

NYSERDA'S 252ND BOARD MEETING

April 27, 2021

Clean Copy of Transcript

Peter Costello:

Okay, Mr. Chair, we have 10 out of 11, just Chair Howard is missing, but we do have a quorum. The recording has started. The slide has been switched. You are ready to go.

Chair Kauffman:

Okay, great. Thank you. I'd like to call this meeting to order. This is the 252nd meeting of the New York State Energy Research and Development Authority. Notice of the meeting was provided to the members on April 18, 2021, and to the press on April 19, 2021. I direct that a copy of the notice and agenda and the revised notice be annexed to the minutes of this meeting. So welcome to the meeting. This meeting is being conducted by video conference. The authority will post a video and a transcript of this meeting on the web to confirm that we have a quorum. I would like to ask the Authority's Secretary Peter Costello to conduct a roll call of each of the members in attendance.

Peter Costello:

Thank you, Mr. Chair, I will first note your attendance and now take the remainder of the roll call authority. Vice Chair, Quiniones.

Vice Chair Quiniones:

Present.

Peter Costello:

Shere Abbott.

Sherburne Abbott:

Present.

Peter Costello:

Chuck Bell.

Charles Bell:

Present.

Peter Costello:

Ken Daly.

Ken Daly:

Present.

Peter Costello:
Commissioner Dominguez.

Commissioner Dominguez:
Present.

Peter Costello:
Kate Fish.

Kate Fish:
Present.

Peter Costello:
And I'll just check if, if PSC Chair Howard has joined us yet. Okay. Jay Koh.

Jay Koh:
Present.

Peter Costello:
Commissioner Seggos.

Commissioner Seggos:
Present.

Peter Costello:
And Mark Willis.

Mark Willis:
Present.

Peter Costello:
There are 10 members in attendance. Therefore we have a quorum, Mr. Chair.

Chair Kauffman:
All right. Thank you, Peter. The first item on the discussion agenda is a report from the Authority's, President and CEO, Doreen Harris. And thank you Doreen for your note to us.

Doreen Harris:
Thank you. And good afternoon to the members. It's a sincere pleasure to provide my first report as President and CEO of NYSERDA. So I wanted to thank you for your vote of confidence in improving my appointment. And it's a real honor to speak with you today and to serve in this capacity. So as seems to be the theme, it has been in data very busy quarter here at NYSERDA and in, in a federal context as well, a focal point of our meetings thus far and, and specifically our work as a State. So if we turn to the next slide I'd like to speak to that topic briefly please. And indeed on day one of his presidency, President Biden fulfilled his com commitment to rejoin the Paris agreement and has taken executive actions to ensure that we together are tackling the

climate crisis, both at home and abroad with a strong focus on jobs and strengthening our economy.

So there are many parallels between the federal policies, which we are now seeing through President Biden's administration and those that we are implementing here in New York context in New York's context, I think last week earth week was a, was an important week in so many respects. From a federal perspective, President Biden held a historic summit with 40 world leaders to demonstrate a globally significant commitment to climate action. And certainly over the course of the two days and eight sessions we saw not only the convening, but also the affirmation of the need for unprecedented global cooperation and ambition to meet this moment. So on the first day of the summit, President Biden announced the United States will target reducing emissions by 50 to 52% by 2030 compared to 2005 levels. So this is clearly a strong commitment in the federal perspective to leading this clean energy movement and create importantly good paying jobs at the same time. So clearly we in New York, and as you can see on this slide, we globally are working in a very expansive and in some cases new context. So I want you to know how closely we at NYSERDA are working to capture that moment for New York and also how to align our work in this new context as well. Next slide please.

And indeed a very happy deleted earth week to all of you. As I had indicated via my email last week, featured an express, it especially active whirlwind of announcements, launches and events for many of our NYSERDA teams and programs. And I was pleased to also join many of our colleagues at sister agencies, some reflect some represented here today for other notable happenings as well. And I can say in my 10 plus years at NYSERDA, I personally have never witnessed an earth week like this one. So it was spectacular in all accounts. And, and I think notable that we advanced initiatives across multiple sectors as we should reflective of the goals of the climate act in the built environment and transportation in innovation and beyond really reflective of the comprehensive work that we are advancing together. Next slide, please.

On earth day itself, we were thrilled to host an in person rib cutting in Eastern New York and Washington county to announce more than 20 large scale renewable energy infrastructure projects that are commencing construction across the State this year, including this site, which is the first utility scale solar project to break ground in upstate New York. So what we see here and what we saw throughout earth week is the manifestation, not only of our goals, but the achievement thereof. So certainly exciting in a global context, a federal context and, and closer to home right here in New York.

Next slide please. And it is true. Within this quarter that there were very significant elements in this year's adopted executive budget. As you can see here, really looking at various aspects of NYSERDA's work both with respect to funding but also with respect to the standards that we are anticipating that will come with our investments. Just focusing on a couple focusing on labor standards as a great example of the expanse the expansive nature of our work, looking at issues of farmland protection in, in various renewable project sighting, and also looking at community engagement and standardization of taxation as important elements of the preconditions for our successful implementation of the climate act. So there were certainly many notable elements in this year's executive budget, which we are now implementing actively next slide, please.

And prior to this period, we certainly have been working on a number of other important activities since we last met among them. We've been making progress, significant progress with our Climate Action Council process with important advisory panel recommendations underway along with the appointment of Sarah Osgood and Sameer Ranade to serve as Executive Director and Climate Justice Advisor to the council respectively. So many of you will know Sarah well from her prior roles at NYSERDA, the Department and the Executive Chamber and Sameer comes our way from Washington State, where he was most recently an Environmental Justice Advocate at front and centered an organization, which is focused on advancing racially and economically just solutions for pollution and climate change. So I know I speak for all of us on the council when I say we're thrilled to have them on Board. And we do look forward to providing you the NYSERDA Board, further updates on our Climate Action Council process and our work in the near future separately, we have launched a number of important pieces of work relating first to New York State clean heat a consumer education and awareness campaign.

We also announced several innovation program activities such as carbon tech and accelerate Southern Tier. I wanted to highlight the fact that we received the first SIPBRA award from the Department of Treasury and Labor to support our clean energy training work. And this is important because it marks the first time the treasury department has awarded funding through the social impact partnership to pay for results or SIPBRA program. So this was an important milestone for us as well. And we helped to file vital legislation related to building codes and appliance standards as well during this period and to round out my report, I do want to note the fact that we named Andrew Kessler as the acting President of NY Green Bank during this period, following Alfred Griffin's departure in February, you'll be hearing from Andrew in just a bit, but we are thrilled to be working with Andrew in his new capacity. So as per usual, we have so much to be proud of in recent months and still so much more great work to accomplish ahead together for which your partnership and guidance will be vital. So with that, I will conclude the President's report for this quarter with my thanks.

