NYSERDA 71st Waste and Facilities Management Committee Meeting January 25, 2023

Clean Copy of Transcript

Janice Dean:

Slides. So as long as the IT team can confirm that the slides are, are viewable to those who are watching by streaming, I think we are good to go. Is anyone on from, okay, now I'm seeing them.

Sara LeCain:

Just one second.

Vice Chair Bell:

Good morning. I call this meeting of the Waste and Facilities Management Committee to order notice of this meeting was provided to Committee Members on January 13, 2023, and to the press on January 17, 2023. I would also like to note that this meeting is being conducted by video conference and the Authority will be posting a video and transcript of this meeting on the web. To confirm that we have a quorum, I would like to ask the Committee to please introduce themselves. I'm Chuck Bell, Vice Chair and Chair of the Committee.

Sherburne Abbott:

Shere Abbott, Member of the Board, Member of the Committee.

Frances Resheske:

Frances Resheske, Member of the Board.

Chair Kauffman:

Richard Kaufman. Chair of the Authority.

Vice Chair Bell:

Thank you. And do we have any Committee Members in Albany? So,

Janice Dean:

No.

Vice Chair Bell:

Okay, thank you. So the first item on the agenda is the approval of the minutes of the October 3, 2022 meeting. A copy of the minutes was included with the January 13, 2023 mailing. Are there any comments on the minutes? Hearing none, may I please have a motion approving the minutes? None.

Sherburne Abbott:

So moved.

Vice Chair Bell:

May I please have seconds?

Chair Kauffman:

Second.

Vice Chair Bell:

All in favor, please say aye.

Members of the Committee:

Aye.

Vice Chair Bell:

Any opposed? The minutes are approved. The next agenda item is a report from Chief Financial Officer, Pam Poisson, regarding the Authority's fiscal year 2023-24 budget for the West Valley Site Management Program and Radioactive Waste Policy and nuclear coordination activities.

Pam Poisson:

Thank you. Good morning. The Members are requested to recommend the adoption of a resolution recommending approval of its portions of the Authority's budget for the coming fiscal year, ending March 31, 2024. Many of the details of the budget will be presented in more detail at the Program Planning Committee meeting, which will meet to review its portion of the budget after this meeting. So I will address for now just those portions of budgets. Specifically subject to this Committee's review budget for the West Valley program is \$25.8 million for the coming fiscal year. That is an increase of \$2.2 million from the current fiscal year's budget. This includes an increase for the State share of federal funding and spending at the site under the cooperative agreement and consent decree. Due to prior year carryover funding that resulted from delays in work activities due to the COVID-19 pandemic costs for maintenance and monitoring activities at the State-Licensed Disposal Area are anticipated to increase by approximately \$284,000 with a decrease in other nicer to managed portions of the center of about \$139,000.

Looking at the federal funding for federal fiscal year 2023, that has increased by about \$900,000 to \$93.4 million. Included in the energy analysis program, budget is funding to meet the requirements under the State low level Radioactive Waste Management Act of 1986 for collecting information and providing regular reports to the governor and legislature on the low-level radioactive waste generation in the State. These activities are funded with the State appropriation of \$150,000 sub-allocated from an appropriation, which is provided to the York State Depart, which is in turn by return assessment collected thanks on operating nuclear power plant licenses. I will pause there for any questions.

Vice Chair Bell:

Are there any questions for Pam? I'd like the record to reflect. We've been joined by another Committee Member Arturo, would you like to introduce yourself, please?

Arturo Garcia-Costas:

Yes, sir. Arturo Garcia-Costas, Chair of the Governance Committee.

Thank you. And Arturo's, also a Member of the Waste and Facilities Management Committee. Okay. So any questions for Pam? So we have included a resolution regarding approval of the author's fiscal year 2023-24 budget in your materials. It's located in the last page of the budget package. May I please have a motion recommending that the Board adopt the resolution approving the author's fiscal year 2023-24 budgets?

Chair Kauffman:

I'll move it.

Vice Chair Bell:

Thank you. May I please have a second?

Sherburne Abbott:

Why, does it, it says it's, it says to, we're, we're approving the, the budget, the whole budget, not the what, not this portion of the budget.

Vice Chair Bell:

I think we're making recommendation to the Authority to approve this component of the budget. Isn't that correct?

Sherburne Abbott:

Is that what it said? Yes. Okay. I, I didn't hear it right. Okay, second.

Vice Chair Bell:

Okay. all in favor, please say aye.

Members of the Committee:

Aye. Aye. Aye.

