're bringing before you this evening? I can't tell you that's not the case but I can tell you we have a fairly high degree of confidence that this project will be executed in 2023. We are at the will of the federal government. So I cannot commit to you this evening that this money will be adequate in the event that the project is extended another 12 month period but we are confident that that will not be the case.

Chairman Dowd

Any other questions, clarifying questions? Seeing none. I will now open up R-22-074 testimony in favor?

TESTIMONY IN FAVOR - None

TESTIMONY IN OPPOSITION - None

TESTIMONY IN FAVOR - None

TESTIMONY IN OPPOSITION - None

Chairman Dowd closed the public hearing on Resolution R-22-074 at 7:23 p.m.

ADJOURNMENT

**MOTION BY ALDERMAN O'BRIEN THAT THE NOVEMBER 28, 2022, SPECIAL MEETING OF THE BOARD OF ALDERMEN BE ADJOURNED**

**MOTION CARRIED**

The meeting was declared adjourned at 7:24 p.m.

Michael B. O'Brien, Sr., Vice-President/Clerk