Chair Kauffman:

Thank you very much. Doreen really a lot an enormous amount has happened in this last quarter. And so we're, again, delighted that you are, you are our President's CEO. The next item on the discussion agenda concerns a private session for the purpose of discussing attorney client privilege matters. So may have a motion for resolution number 14 to enter into private session, to discuss attorney client privilege matters.

Charles Bell:

So moved.

Mark Willis:

Second.

Chair Kauffman:

And I get a second. Thank you. When Peter calls your name, please indicate whether you're in favor by stating aye or opposed by stating no.

Peter Costello:

Thank you, Mr. Chairman. I'll first take your vote.

Chair Kauffman:

Aye.

Peter Costello:

Sorry. Vice Chair Quiniones.

Vice Chair Quiniones:

Aye.

Peter Costello:

Shere Abbott.

Sherburne Abbott:

Aye.

Peter Costello:

Chuck Bell.

Charles Bell:

Aye.

Peter Costello:

Ken Daly.

Ken Daly:

Aye.

Peter Costello:

Commissioner Dominguez.

Commissioner Dominguez:

Aye.

Peter Costello:

Kate Fish.

Kate Fish:

Aye.

Peter Costello:

Jay Koh.

Jay Koh:

Aye.

Peter Costello:

Commissioner Seggos.

Commissioner Seggos:

Aye.

Peter Costello:

And Mark Willis.

Mark Willis:

Aye.

Peter Costello:

Thank you, Mr. Chair, the private session has been approved.

Sherburne Abbott:

May I ask a logistics question?

Peter Costello:

Yes.

Chair Kauffman:

Pete, I see looks like nine of us.

Peter Costello:

Sorry. I've been on mute. I have eight I think Mark Willis and Commissioner Dominguez have not yet joined us.

Chair Kauffman:

No, mark is on.

Peter Costello:

Mark is on. Okay, so it's just commissioner Dominguez.

Chair Kauffman:

All right. Can somebody send a message?

Peter Costello:

Yes. Yep. I sent a message and, and hopefully she will join this moment here.

Chair Kauffman:

Okay. So I'd not like to reconvene the meeting in open session. No action was taken during the executive and private session. The next item on the discussion agenda is report on the items considered by the Governance Committee meeting from that Committee's Chair, Shere Abbott, Shere, please.

Sherburne Abbott:

Thank you, Richard. The Committee met earlier today and the quorum was present throughout the meeting. The first item on the agenda was a Conflict of Interest Policy. The Committee received a presentation from the Authority's General Counsel, Peter Costello, on proposed amendments to the Authority's Conflict of Interest Policy for Board members. Specifically the policy revisions would allow NYSERDA's Ethics Officer to be consulted on ethical matters. In addition to the General Counsel, other non substantive ministerial or clarifying changes will also be made the Committee unanimously recommends that the Board approve the revisions to the Conflict of Interest Policy for Board members. The second item was the comp compensation for officers that Public Authority's Law requires the Board to establish policy regarding compensation of Authority Officers and Article 3, Section 3 of the Authority's By-laws requires Board approval of Officers compensation. Historically the authority has provided its employees with the same salary increases that are provided to State management, confidential employees through State legislation, and as authorized by budget bulletins issued by the New York State Division of the Budget.

The most recent New York State budget has passed on April 7, 2021 authorized a general salary increase of 2% effective April. I can't read my thing. My thing on 2020 for State management confidential and underrepresented executive branch employees pursuant to approval in terms and conditions established by the division of the budget in June, 2019, the members approved this 2% increase for all officers. Then in office as of April 1, 2020, the recently appointed President and CEO, this compensation was set to align with the prior President and CEOs compensation and had the bullet budget bulletin been in a place during the period of appointment. The current President and CEO's salary would have reflected the increase accordingly. The proposed resolution would authorize a 2% increase retroactive to April 7, 2021 for the President and CEO. Additionally, it would also authorize similar general salary increases as maybe authorized for State management and confidential employees by the New York State Division and of the Budget. The Committee unanimously recommends that the Board approved the general salary increases for the Officers. And finally the Board, the final item was Board Member Performance Evaluation. The Committee met in private session to discuss the results of the Members' Evaluation of the Board's performance. This will be presented to the members at the June, 2021 Board meeting. This concludes my report.

Chair Kauffman:

Very good. Are there questions for Shere? Okay. So we will consider the resolutions that the Committee's recommended as part of the consent agenda later in this meeting. So thank you very much, Shere. The next item on the discussion agenda is report on the items considered by the Audit and Finance Committee from that Committee's Chair, Jay Koh. Jay please.

Jay Koh:

Thank you very much, Mr. Chairman, the Committee received a report from the Authority's director of internal audit, Mary Peck on her proposed internal audit plan for fiscal year 2021 through 2022 following discussion, the Committee voted to approve the 2021 to 2022 audit plan. Next, the Committee received a report from the Authority's internal control officer Jeff Pitkin on proposed changes to the internal control manual. Jeff described the changes which include amendments to conform with the bylaws changes to better describe task conducted by certain departments to the authority renaming section 17 as the internal audit charter and clarifying internal audit's ability to communicate with the members and other ministerial and clarifying changes. The Committee unanimously recommends approval of the amendments to the Authority's internal control manual. Next, the community considered proposed a proposed financing of the green job green New York program that would sell a participation interest in the green job, green New York program loans to community banks for credit unions.

The details of this transaction were included in your meeting package. The Committee unanimously recommends approval of the GJGY financing. The Committee also considered a proposed portfolio monetization for facility on behalf of the NY Green Bank. Specifically NY Green Bank would sell an interest in financing receivables from 20 loans with an outstanding principle balance of approximately \$396.5 million to ESG green acquisition trust a statutory trust beneficially owned by Bank of America. The details were included in the materials, provided to the members. And I also like to congratulate the Green Bank program overall on the successful, full movement through recycling capital. That's been provided by rate payers towards the furtherance of the mission of the NY Green Bank. The new the Committee recommend recommends unanimously approval of the authorization for the monetization facility on behalf of the NY Green Bank. Lastly, the Committee heard a detailed presentation from KPMG on its proposed process for conducting the fiscal year 2020 to 2021 independent audit the Authority's financial statements at NY Green Bank's financial Statements. The Committee was able to ask questions and thought the approach was reasonable and that the final financial statements would make the requirements of the Public Authority, Accountability Act and the State Controllers Regulations, including delivery of all required opinions. This concludes my report. Thank you, Mr. Chairman.

Chair Kauffman:

Questions, questions for Jay. So I'd like to thank the Audit and Finance Committee. This was a, a deep dive into some detailed technical financial issues. And so I'm pleased that we have the capability on the Board to be able to, to provide that kind of oversight. So we will consider the resolutions as part of the consent agenda. Thank you, Jay, for your report and for the work earlier. The next item on the discussion agenda is a report on the items discussed by the Program Planning Committee from that Committee's Chair, Mark Willis. Mark, please.