Vice Chair Bell:

Opposed? Thank you. Motion is carried. The fiscal year 2023-24 budget is recommended for approval. Next on the agenda is a status report on West Valley's site management program activities. Paul Bembia, Program Director will present the report with Brad Frank and Andrea Mellon. Paul.

Paul Bembia:

Thank you, Chuck. So we'll start first with Brad Frank. We'll provide an update on the demolition of the main plant process building at the West Valley Demonstration Project. Andrea Mellon will then follow with an update on our work to stabilize the North Slope of the State Disposal Area. And I will be providing some information to follow up on a question that came up at the last meeting in regard to the leach eight elevations at the SDA. So, we will start with Brad.

Brad Frank:

Good morning. As Paul mentioned, I'm Brad Frank, and I'll be providing an update on the demonstration project and progress for building demolition. Next slide, please.

My last discussion with the Committee, I ended with this slide, and today I'd like to begin with it. This is how the main plant appeared on the first day of demolition in September. The next three slides will show steady progress through late December. All of the slides have the general same, same general orientation. Looking at the main plant from the south, generally speaking, the demolition of the structure will occur from the south to the north. So I'll try to keep this general orientation as I update you on demolition progress over the next several years. As we have discussed in the past, DOE is calling this phase of the demolition work. Phase One A, the removal of the existing structures down to ground level. Phase One B, which should begin at about 2026, will address below grade portions of the main plant as well as could contaminated soil up below the plant. Next slide, please.

The initial activities focused on the southern more southernmost portion of the main plant. These areas consisted of operating isles were site personnel would operate pumps and other equipment within the heavily shielded cells. This allowed these areas to be constructed out of concrete cinder blocks, which made easy work for the demolition processors. Once the walls of the operating aisles were removed, the site's contractor was able to remove several highly contaminated pump niches and immediately packaged them per shipment. The site is currently operating two shifts. The morning shift generally focuses on active demolition and the second shift on debris removal and packaging. Next slide, please.

In this photo we're looking slightly northwest. Throughout November, the demolition crews focused on removing the accessible portions of the fifth floor of this part of the building. Now that's identified by the letter A. This area housed a large remote operated crane that was used for operations in the highly contaminated process cells directly below. The crews then transitioned to removing concrete from the first highly shielded process cell. If you look above and just to the right of the b in the photo, you can see the concrete has been shipped away with a hydraulic hammer. This cell has walls that ranged in thickness from four feet to six feet, and is comprised of high density concrete in several layers of rebar matting. Next slide.

In December, crews completed their activities on the first shielded process, cell letter A, and continued to remove sections of the fifth floor crane room as they created access. Letter C B is the second shielded process cell that the site's contractor demolished. In this photo, the outer wall of the cell is roughly 80% complete. Demolitions generally progressing per the contractors publish schedule. The crews have adapted well to changing weather conditions and continue to refine their techniques based upon lessons learned. Next slide. As of late December, the site has shipped over 1000 tons of demolition debris in 67 inter modals and seven specialty containers. The inter modals are shipped via rail to Utah, and the specialty containers are shipped via trucks to various disposal sites based upon their contents. In the photo, you can see site personnel assembling the train for shipment to Utah letter A in the foreground. The two Bs the empty containers are awaiting use in eventual shipment. Next slide. The Department of Energy, in conjunction with the site's prime contractor, developed a video that walks the viewer through the demolition process. I'd like to take five minutes of your time and allow the Committee to watch

the video. Now at its conclusion, I'll gladly take any questions. John, please bring up the video (Link to video: https://www.youtube.com/watch?v=kobznp07Mow).

Video:

The Department of Energy began deconstruction of the main plant process building in 2022. It is one of the last remaining major facilities at the West Valley Demonstration Project. And the successful demolition of this facility will further reduce environmental risks and position the site for the next phase in cleanup. Significant work has been done over the past two decades to prepare the building for demolition.

Video:

A large excavator with a sheer or hydraulic hammer attachment will be used to deconstruct the building in a deliberately planned and sequenced manner while integrating robust work controls based on best practices and lessons learned. Planned demolition will be accomplished in a stepwise fashion from top to bottom, focused on one area at a time while turbo misters will provide water for dust control. An excavator with a thumb and bucket attachment will be used to safely load demolition debris into waste containers, which will be shipped offsite for disposal waste. Loadout with water dust suppression will help control contamination at its source by keeping debris piles small as proceed. Demolition water will be collected within the demolition work area using installed berms as shown by the green line, which will include water used for dust suppression and precipitation that falls within the work area.