Mark Willis:

Right. Thank you, Richard. The Program Planning Committee met just before this meeting and a quorum was present throughout first, the Committee received a report from the Authority's, President, Doreen Harris and Project Manager in Energy Affordability and Michelle, the Authority's Diversity and Inclusion Initiative. Michelle described the work that being conducted across the Authority by many staff members to incorporate DEI principles both internally and

externally. The report was very well received with a lot of support from the Board, the activities that the is undertaking next, the Committee received a report from the Authority work on behalf of disadvantaged communities, Senior Vice President for Strategy and Market Development. Janet Joseph introduced the discussion and the Committee received presentations from Chris Coll, Director of Energy Affordability and Equity, Jamie Marcotte, Program Manager, Efficiency, Planning, and Engineering, Robin Marquis, Program Lead Clean Program Leading Clean Transportation Prizes and Emily Dean Director of Market Development. Again, there was a lot of energy, no pun intended from the Board and interest in these initiatives. So we thank the staff and all the work that's being done and look forward to future reports on progress here on, on these very important areas. Richard, this completes my report on the Program Planning Committee meeting.

Chair Kauffman:

Questions for Mark? I'd just like to reiterate what Mark just said, which is the Board has keen interest in, in equity initiatives. So we very much look forward to the next report by management. I'd also like to acknowledge the participation of non-Committee members attending the Program Planning Committee meeting, and again, encourage all members of the Board to participate in future meetings. So thank you, Mark. So there are no, I should say there, these were informational items and no formal action was taken. All right. The next item on the discussion agenda is report on the recent activities of NY Green Bank from its acting President Andrew Kessler. So Andrew, welcome. And again, thank you for the, the report in the Audit Finance Committee earlier today.

Andrew Kessler:

Great. Thank you. Thank you, Richard. And, and good afternoon, everyone. Could you move to the next slide, please see? Yeah, one maybe one more. Yeah, super let's start here. So I'm very pleased to, to provide this report. We've had just a tremendous year. This is a great, maybe a great page just to sort of kick off the, the quick update here. You know, it, it seems incredible that it's only been 12 months since we set forth these objectives about a year ago so much has happened. Most of it just tremendous progress. You know, we had you know, the onset of COVID and so one of our key objectives obviously was to mitigate the impact of COVID 19 on the NY Green Bank on our borrowers on and on potential borrowers.

We also were in throes of disadvantaged communities initiative in terms of gathering insights, developing strategic approach and tactics to implement that strategy. We were continuing to build and maintain a strong and growing portfolio. We were also maintaining our strong financial position and seeking ways to strengthen our operations. And lastly, our key objective was to continue to mobilize capital through our capital deployment activities on the next few slides. I'll walk you through our investment par performance and impact in these key areas. Can you go to the next slide please?

And one more. Yeah, super. So first, why don't we start with a quick snapshot out of our, of our cumulative investment performance as of calendar year end, we've made cumulative commitments of over \$1.2 billion and generated accumulative revenue of 108 million from an impact perspective. This is expected to mobilize up to \$3.4 billion in New York State project costs and expected to deliver between \$13 and \$25 million metric ton emissions reductions in

New York State and in calendar and fourth quarter 2020 calendar fourth quarter 2020 alone. We closed seven transactions totaling \$87 million in new commitments. Next slide, please.

Let's drill down a little bit on 2020 performance itself, as I'm sure you saw in our announcement 20 in our various announcements throughout last year 2020 was a year of heavy reliance on NY Green Bank for liquidity and continuity within New York. State's clean energy markets, largely due to dislocation and illiquidity in the institutional markets, as well as some degree of retrenchment from traditional lenders that historically had been active in New York State. This was particularly pronounced during the second first and second quarter of 2020. And the result for NY Green Bank was a record year in investment activity. The NY Green Bank executed 23 transactions in 2020, and we had our strongest second and third quarter to date last year. You know, the benefits were, were, were fairly varied and, and wide, including importantly benefiting disadvantaged communities and impacting a variety of technologies from solar to wind sustainable agriculture, bio energy, energy storage, and energy efficiency projects. We were also able to offer PPP loans to three companies that had a clean energy focus. One of which recently send a wonderful note to us. And I'll just quote our company. Wouldn't be around if we didn't get a loan from NY Green Bank. So it's always, always great to hear that kind of feedback from our counterparties. Why don't we go to the next slide please?

So let's just talk a little bit about forward looking the pipeline itself. Let me say a few words about that as the pie charts reveal there is a healthy and high degree of diversification of NY Green Bank's pipeline across technology segment geography, as well as end user. So for the technology category, you can see that solar remains the largest part of our pipeline totaling about 475 million in transactions. We also have about 155 million in energy efficiency investments in our pipeline 86 million in bio energy, 319 million that leverage multiple technologies and almost a hundred million in across energy storage, electric vehicles and sustainable agriculture from a geographic perspective, the pipeline you know, appears to be very well diversified as well between upstate and downstate with about 580 million of investments related to upstate activity and about almost 300 million related to downstate activity. And then finally looking at end user the pipeline again I think demonstrates a good diversification across agriculture, residential CDG, the most market commercial and utility scale.

Chair Kauffman:

Can I just interrupt for a second? Are these particularly well any of these charts, are they, how much are you how much are these just as a result of, of what you've decided to do and how much re represent a kind of top down decision for portfolio diversification?

Andrew Kessler:

Of course, it's a mix. We do receive reverse inquiry and, and repeat business from our existing customers and, and borrowers, but Richard you know, a lot of it is driven by, you know, prioritization. We put on webinars to signal our interest in closing funding gaps in certain areas you know, storage, for example, last year, a disadvantaged community. I'll talk a little bit more about going forward with respect to energy efficiency and deep retrofit investments. You know clean transportation continues to be a big focus. You know, the, the, the, the, the bulk of the repeat business is in community solar that continues to be a source of significant volume. We've have been signaling to the marketplace very actively that we are seeking and have more appetite

for community solar when paired with storage and, or when paired with a significant element of, of a disadvantaged community angle to it as opposed to just plain community solar, where we feel there's ample liquidity in the marketplace to cover that those, those portions of the capital stack that historically we had been covering.

Chair Kauffman:

Okay. Thank you.

Andrew Kessler:

Next slide, please. Yeah, thank you. Just quickly I think this is a helpful visual to show our cumulative committed capital relative to current total commitments, as well as current total deployed capital. So as previously stated on that top line there, you'll see that we've committed over \$1.2 billion on a cumulative basis since inception on our current commitments stand at \$733 million with close to \$570 million actually deployed. Let's go to the next slide, please. I think this is a nice visual just to give a, a feel for, you know, sometimes our, our metric numbers you know need a little bit of perspective, I think, to be more meaningful to the average person. So let's look at our annual emissions reduction. It, it is the equivalent of eliminating an entire year of CO₂ emissions from almost 114,000 households where basically all the homes in the blue shaded area.

Another way to think about it, our annual emissions reduction impact is the equivalent of an entire year of CO₂ sequestration by a forest, the size of all of New York City and the Long Island put together as depicted in the forest graphic at the bottom of the slide. Next slide, please. And let's go one more to our disadvantaged community. Yes. Thank you. So we are at laser focused on achieving our disadvantaged community objectives. We spent a significant amount of time last year, gathering insights, developing an actionable strategic approach. And 2021, and going forward is about execution, about executing on these plans. You know, we are committed, we have committed to at least 35% of our capital on a go forward basis from January 1, 2020 through 2025, 35% of our capital to benefit disadvantaged communities, at least we have specifically committed to approximately \$400 million and looking to deploy at least \$350 million to such projects, including in the following areas, \$150 million in affordable housing projects by 2025 and \$100 million in energy efficiency in building electrification by 2025.

Those are inclusive of that, of those total targets. How are we gonna do that? So specifically our deliverables in 2021 include executing pilot transactions across four affordable housing focus areas by the end of the year, that includes pre-development lending, electrification, energy efficiency, improvement, loans, construction to perm type loans and permanent debt. In other words, competitively priced gap financing within a mortgage context, all within the all, all within an affordable housing disadvantaged community context we're weeks away now from launching RFP 18. So I'm, I'm very pleased to be able to announce that that speaks specifically to what I've just covered including providing the marketplace with indicative terms for each of these four product offerings to stimulate demand and create action, more opportunities for us to to deploy capital in these important areas. Secondly, we're looking to progress multi-agency collaborations, including importantly, the raise, the green roof initiative between HCR, NYSERDA and NY Green Bank which was covered in the State and State announcements earlier this earlier this year we're also modifying our current reporting to include DAC metrics and benefits so that we're

able to, to track and highlight the impact on disadvantaged communities as part of our communications plan and as part of our overall metrics in reporting, we're looking to hire a managing director to provide senior leadership and focus within this important area to drive the underwriting of DAC related transactions.

And we're looking to expand our, our advisory Committee to include a member of our advisory Board that can provide incremental expertise and disadvantaged community lending and advocacy. And lastly I'll, and I'll cover this very briefly in a, in a final slide here. We're also launching an RFP for NY Green Bank to inject equity capital in the form of a mandatory redeemable preferred to financial institutions, actively investing in disadvantaged communities. So in other words, underwriting the underwriter and doing so with an equity instrument that allows them to lever that up even further to, to catalyze their investment activities. Next slide, please, let's talk about progress to date with respect to DAC. So on the left hand bar chart there, this is what we've done to date since January, 2020 through March, 2021. So about 400 million in new commitments 21% of which based on the interim definition of interim disadvantaged community definition about 21% impact.

So some very good initial progress. We are on the very right hand side, perhaps under pipeline very last bar chart there. Our pipeline is suggesting about a 25% D impact. And so with the combination of the, the existing momentum and built in benefits to this community, along with execution on the key initiatives I've, I've spoken about before, we feel very confident in achieving that middle bar chart, which is the overall target close to 470 plus million dollars in, in D oriented investments for associated with a total of about \$1.2 billion in new commitments between January 1st, 2020 through the end of 2025.

Chair Kauffman:

What does short, what does shortfall mean? I don't understand what that means.

Andrew Kessler:

Yeah, that, that, that's what we, what we have to go, Richard. So we are that we, we are looking to build up to a \$471.1 million investment in, within the DAC within our, within our affordable housing and D practice we've done 83.3, our pipeline suggested incremental 203. We still, and, and that middle 471 that's, that's our total goal it at a minimum.

Chair Kauffman:

Okay, thank you.

Andrew Kessler:

Yeah. Yeah. Why don't we just touch on the next slide quickly? Obviously another very important initiative that enables us to do all of these things as ensuring that we have liquidity. We are seeking to monetize a set of 20 loans as discussed previously from our existing portfolio representing approximately \$473 million of total commitments. Net proceeds are estimated about \$324 million. NY Green Bank will pledge and assign to a trustee its interest in repayments from the transaction portfolio, those 20 investments that we're carving out through a trust and denture

agreement, the trust will provide for segregation of cash flows from the transaction portfolio you know, within an agreed upon waterfall structure, NY Green Bank will reinvest loan proceeds in projects within New York with the mission of obviously deploying, continuing to deploy our clean energy resources to reduce greenhouse gas emissions.

Last slide here. I, I think I may touch on one more, but just quickly, I talked about our upcoming RFP 18 already. I, I mentioned our mandatory, renewable preferred equity, RFP. Both of those are DAC oriented RFPs to drive that activity. In addition, we are working with a through a significant modification to streamline and optimize our RFP number one, which is our general solicitation to formally engage with the NY Green Bank on investment opportunities. We're gonna make that streamline and more efficient for counterparties to engage with us. Maybe just touch on the last couple slides there, if you wouldn't mind going to the next one, one more. Thank you just quickly. I think this just, just visually demonstrates the strength of our pipeline. And then the last slide here you know, we continue to generate revenues and excessive expenses.

And, I just want to note to the Board that you know, you will see a bit of compression in the Delta between our, our revenue and expenses. After we close into the transaction, the proposed transaction would be of a as well as pay MOS, our investment bank advisor placement fees, et cetera. So there will be some compression next year to, to, to expect. And that's all very much anticipated but nonetheless our profit margin excuse me, our, our revenues will continue to exceed expenses and we will continue to achieve our mission of being self sustaining on a go forward basis. I'll stop there for any questions.

Mark Willis:

Richard, I have a couple, if I may actually comments one the affordable housing area obviously interests me greatly. So I don't know if we can have the time here to do it, but I'd appreciate conversation from you in terms of ideas, questions about what's the incremental cost here, what what's the market willing to finance or not finance? So what, what's the gap that that you're filling here, the second one, okay, so I'd love to have that conversation, but I don't think it's longer than really makes sense for.

Andrew Kessler:

I would welcome that conversation. We put a lot of thought into that, very into those very questions. Yep.

Mark Willis:

I'm sure you have. So that, that would be helpful. The other is on the Bank of America. I know we've considered with most a number of different ideas here. So I just wanna make sure if I understand this correctly the, so not the little bottom line, but the bottom line of this transaction is that you, the Green Bank retains complete control over the servicing of these correct and its ability to modify or whatever. You know, the whole principle here of the Green Bank was to do deals that the market wasn't willing to do. And so there's often the learning as part of that process. I wanna make sure that you have retained the Green Bank. You, the Green Bank have retained the ability to do what needs to be done to make projects be successful.

Andrew Kessler:

We do. We are going to be

Jeff Pitkin:

Andrew.

Andrew Kessler:

Provide, go ahead. Jeff.