Demolition water will be collected, sampled, analyzed, and treated as processed water prior to release through permitted discharge points, or shipped off site for treatment and disposal if water exceeds thresholds for hazardous waste or radiological constituents. The water management system is designed to collect, transfer, and contain applied water and precipitation from demolition and storm events. It includes equipment such as large tanks as shown for collection, storage, sampling, pumping treatment, and water disposition. The intent is to collect and properly manage all demolition water in accordance with federal and regulatory requirements to prevent an unintended release. Water management will be operated with standard operating procedures and will have continuous oversight during demolition operations. The remainder of the animation will show you how the main plant will be deconstructed, one area at a time to provide a structurally stable demolition.

Brad Frank:

Thanks, John. Move to the next slide. I'll stand by here for any questions.

Vice Chair Bell:

Thanks. Do Members of the Committee have any questions for Brad?

Sherburne Abbott:

So, Brad, can I ask you sort of, this is a very obscure air circulation question, but one of the things that's happening in the Arctic is a change in a arctic air pressure moving circulation pattern itself. So the airflow over this, this area of New York has changed significant, especially this past year, but in previous years as well. So if you look at the logic of going south to north, it, it makes sense. I get, I, I'm not sure I understand, but I, I think it probably makes sense. But the,

the, the misters are, are spraying east to west, and the, the circulation pattern is now shifting to a circular. So, so it's going west to east and then west again and over this region. So is the, most of this is based on pulling stuff down, but there's dust likely going up, right? So do we know where it's going and is it different than before?

Brad Frank:

Yeah, I'll start with the point about working south to north. The reason they're working south to north isn't based on the wind direction or speeds, is to allow for the easiest and most efficient load out for the waste. The rail line is to the south. The waste handling areas are to the south and the road network points to the south from the plant. So that allows them to get the waste out of the area. As far as the, the air circulation patterns the site has decades air patterns generally it's north and south through this valley. However, as you Stated, it does change based on the weather conditions. And now that's why they have the extensive air monitoring network around the main plant. And that's three concentric rings around the, the demo site itself.

So that allows them to capture any emissions that may or may not be leaving the demolition site. They're not just focusing on one point and also on the, the misters they move throughout the day. And again, that's based on the wind patterns and the, the demo approach. So if the, the piece of equipment changes its approach the misters also have to change to ensure they're knocking the dust down. And that's where the supervisor's on the job as well as the safety monitors and the radiation technicians out there now, they're all observing that. And they make adjustments and work together to ensure that the dust is properly addressed.

Vice Chair Bell:

Other questions? Arturo?

Arturo Garcia-Costas:

So that large last building that was left in the animation that's not considered part of the main, main plant?

Brad Frank:

There would've been great question. There would've been two things left standing in that video. One would've been a large steel I beam structure encased with a metal sheeting. And that is the fuel storage pool. The pool is empty, it's empty a fuel and empty of water but it's not part of the scope of this contract since the pool goes down into the ground. That'll be captured in phase one B as part of the, the soil removal Project. The other large tall skinny structure that was on the right part of this screen that is what we've been talking about over the last year as one of the last highly contaminated cells that is the product purification cells south that will come down as part of this demolition project. However they're still designing and determining the best way to bring that structure down. They're exploring a couple different options ranging from a large saw to diamond wire cutting or, or the hydraulic hammer once that is addressed and fully written down into a work construction package that'll also be part included in an updated video as coming down.

Arturo Garcia-Costas:

Thank you.

Chair Kauffman:

So, Brad, do you expect that the, that the demolition material, all of it is going to be taken offsite?

Brad Frank:

For the most part? Yes. There are two pipes still in the main plant process building that are gonna be classified as Transurban waste. Those do not have a disposal path at this point until we get a defense determination we will not be able to shift by transatlantic waste to DOE's true two-way storage site in New Mexico.

Chair Kauffman:

Yeah. So that, I was gonna ask that exactly that question about the, the, the determination of defense, where that stands?

Brad Frank:

Yeah. Paul, I don't know if we have any additional info on that. But as far as I know, we're still at an impasse with DOE. Our position is that yes, we conducted defense operations here in West Valley.

Paul Bembia:

Janice, could you speak a little more to that?

Janice Dean:

That is the current status. There is no pending live discussion right now as there is no active request for the funding to relocate the high-level waste, which would trigger the resolution of this question in full. But of course, we do remain very interested in options for transatlantic waste relocation as they might emerge over time.

Vice Chair Bell:

Well, is it correct to say there's no facility open that can receive that waste at this time?