Jeff Pitkin:

Can I, can I just clarify this point though? Cause Mark, you know, in order to attain a true sale, if you sell something, you sold the receivables to a purchaser, so the negotiation of terms and in order to retain a true sale, there is, there is some attention right now we are negotiating points on the purchaser's ability to direct aspects of receipt of servicing the receipt. And I, I don't mean just normal collections, but I mean, if one of the, one of the transactions went into a bankruptcy, absolutely decisioning on, on actually effectuating decisions related bankruptcy. If the purchaser has purchased the receivables, the purchaser normally, and a sale transaction has that authority. Now that now in this case, they effectuate that decision through the Green Bank, cuz the Green Bank is still the lender of record and is actually the servicer. So the purchaser actually can't do anything unless it works through the Green Bank. Right. And so I just wanna be, I just wanna be clear, I don't wanna say yes, you know, we've, we've given away controls cuz in fact we have, and in the context of a sale transaction, you typically do transfer control of decisioning over to the purchaser. But from a legal standpoint, those decisions are effectuated by the fact that the Green Bank still is the servicer and still is the legal lender of record.

Mark Willis:

And so there is separate service agreement.

Andrew Kessler:

There is, there absolutely is. And, and we are retained to, to perform in our traditional function of servicing these 20 investments. And, and of course like any service or agreement there, there are some, there are abilities for the, the owner of these receivables to, to inject their preferences, as Jeff just said, particularly in such certain situations where there's an actual bankruptcy proceeding where they, they need to be able to affect you know some of the decision making outside of a traditional ordinary course servicing arrangement.

Jeff Pitkin:

And I know Katherine Mogg, General Council may also want to make a point, but the other thing I will just say, Mark, is that again, there are also typical customary provisions that would look to include terms that could involve the replacement of the servicer.

Katherine Mogg:

That's right.

Jeff Pitkin:

So material adverse, if the material, if a material, sorry, go ahead. Katherine.

Katherine Mogg:

Of Bank of America to replace a servicer in certain dire and adverse situations.

Jeff Pitkin:

Exactly.

Mark Willis:

Right. So you've heard my question. It's not new to Jeff. It's not new to Doreen. It's not new, maybe new to you, Andrew, certainly not new to Richard either. So to the extent that you're not worried enough about this issue I just wanna add something to it. I suspect you paid a lot of attention to this issue. I just wanna highlight that this is, this is a concern here because the whole idea of the Green Bank was to be able to be innovative and to take very smart risks here, to try and advance the field and demonstrate how safe these investments can be. And that they're they, that they, that they make sense. And so I know that is what you're trying to do, but I, I also don't want to see you hobbled in any way.

Andrew Kessler:

That no, to be, yeah. To be clear, this creates liquidity and enables us to I get that to put money to work in, in exactly the same man, without any restrictions, without any, you know, the, the Bank of America relationship does not restrict us on a go forward basis with

Mark Willis:

I understand that.

Andrew Kessler:

Yeah.

Mark Willis:

I understand.

Chair Kauffman:

Yeah, Mark. We did spend time on this. And I would say that the fact that these are loans that the market is willing to buy means that the Green Bank has, you know, sort of incubated. These are seasoned, these are seasoned loans as it.

Mark Willis:

Sure.

Kate Fish:

I, this is Kate. I've got a question too. One of the initial reasons the Green Bank was set up and I think it's was a very powerful reason is to, you know, as someone said earlier, help the rest of the market kind of move in this direction. Will there be a parallel learning on the part of Bank of

America, which is a significant bank in terms of getting more comfortable with these kinds of loans? How do you see that happening?

Andrew Kessler:

Look, I think, I think we are already collaborating with them. And so it's interesting. Two of the loans in the 20 loan portfolio are collaborations alongside Bank of America. And, and the fact that they're, they're now you know, getting familiar with intimately familiar with the other 18 in terms of how they were structured, why they were structured that way, that I would expect those learnings to, to filter, you know, through their organization and, and may well lead to a greater appetite in some of these other areas that we haven't seen them in. I can't predict how quickly that will, that will happen, but we, we certainly look forward to collaborating with them as well as other private sector market players to, to further crowd in capital into these important areas.

Jeff Pitkin:

And Kate.

Kate Fish:

I understand.

Jeff Pitkin:

Kate I'll just add quickly that, you know, the transaction team has had to do numerous briefings with their credit officials. And these have gone up to very, very, very senior people at the bank. And I think one of the things that the transaction team and I think even the senior people have appreciated is Bank of America has a \$1.5 billion, billion, or trillion dollar commitment here. And so I think, you know, having some senior officials become more familiar with some of these types of transactions, we think helps, you know, helps them as an institution, right. To be more comfortable with these types of transactions. So I think we're hearing that there will already have been a little bit of knowledge sharing, you know, market transformation even within, within, within their institution, which is a good outcome.

Andrew Kessler:

Great. Thank you.

Jay Koh:

Maybe a different way asking the question. And congratulations, Andrew, and the transition here. I appreciate that. The leadership and the execution on the on the Green Bank front is, is two, two just confirmations. One is it's always been in the design and execution of the Green Bank's business plan to be able to recycle rate payer funds into new transactions and continue to push the frontier of innovation. Is that correct?

Andrew Kessler:

That's absolutely correct. Jay. Yep. And, and this enables us to do just that.

Jay Koh:

And then

Andrew Kessler:

The second point on, on a first basis you know, this, this is likely to be the first liquidity event that we, that we will do. First of several

Jay Koh:

And the balance here is that there are, you know, far more than 20 names in the existing continuing portfolio. So there is a way of managing different types of risk and capitalization effects in the kind of core operations of the Green Bank and this free additional capital to continue to make those sets of choices, for example, to focus on deck priorities as well as market capitalization, market participation, crowding into the market. Is that right?

Andrew Kessler:

That's exactly right.

Jay Koh:

Great. Thank you very much.

Jeff Pitkin:

All right.

Ken Daly:

Yeah. Just quick question, first of all, Andrew, congratulations on your appointment. Two questions on the PPP. There's a second round, as you know, and it's been extended to May 31st. I'm just curious any opportunity for those same clients to avail them to those funds, which is a nice, you know, loan for our portfolio. And then secondly, on the chart, that's on the screen now, very nice, you know, delta between the revenues and the expenses. It seems higher than what I remember seeing in the P L I don't remember seeing this level of income. So I'm just curious what the reconciliation is good to see the, you know, higher cash flow, but how, or why that's translating into the P and L effects.

Andrew Kessler:

Yeah. You know, this is a cumulative chart. And so I, I I'd have to go back to see, you know, what the real impact was of, of the prior year on, on the delta there. But you know, we do, we, we had, we, we closed 23 new transactions last year, and almost all of them have an upfront fee element to them, which, which, which, which does create income immediately upon closing. And so that I, I suspect that that was a big driver of kind of what appeared to be sort of a pop in that delta. And, and, and we've already closed a number of transactions this quarter as well. So that, that activity continues at pace. And if it does compared to last year, that Delta won't be as significant because it will be right more, more or less consistent with the prior year. But nonetheless, my suspect that that was the driver.

Mark Willis:

Sorry, go ahead, Andrew, go

Andrew Kessler:

Ahead. Go ahead, please.

Mark Willis:

This is operating expenses there. There's no cost of capital built into this, as I recall.

Andrew Kessler:

That's, that's correct. These are operating expenses.

Mark Willis:

Of fixed costs, more your portfolio grows, the more you would expect this would happen. So, yeah.

Andrew Kessler:

And I'm sorry, this, the, the, the first question?

Mark Willis:

PPP.

Andrew Kessler:

PPP. Yeah. You know, we Katherine do you recall if of the three loans we, we continued in, in the second round or?

Katherine Mogg:

I believe we made a second loan to two of those three.

Andrew Kessler:

Okay. Very good. Okay. Very good. Thank you. Thank you. So look, you know it, it, we were particularly important early on when it was sort of a, a race in that first tranche that first round. And, and, and not everyone was getting the attention of the commercial banking community that they and so it was important that, that they could come to us at least had the option to I, I think at this point, you know the, the things are better and that program is being managed more effectively. We may or may not continue to provide that service, but you know, we're there, we're there in the event that the market needs us.

Chair Kauffman:

Okay. Andrew in the interest of time, I'd like to move on to the next topic. So thank you very, very much.

Andrew Kessler:

Thank you very much.

Chair Kauffman:

So I'd like to acknowledge Chair PSC Chair Howard. Who's been listening, but was unable to join the video now he has been on the video, Chair Howard, thank you very much. You're the last item on the discussion agenda's report from Carl Mas, Director of Energy Environment and Analysis and Elizabeth Grisaru from the New York State Department of Public Service the initial report on the New York power grid study.

Carl Mas:

Great. Thank you, Richard. Could we advance slides a couple forward? Great.

So earlier this year, the, the department of public service published the initial report of the New York power grid study which was developed in collaboration with NYSERDA. And as Richard mentioned, I'm joined here today by DPS's Liz Grisaru who will help me to provide a brief summary for the study. I know we're short on time, so we will keep it efficient. Next slide, please, just as a little bit of further background as you are aware, our New York State Climate Act called for an unprecedented transformation of our electric grid in order to meet our 70% renewable energy goal by 2030 and is zero emission goal by 2040 to meet all of the climate acts objectives. We really see there are some major milestones ahead, including large investments in our renewable generation, new energy storage, energy efficiency, and, and electrification of both our heating systems and our transportation systems and to support all of that. Our transmission and distribution infrastructure have to play an increasingly critical role. Next slide. And so I'm gonna turn the flow over to Liz to provide you all with a little more of an overview of the study and then go into the first part, Liz, hopefully you're on.

Elizabeth Grisaru:

Yes, I'm on. Can you hear me?

Carl Mas:

Yep. We can hear you. Thanks.

Elizabeth Grisaru:

Okay, great. So and thanks, thanks for having me and, and I'm happy, happy to help and to participate today. This is very brief overview of the power grid study that we're here to tell you about. It was directed as part of the accelerated renewable energy growth and community benefit act. It was enacted last year which instructed the public service commission to move forward and identify, begin to identify transmission and distribution upgrades that are needed to reliably and cost effectively integrate the new, the new renewable resources that we need and to establish updated planning processes, to support the cost effective and timely development of our, of our infrastructure to meet these various goals, the commission the staff of the department and the consultation with NYSERDA initiated this set of studies, which we collectively talk about as the New York power grid study, there are three components.

One is a utility study conducted by our joint utilities on their local transmission and distribution system needs an offshore wind study, which looks at offshore and onshore bulk power transition scenarios to illustrate possible solutions for that to integrate the 9,000 megawatts of projected or targeted offshore wind. This study was conducted by DN BGL, Power Gem and WSP under RGS direction. And then thirdly the zero-emission study, which again is a scenario based look to analyze the transmission generation and storage options that we may have for achieving the 70% renewable generation goal by 2030. And then the zero emission goal by 2040. This latter study was conducted by Siemens again at NYSERDA's direction. Next slide.

I'll talk a bit about the utility study. Again, under the accelerated, accelerated renewable energy growth act, the commission directed the utilities to begin identifying distribution and local transmission upgrades needed to support the CLCPA goals. The utility study, which is the output of that directive identifies a number of upgrades to those local transmission and distribution systems, which the utilities categorize as phase one and phase two projects, phase one projects represent what would otherwise be business as usual investments made in the ordinary course to maintain assets and to preserve reliability. But they have ancillary CLCPA benefits. Phase two projects are those investments that are primarily if not uniquely driven by CLCPA requirements. Next slide among the key findings of the utility study is first that the bulk system projects that are underway in our State now appear to be adequate to address the bulk system needs through the next decade, leaving aside for the moment offshore wind integration and that our near term needs relate primarily to those local transmission systems.

We also find that the phase one projects do address those local system needs and actually present a significant opportunity to capture CLPA benefits at a minimal cost. Thirdly, the study suggests that those phase one local transmission investments may actually be sufficient to meet the State's 20, 30 objectives for anticipated mainland based renewable generation. Next slide, the recommendations coming out of that utility study include that we should consider implementing an expedited approval process for those valuable proposed phase one local transmission and distribution projects that we seek further evaluation of the proposed phase two portfolio, which was quite preliminary focused on prioritizing some of the proposed phase two projects that provide unique opportunities to expand phase one projects and address known renewable generation pockets to work with utilities and NYSERDA to identify in advance high priority additional high priority phase two projects to address headroom constraints and limitations in areas of high potential for renewable development to explore providing access to local, renewable energy zones and areas that currently have significant potential for renewable generation, but, but little transmission infrastructure, and finally find some creative ways to accelerate the adoption of advanced transmission technologies in all these programs.

Next slide.

Carl Mas:

Great. Thank you, Liz. So I'll take back over to walk you all through the other two large studies that I sort of manage with DPS staff. As, as Liz mentioned, there was a lot of focus on the local distribution and, and transmission needs. But we did find some, some interesting outcomes from, for both the offshore wind study and the bulk system study. So for offshore wind there's a general format. First I'll walk you through some of the findings and then take you to the recommendations. So of, of the key findings from the offshore wind work, we did see that there's gonna be a need for an additional upgrade to the bulk transmission between Long Island and the rest of the State. We looked at a number of scenarios at different levels of adoption of offshore wind, where we see significant gigawatts we'll be flowing through the island.

And in most scenarios, especially ones that have to lean on that Long Island system, or we will need to have new transmission in order to get the energy off of the island. We did find that there are no other near term needs in really focusing on the next 10 years. There are no near term offshore, wind, bulk transmission needs beyond those enterprise. And, but however those, those projects that are already under development will, will, will be key. And I'll speak to some of that

on the next slide. This, this conclusion though is important in that when we did our, our, our simulation work, it, it depended on some very key factors. One was it, it will depend on a high level of, of coordination as we look at developing our offshore wind plants. And what that refers to is we need to best utilize our existing infrastructure and in so doing, we can best utilize wires that we already have in the ground.