Janice Dean:

Paul?

Paul Bembia:

Yes.

Brad Frank:

There's no commercial facility that can receive this waste. There is a Department of Energy facility that could receive this waste.

Thank you. Other questions, Brad? I wanted to ask about the classification of the waste that's been shipped in the 67 intermodal containers. Is that mostly construction waste? Was there any low level radioactive waste in those shipments?

Brad Frank:

Yes, there is. It's mostly construction and demolition debris, but there is some low-level radioactive material in there, and that is why it's shipped to Clive, Utah for a low level commercial waste disposal.

Vice Chair Bell:

Thank you. And then for the water it sounds, seems like you have a very good system for suppressing the dust release to the air. What about the component of the water that might have radiological components? Is it, is that shipped offsite somewhere?

Brad Frank:

No. that water is captured. And in the video, you saw the series tanks lined up side by side, it goes into a first, into an evaluation tank. And that's where they take radioactive sampling or sample for radioactive material there. And so far all the collected water has been below our threshold. We've been able to treat it on site with no issue and then discharge it. If for some reason we ended up with water that was unable to be treated on site, but they have open contracts to send it offsite and receive treatment there.

Vice Chair Bell:

Great. thanks so much. I wanna compliment you on the quality of the pictures and the animation. I think you gave the Committee very good idea of what's planned and where we'll be in 2026 if everything goes well. Okay. So shall we give the floor back to you, Paul and Brad and Andrea to continue your report, please?

Paul Bembia:

Sure, certainly. Andrea is up next with an update on the SDA North Slope.

Andrea Mellon:

Thank you Paul. And good morning. I would like to provide a brief update to the Committee on the status of the North Slope construction activities at the State-Licensed Disposal Area. Next slide, please. So when we last well to reorient everybody in the Committee on the North Slope, the photo you see on the right hand side is the State-Licensed Disposal Area with an arrow pointing in white to the north slope. And when we last spoke about this, we discussed the loose soils that had been moving on the North Slope. You may remember that NYSERDA completed a geotechnical investigation early in 2022, and the results of that investigation indicated that the loose soils that were moving were the soils that were placed on the slope during the construction of the s d trenches in the mid-1960s, and that it did not represent deeper or more competent soil movement, which is a fantastic thing.

And as we're designing the, the system, we looked to the loose soils and the removal of the loose soils, but we wanted to improve and enhance the long-term stability of the North Slope. So we

wanted to install additional drainage systems to help shed the water off of the slope. And we also wanted to reduce the steepness of the slope. So our design that we spoke about in the fall included all of those key components. And initially we thought we would have to remove about 5,000 cubic yards of soil off the slope. But in, in recalculating that and kind of refining our design, we were able to reduce the amount of soil that needed to be removed by about 28%. So about 3,600 cubic yards of soil were remote. I'm pleased to tell you that we safe, safely and successfully completed the construction in 2022. We have only minor restoration activities to com be completed in this field season. So in the 2023 field season, as soon as it's safe to go out, we'll complete those minor restoration activities. Next slide please.

So the next three slides are looking at photos of the progression of this project. The first photo you see is the removal of those loose soils in the installation of a hall road. The hall road was placed at the top of the slope to be able to move the heavy equipment north and south on the slope. The second photo you see, is nearing completion of the removal of those loose soils in the installation or the beginning of an installation of a common collection area for water. I mentioned the enhanced drainage that we're putting in to help shed that rainy snow melt off of the north soap in a more efficient manner. So this is that common collection area that's placed at the bottom. There are drainage pathways from the top of the slope to the bottom of the slope that will move the, the water in areas of the slope down to this common collection area.

And then that clean water will be metered out into the wetlands that are at the bottom of the slope. So the second photo is showing the beginning of that construction activity. The third photo you see on the right is the at grade, the final grade of all the removal of the loose soils. And if you look carefully in the center of the photo, you'll see two stakes that are put in place to help begin the drainage pathways or drainage channels that are going to be installed to help move that water in efficient manner off the slope. Next slide, please.

So we are on slide 13 and photo four is showing in greater detail the excavation in the construction of that common water collection area. And again, that meters the clean water out into the Rutlands, the middle photo here, photo five is looking from the top of the slope to the bottom of the slope and is delineating one of those drainage pathways or channels. And the photo on the right photo six is the actual beginning of construction of these drainage pathways or channels. You'll see two of them being installed here. They are about three feet in width, about five feet in depth into the competent soils. And again, they're a pathway for that water to get into the channel and then down to that common collection area, each of these channels are then back filled with bedding stone to prevent erosion of that channel, but to help keep everything nicely contained within that channel. Next slide, please.

This is the last of the photos. The photo on the left, photo seven is showing the completion of that butting stone installation to, into each of those drainage pathways or channels. And on top of that, you see in photo eight, larger stone being placed on the north slope, and that larger stone is placed on the entirety of the North Slope and works to protect and keep that slope face safe from erosion. And then the photo on the right is the comp completion. Photo nine is the completion of that project. Again, we achieved a more stable configuration for the North Slope because we enhanced the drainage. We've reduced the slope steepness and we've removed that loose soil. In the spring, we will go out and do the minor restoration activities, including vegetation around the

north slope. We will be removing the temporary fence and installing our permanent fence on the north slope. And I'm pleased to say that we are completing this work, not only safely and successfully, but we're completing it on or slightly below budget of about \$1.5 million. And I'm happy to take any questions if there are any questions, but that is the report that I have for the Committee. Thank you.

Vice Chair Bell:

Thank you, Andrea. Are there any questions? Okay. thank you so much Andrea, and thanks for your clear and concise pre presentation. Paul, back to you. I think you may be on mute.

Paul Bembia:

All right. Thank you, Chuck. So at the again, at the last Committee meeting, a question came up about decreasing leachate levels at the SDA and as a follow up I'll be providing some information about the geology and hydrology of the SDA and some natural processes and mechanisms that limit the movement of the trench constituents. Next slide, please. Okay. So first we'll take a look at the geologic framework for the SDA. This is a geologic cross section. And as you see, the SDA or State-License Disposal Area is in the middle of the figure. A couple of things I want to point out here. The NRC licensed disposal area and is adjacent to the SDA, you see it on the west or the left side of the SDA

And on the easternmost side of the figure is the Buttermilk Creek Valley. I do wanna mention that this cross section has a vertical exaggeration of 2.5. That means the vertical scale is 2.5 times that of the horizontal scale. This is commonly done with geologic cross sections to make the features of interest visible on one page in a publication, but it also makes the creeks and other features look more accentuated on the figure than they are in the real world. So if you stretch this figure out two and a half times to the right it would more accurately present the site topography. But it would make some of the details difficult to see here. The key geologic units at the SDA that you see on the figure are clay silt sand and gravel units that were deposited by glaciers and glacial meltwater during the last glacial advance.

The SDA is constructed directly in a thick clay unit called the labor till, and till is a general term for a sediment deposit. That's laid down by a glacier. The labor till is about 80 to a hundred feet thick. The upper part of the labor till, which is shown by the orange cross hatching, it's called the weathered labor tilt. It's weathered and fractured by freezing and hawing and wetting and drying cycles. So it is permeable. And when West Valley staff have previously spoken with the Committee about the engineering controls we've installed to keep water from entering the SDA trenches, those engineer controls were constructed in this weathered portion of the labor till the fractured and permeable nature of the till allow it to transmit water. And that's why it's been the focus of our infiltration control actions.

The lower part of the labor till is called the unweathered labor till, and it's a dense clay with a very low permeability. At the bottom of the cross section is, is another thick glacial clay deposit called the Kent Till. And in between our sand, silt, and gravel deposits that were deposited by glacial meltwater these meltwater deposits are called the Kent Recessional Sequence. You also see some bedrock to the west. This is one side of a stream valley that continues down to a depth of about 500 feet. The stream valley was present prior to the glacial advance, and the valley is

now completely filled with glacial deposits. One of the reasons the site is prone to erosion is that the site facilities are not constructed or anchored in the bedrock. They're constructed in this relatively young sediment sequence. The figure also shows arrows that show the direction of groundwater movement. And can we go to the next slide, please?

So now we'll look at the factors that influence the movement of the trench constituents at the SDA So this is the same geologic cross section that you saw in the last figure. There have been a number of geologic and hydrologic studies conducted at the West Site over the last 40 years. And these studies show the groundwater flow in the unweathered till is vertically downward. The water flow rate in the unweathered till is very slow. It's about one inch per year. This low flow rate means that it would take about a thousand years for water to travel from the bottom of the s d trenches to the bottom of the clay unit. This makes the unweathered labor till a very good hydrologic barrier. In addition to that very slow rate of water flow many of the key radio nuke radionuclides in the SDA are strongly bound to the clay under and surrounding the trenches.