Also there are gonna be considerable issues around sighting and permitting. And we looked at those in depth and did see a feasible path to our nine gigawatts, but it's gonna require quite a bit of coordination in order to make that sighting work. And then finally we did include our three gigawatt goal for, for energy storage, which has some, some of that clearly downstate both in New York City and Long Island. And we looked at scenarios where we were situating that storage in such a location that it could best allow for the integration of the offshore wind. So again, there was some useful insights for us as we think about how to co optimize our system, both generation storage and transmission focusing on, on, on the wet side of the system, looking offshore our analysts looked at different configurations and concluded that a meshed offshore wind transmission network that interconnects our offshore wind farms through various substation infrastructure could actually ultimately lead to a more valuable reliable and resilient system.

And that was a, a critical aspect for us. We are currently doing radial or single line systems coming from the farms. What we wanted to look at was how do we build a robust system that will allow us to wheel energy around and increase the, the resilience of the overall system? What we did conclude from this analysis is that a decision to build a mesh system doesn't require immediate action. But what it does require is that we ensure offshore wind projects that are currently radial that are gonna be coming in in the pipeline that they be constructed in such a way that we have the option to integrate them into a, a future mesh to really make them mesh ready and, and add a lot more value to the system in the future. Next slide.

So from these findings, there were several recommendations. There was a recommendation to commence the, the development of that new off of Long Island by 2030. That sounds like it's a long ways away, but these transmission projects take a long time to build and even just to permit and get through the process. So really, if we wanna see a line in 2030, we have to start now. I also called for the initiation of a multidisciplinary planning and, and coordination effort in order to cost effectively, get six gigawatts or more into New York City. We think we're gonna need to get as much of this energy directly into New York City, where we have load, and that will minimize our overall infrastructure costs, but really in order to get that much energy into the city, there's gonna have to be tight coordination around some of the areas such as through the Arizona Bridge and in and into the narrows and into our New York City Harbor.

We're also looking at how we can promote options for adding transmission links between the offshore wind substations, again, to create that mesh. And we're already beginning to think about that in terms of how we can best leverage our tools, including the NYSERDA RFPs. And then finally, to review policies around planning and developing storage and other advanced technologies, there are non-wire alternatives, even at the bulk level where we can better utilize our existing infrastructure. And our advanced technologies group at NYSERDA is working closely with utilities and, and DPS staff to think about both, how do we implement storage and some of these new advanced technologies. Next slide, please. So shifting gears just wanna speak

very briefly about the zero mission studies. So again, this is looking all the way out to 2040 and the evolution of our grid to a zero emission State.

So for the shorter term, when we look out the 2030, we find that the goals can be met for 2030, with low levels of curtailment and, and congestion, where curtailment is the case where you actually have available solar wind, but you can't actually get it to load. And we see that without new significant upgrades needed. And really what that builds on is the incredible history that we've had over the last decade to put wheels in motion, to build hundreds of miles of, of new transmission. This is really a building from, from the energy highway work that that NPA led and the new Northern New York project, that, that NYPA is also spearheading that in addition with the new dispatchable, renewable energy deliveries that we're gonna see through the clean energy standard tier four, that was approved last fall, we think that that full portfolio is gonna allow us to achieve our 2030 goals.

And as Liz said, allow us to focus on the local distribution. So we've got the highway is being built and we have to figure out how to get the on ramps and the off ramps built over the next 10 years, 2040, it's a slightly different situation. The, the magnitude of the load growth, as some of you have seen through some of our Climate Action Council work shows that load could go up significantly by 2040 and 2050 as we, as we electrify heat and transport. And we do see that there will, there, there is the potential for higher levels of congestion and some curtailments upstate according to the need for, for additional bulk transmission, again, out around 2040. So that bulk transmission from upstate to bring the power down to New York city will likely become cost effective over time.

In the sense that the cost of the congestion will outweigh the cost of that new transmission. And these congestion reducing transmission would also reduce upstate renewable curtailments and will allow us to not only get more of the energy out, which makes each of those projects more economically viable, but also will allow us to shrink our footprint of those resources because we can get more energy out of the same projects. So a couple of the recommendations that that came out of the study, again, they reinforced the importance of the hundreds of miles of transmission that are already in the pipeline. And they called for us to revisit with the ISO. So our New York independent system operator and NYSERDA looking at periodic studies, right, this needs to be an, an adaptive planning framework. As we see where the renewables are actually built, as we see how the transmission projects succeed and under what timelines we, we, we need to, to proactively look at how the bulk transmission needs will change. And then we also affirm that the New York independent system operators, economic and public policy planning processes are available and in identify needs and solutions in, in, in an appropriate way. In other words, we have the, the institutional framework in place with the new renewable siting law and with our existing public policy transmission process to be able to execute on these goals. Next slide please.

And so my, my last one, just to do a quick wrap up, and then I'll turn it back over to Liz, just overarchingly, looking at improved planning and future analysis. We need to have increased coordination due to the, the complexity of this co-op optimization that will, will be unfolding across, you know, our upgrades, as we looked at the, at each individual utility, as they look at planning their system and how that integrates with the bulk power system. That's something that

DPS has already taken at the lead on working with, with the ISL. We, we do think that there will be more studies that will be needed to really get into a, a deeper dive into the existing headroom and our local system and how we can expand on that that will help to identify again what high priority high value locations we should be focused on as a State the, the nearer term offshore wind recommendation for building out that that transmission line is a priority and the public and the public service commission has actually already acted in a recent order, they called for this as a public policy transmission need, which has initiated a process with the ISO to build out the, the transmission system on Long Island and to initiate the construction eventually of a new to the mainland.

We, as I mentioned before, we need a multidisciplinary planning process to best coordinate how transmission lines will be brought into New York City. Six gigawatts is a substantial amount of energy and will require some large transmission lines to be brought into the city through the Harbor, which is very congested physically. We need to build on the existing NYISO studies and think about some of the additional operational challenges. So as we think about how we need to build a more flexible system in order to adapt and change to the intermittency of these resources, we to work closely with the ISO to think about what new market products might be necessary in order to overcome what will be some of these challenges in, in the next 20 years. And then obviously as any good study says, further study is also needed. And so some of the key areas that we're looking at are future generation of transmission technologies, something that's also been highlighted as part of our Climate Action Council process and our power duration generation panel is the need for long duration storage. There are some solutions in hand, but we firmly believe that there need to be new ones. And the good news is that we have time and we have an ability to partner with our federal administration to do new research around long duration and really make New York a test bed and a hub for some of the new technologies that that will come. So with that, I'll turn him back over to Liz to give us a quick wrap up on some of the next steps.