This happens through the interaction of dissolved trench constituents, which tend to be positively charged with the surrounding clay particles, which are negatively charged. So through this mechanism, the clay basically acts as a filter that lets water move, but keeps key radionuclides close to the trenches. Another important consideration in the movement of the trench constituents is radioactive half-life. At the SDA, we have a significant amount of tritium, which is a trench constituent that is not bound to the clay. The tritium is a, a short half-life of 12.3 years. So while tritium is mobile, it's short half-life combined with the very slow rate of water flow, limits the distance it can move from the trenches. Finally, there are some constituents that are long-lived and mobile, but those constituents are not present in the SDA insignificant quantities. We go to the next slide, please.

It says some final points. There is downward movement of water from the trenches, but the hydrologic and other properties of the clay and the properties of the trench constituents tend to limit the movement of those constituents from the trenches. We sample the groundwater from the weathered labor till the unweathered labor till, and the underlying Kent Recessional sequence twice per year at 21 groundwater monitoring wells that surround the SDA all results are below drinking water standards, confirming that there's not significant movements of constituents from the trenches. And again, this is largely due to the presence of the thick, low permeability clay unit. And I did want to point out that the presence of this clay unit was and the ability to limit the movement radionuclides was one of the reasons this area was selected for the location of the Western New York Nuclear Service Center.

Three more points in regard to the arrows in the Kent Recessional sequence that show water flowing laterally over to the Buttermilk Creek Valley. First point about that is that the water flow through the clay unit, through the labor till above is so slow that most of the count recessional sequence is actually unsaturated. The, there is some water in the lower part of the unit and there does appear to be flow east to Buttermilk Creek where the deposits are exposed in the valley wall. But estimates are that this portion of the travel path would be another 1200 to 2,500 years in addition to the thousand years from the clay above. So while we wouldn't expect to see any trench constituents along this flow path, we do sample the creek just downstream of this area, and we've not detected any trench constituents.

Also wanted to mention that the supplemental environmental impact Statement that's being prepared by DOE and NYSERDA is evaluating a range of closure and decommissioning options for the SDA, the NDA and the other facilities. And the SEIS will include an evaluation of groundwater impacts, including impacts over the thousands of years it would take to move water through these very long transport pathways. And one more. My final point is that you see that the NDA bottom extends further into the clay unit. Then the bottom of the SDA trenches, this is an area, the NDA called the deep disposal holes. And this is where the site operator disposed of leach holes are cladding from the spent fuel rods after reprocessing these holes are 50 to 70 feet deep. So beneath this, there's 30 to 50 feet of clay rather than the 80 feet of clay. Beneath the SDA trenches the time for water to travel along that path would be about 360 to 600 years. But those disposed materials are also gonna be strongly retained on the clay close to the bottom of the disposal holes. So with that, I will take your questions.

Vice Chair Bell:

Thanks very much, Paul. Are there any questions from the Committee?

Chair Kauffman:

Yeah, Paul, can you just go over this last sentence? You, you were talking about on the NDA, on the, the deeper, deeper trench. Just go over that again, just say what you said again.

Paul Bembia:

Sure. So there's an area of the NDA called the deep disposal holes, and that's where the site operator disposed of certain, a certain waste stream. And that was the leached fuel holes, the cladding from the reprocessing of the, of the spent nuclear fuel. So those holes go down 50 to 70 feet in the clay. So there would be again, depending on the depth of the hole 30 to 50 feet of clay beneath those n d deep disposal holes. So the same framework for the geology and hydrology that I described for the SDA applies here water flow rate of about an inch per year. So we would be, you know, on the order of 350 to 600 years to move water through that pathway to the bottom of the clay. But same situation applies with the materials that were disposed in. Those steep disposal holes, they're gonna be very strongly retained on the clay close to the, the bottoms and the sides of those holes.

Chair Kauffman:

Okay. So then the follow up is, you're saying the DOE is, and, and I'm certainly looking forward to the meeting in 350 years, fourth then DOE is, is looking at options for that, for that site?

Paul Bembia:

That, that's correct. So NYSERDA and DOE are working together on this environmental impact Statement. And so the range of alternatives for the SDA, the NDA, the tanks and all the other phase two facilities will include everything from in place closure to complete removal. And we're also looking at things like, you know, if we did partial removals, let's say, you know, at the SDA, we removed certain trenches at the NDA. What would the performance or the impacts to groundwater be if these deep disposal holes or other portions of the NDA were removed? So all of that information currently is being folded into the, the models and the probabilistic

performance that we have talked to you about. So the range of options and the impacts from the different decommissioning options are, will be presented in the supplemental EIS.

Sherburne Abbott:

When is the supplemental EIS scheduled again?

Paul Bembia:

Brad, do you have the date on that?

Brad Frank:

Correct? Yeah. It'll be late 2025 when the draft SEIS comes out for public comment.

Chair Kauffman:

So again, I, I know this is not immediate here, but the cost associated with, if there is some decision to do something in the NDA, the cost sharing would be the same as what we have with DOE now, or to be renegotiated?

Paul Bembia:

The cost share for the NDA has been determined in the consent decree, and that would be a 50/50 cost split.

Vice Chair Bell:

Okay. Any more questions for Paul? Great. oh. Yes, Shere.

Sherburne Abbott:

Just make a comment. First, I mean, it's three things. One is, is that this is an impressive operation, right? And, and it, it really, it goes to the strength of the, the, the individuals associated with it. So my, you know, thank you for your service. The, the, the second is, is it requires a lot of State fed cooperation, which, and with contractors, which is really hard. And it, and it's, it continues to amaze me how well you execute that, that that process. The third is that this has enormous academic value as a case study. And, and I say it's sort of gratuitous with my, my universe my sort of allegiance to the academic community. But, but the, the piece of that that I think would be, there's a part that is beyond the academic community.

So that little video is, is quite interesting. And, and I was thinking as you roll out towards the EIS, it would be really nice to see if, if you could get DOE to expand on that a little bit to, and, and to do a, a better job of the, the geologic process. Kind of getting at Richard's question of, you know, how do you take condense 350 years into something that the public understands, right? Because I think that would really help that process of the discussion with the public. And since you've got a couple of years lead time, it would be really cool to see that come out.

Paul Bembia:

Thank you. Well, we'll work, work on that with doe.

Well thank you to Paul, Andrea, and Brad for the continued progress you're making on the site cleanup and remediation. And thank you for your presentation today. Very helpful.

Paul Bembia:

Thank you.

Vice Chair Bell:

Okay, next on the agenda is a status report on the Authority's facilities Chief Financial Officer, Pam Poisson will present the report. Pam,

Pam Poisson:

Thank you very much. This is just an informational update. This is a verbal update, and we will provide additional details in the forthcoming meeting. As this Committee is well aware, NYSERDA has office space at multiple locations. Most of those are leased through dates that expire in 2026 and 2027.

Chair Kauffman:

It is dramatic. Dramatic. Sure did laugh>.

Pam Poisson:

It's a wonderful lead in.

Pam Poisson:

So we, you know, we of course own our headquarters in Albany. But coming up soon is, is a pivot, a potential pivot point for us. We have supplemental space in Albany at 15 Columbia Circle with a lease expiration date in 2024. And as we go through our regular annual planning and budgeting process, one of the things that we look at is our facilities maintenance needs over time. So, you know, aiming to keep workspaces safe and secure and highly functional, we consider factors such as changing building codes and labor laws. We consider State initiatives, especially most recently, Executive Order 22, focused on improving sustainability and lowering GHG in government buildings, among other things, technology advancements and studies that provide further updates around how to improve employee engagement, particularly focused on productivity in the workplace and what's becoming a very fast a hybrid work environment for many organizations.

So as we are looking ahead through that planning process, we have a potential material savings opportunity with this upcoming lease expiration in mid-2024 for the supplemental space in Albany. So we are going to be revisiting the potential to consolidate our Albany office space. We are still in review mode, but we wanted this Committee to be aware of our next steps. We right now, through preliminary data, appear to have an opportunity to save about \$550,000 per year, while also reducing our carbon footprint simply by way of consolidation, and then ultimately having a changeover in our HVAC systems very shortly thereafter. The goal of such a consolidation would be to accommodate all our anticipated Albany based staff secondly to make sure that we improve building functionality through better av, for instance reconfigured spaces so that we can actually, you know, help people work more mobilely and dynamically.

And finally, to make sure that the building which hasn't had upgrades in quite a few years at 17 Columbia Circle would be potentially more marketable if this Committee and NYSERDA opted to market at some point in the future. As we contemplate this analysis of the consolidation, we are able to draw upon task data post some work that was done by the NYSERDA team 6, 7, 8 years ago relative to possible consolidation, and more recently looking at teleworking in the workplace and employee engagement factors. We also have confidence that we could do so successfully. We recently piloted just such a consolidation moving an entire floor of the team from our 15 Columbia Circle property over into 17 CC and thus co-locating our entire IT team together. And that's generally gone well and it gives us some opportunity to fine tune anything that we would do going forward.

With that as context, the Authority proposes the following near term actions. We have incorporated in our recommended budget for the coming year, a placeholder for the portion of the capital that we believe is a reasonable approximation of what would need spent in the coming year if we were to make this shift in anticipation of a May of 2024 consolidation. We have to that end included \$2.6 million in that capital budget that will be approved hopefully later today. Secondly, we would propose to conduct a deep dive analysis in consultation with outside experts so that we really can pressure test our assumptions around both the cost and the project risks. We would consider in that process the timing at which construction costs are likely to begin to return to more typical levels as inflation comes under control. Third, if the results of the analysis demonstrate that this is in fact a cost-effective solution in a reasonable timeframe we would proceed with an RFP process for general contractor and use efficient detail and rigor to ensure that we are going to have cost estimates and hold water over time.

Obviously, that would feed into a decision checkpoint with this Committee either in April or June of the coming year to share our analysis, review the recommended course of action, and ultimately to ensure agreement on proposed implementation plan and checkpoints. Meanwhile, we would propose to proceed with some relatively small, I'll call them, no regrets, updates to all of our office spaces that are already baked into current and next fiscal year budget. These are relatively low price point items simply to improve the functionality, for instance, as more people are coming back to work and an open office environment, making sure that there is sufficient sound masking so that they can focus on the work that's in front of them. So just wanted to share a quick snippet on our plans going forward. Obviously some analysis forthcoming and to be brought back to this Committee. Any questions or recommendations, if not, turn back to you.

Vice Chair Bell:

Thank you. Are there any comments or questions for Pam?

Chair Kauffman:

I do. So the \$2.6 million, is that the total amount or would there be additional capital?

Pam Poisson:

There would be additional capital. Right now I would estimate at current prices, we are probably in the four to five range. That is a very preliminary estimate that's informed by work I did about three or four years ago to consolidate a 30,000-foot space down to 15,000 foot space with a full

gut in rehab. So, and that was in a metropolitan area, not New York City, but it was quite a large metropolitan area. So I think even factory and construction costs we're south of four to five.

Chair Kauffman:

So, so I recognize relative to the overall program expenses, this is a, you know, tiny, tiny number, but I'm just curious as an analytic exercise we're taking money that would've otherwise been used for, for programs for this purpose. So we can do a, we can do a, an analysis based upon traditional payback for energy savings, but are we thinking about what we would normally think of in terms of the return that we get on rate payer dollars?

Pam Poisson:

Right. I follow your question and, and actually the, the way I would say we look at it from a financial analysis perspective is looking at how we keep this net to budget while this work is being done and then lower the costs ongoing so that the ongoing operating costs can actually be diverted to the program of support. So let's say it's a five year payback, so we essentially would self-funded in the five years with the capital cost being more than offset, offset by that rent savings. And then once that's locked in, we no longer incur that spend. So that can actually be directed to the program expenses. So it's, it's essentially a no net effect for the duration of this because the depreciation expense offsets the amount that would be invested in the upgrades, and then because we've consolidated, we no longer have that obligation of the other building to pay for and that can go to the program funds. But that's a, that's a really important point. So as we come back to this Committee with that analysis that is something that we wanted to demonstrate in factoring in not just the relative costs, but also lost opportunity costs through interest rates and so forth.

Chair Kauffman:

Okay. Thank you.

Vice Chair Bell:

Great. Any other questions or comments? All right. Thank you Pam. Okay. Very, very much for your report. Next I agenda item concerns an executive session Section 105 of the Public Officer's law authorizes the Members to convene an executive session order to discuss a proposed sale of real property. May I have a motion to enter into executive session for the purpose of discussing a proposed sale of real property?

Arturo Garcia-Costas:

So moved.

Vice Chair Bell:

Second?

Sherburne Abbott:

Second.

All in favor?

Members of the Committee:

Aye. Aye.

Vice Chair Bell:

Any opposed? Motions carried. Committee will now enter into executive session with the Officers, Senior Counsel, Sara LeCain and Project Manager. Kevin Hunt. During that time, the webcast will remain up. Upon our return, we will reconvene the meeting. And we're back Thank you. I now reconvene the meeting in open session. No formal action was taken during the executive session. The final agenda item is other business. Is there any other business? Hearing none? May I please have a motion to adjourn this meeting?

Sherburne Abbott:

So moved.

Chair Kauffman:

Second.

Vice Chair Bell:

All in favor, please say aye.

Members of the Committee:

Aye. Aye.

Vice Chair Bell:

Opposed? meeting is adjourned.