Elizabeth Grisaru:

Thanks. Thanks, Carl. Basically I wanted to touch on some of the things Carl mentioned that the public service commission has actually started to move on a number of the recommendations coming out of the power grid study. The commission issued an order based on the results of the utility study, which established the funding pathway for those phase one projects directed the utilities to consider applying advanced technologies. And we are working on the development we're working on and reviewing criteria for the phase two investments and the priority locations including of course, the very difficult issues of cost recovery and cost allocation for the phase two investments. And we are collecting public input on the number of issues, including the idea of creating renewable energy zones on offshore wind, as Carl mentioned, the commission issued an order identifying the need for the Long Island mainland tie, which kicks off a NYISO solution development solicitation and evaluation process over.

We have initiated some work to improve and standardize the assessment of headroom that is very non-engineering speak sort of capacity on the local transmission and distribution systems. We have started some outreach to the utilities and NYISO to act on the recommendations for improving the coordination of our, all of our planning efforts in support of the climate act goals. So there's quite a bit of work underway responding to the, to the power bridge study and the various recommendations. I just wanna note BPS and NYSERDA staff are stepping up their, our

own, you know, coordination and consultation with each other, as well as our, our partners at the NYISO to manage all these various efforts. And of course, all of the deadlines. And just as an, as a personal note, I would say, great, thanks to the NYSERDA team they've been incredibly helpful and supportive so far. And we all look forward to working with them on, on these matters in the future. So with that that's our presentation. Any questions?

Jay Koh:

Yeah. Thank you. Liz, just have one. I, if I may which is, I think it's great that these kind of analytics are being done, particularly because we need to plan out for a very different kind of energy architecture moving to 2030 and beyond. And so I'm glad to hear that there's some consideration towards the architecture on the mesh side and offshore wind with regard to future proofing, the ability to kind of build additional resiliency into the structure. So we'd just like to hear if there was you know, systematic scenario analysis done about what the climate is likely to look like in operating conditions and engineering requirements will look like by 2030, 2040, not just from a technology and demand perspective and Team D, but also from the point of view of what, you know, likely projected weather volatility and extreme weather event engineering, requirement's gonna look like, and the kind of cautionary tale here is California.

You know, you've had suddenly this range of extending wildfire seasons that drove SoCal Edison spend on wildfire risk management in 19 to over half a billion dollars. And now it's over 1,000,000,002 per year then accelerating. So if we're gonna design a system that is meant to futureproof the grid for the next 20, 10, 20, 30 years, then I think it's critical that we take some, at least affirmative steps to begin to plan specifically and systematically for the environmental conditions we're gonna be facing particularly given the expertise that's resident at the agency.

Carl Mas:

Yeah, no, thank you for the question. We do have several parallel efforts that are exactly in that vein. So we do have new, new climate modeling that we are funding updating our now 10 year old climate report which I think you helped us to kind of steer back then. And so we are updating that to be able to look at new forecasts for the weather volatility and how will impact all of our energy systems, including offshore wind. As I think was also, there was a previous presentation to the Board where we spoke to what is I started doing as we look to leverage our billions of dollars of investment. How do we make sure that we're not just buying clean, but buying a, a, a resilient system? And so our innovation team is actively pursuing that around some of our largest portfolios. So those are definitely clear issues for us. We, we know that we have climate change baked into the system, and it would be foolish for us to not, you know, face that right now.

Ken Daly:

Call and Liz, thank you very much for the update. I thought it was excellent, you know, really good to see the utility study as I'm sure Gill and PSC Chair Howard would agree, you know, transmission, transmission, transmission. I think my only comment is does the NYISO have a prominent enough role as we go forward? I mean, are they on, I know they weren't on the group originally, are they on the group now? Cause a lot of what you presented almost seemed more like an ISO presentation, which is wonderful. I mean, it really needs to flow through there, but if it's going to be transmission driven and into connection driven, you know, I do think given the earlier comments, a lot of lead time, long term planning, which seems like it fits right in their.

Carl Mas:

Yeah, totally, absolutely true. So they were on the advisory group, but you're absolutely correct. They were not a co-author of the study. So they they'd inform us along the way. And maybe Liz, you can speak to some of this last bullet here on this slide, this coordination. We absolutely think that the ISO has to be with us in, in the driver's seat.

Elizabeth Grisaru:

Yes, I'm in the market for a calendar that has more days and hours in it. Because I'm expecting to have lots more meetings with NYISO staff going, going forward the, the need for coordination among all the planning, regimes, the local, the distribution, utility driven, NYISO driven reliability, you know, the need for coordination among all those regimes so that we are sure that all the State objectives are being met, you know, in an efficient way really stands out, I think, as a result of this exercise and, and we, we are committed to, to tackling it and, and we're necessary you know, developing new processes or tinkering with processes to make sure that they all work together in the right way.

Vice Chair Quiniones:

Just a quick add I, I wanna commend NYSERDA and DPS for leading this this effort for context. The last transmission that broke ground in upstate New York was in 1985, which was NYPA's Marcy south line from Marcy or near Utica to the lower Hudson Valley this year. And next year we will be building five major electric transmission upstate. That is an unbelievable build out. That's not even adding what, what Liz mentioned about the local upgrades that the byways we're, we're building five highways. And there will be a lot of byways that the utilities are going to be building in their respective service territory. Again, all of this, to be able to integrate and accommodate the various renewables that are being development across the State also led by NYSERDA in their, in their program. So this is an amazing catalyst for investment, job creation economic development and, and of course battling the climate crisis.

So again, I just commend the teams and Jay, by the way ConEdison actually completed a study Jay about the climate adaptation, you know, forecasting, future weather scenarios and adjusting their design basis for planning, engineering, construction, and operations NYPA. We're about to launch that this month in partnership with Argon National Lab and The Electric Power Research Institute. So we will be doing the same thing. I anticipate all the other utilities will follow ConEdison and NYPA's lead on that to again, not only on our assets in terms of NYPA we will also use that information to inform customer sided programs that we're doing energy efficiency, solar storage street lighting, EV infrastructure, et cetera. So it's, it's appropriate that you have raised that issue for all of this work that we're doing. Thank you.

Carl Mas:

Thanks Gil.

Chair Kauffman:

I have a comment and then a question. So well the question is Liz, the renewable energy zones. So when you think about these zones, I know in the past we've talked about areas where, where there would be sort of non-prime agricultural land and other things that would be on the ground, including maybe areas where there could be more community support. When we think about

renewable energy zones, we're thinking about it in a, in this broader systemic way. Are we just looking narrowly at the, at the renewable resources?

Elizabeth Grisaru:

We, I, I think I can say that, that we are really near the beginning of the process of, of defining what a renewable energy zone is. So I don't think we have an answer to that question. It's one of the things we, we, we put out a specific request for, for input on, on how to define a renewable energy zone. So I, I think, I think I think the parameters are yet to be decided. And I think that's about as far as I can go at this point.

Chair Kauffman:

Yeah, no, that's great.

Carl Mas:

Yeah. And I will offer Richard that, you know, we are closely coordinating with DPS to leverage all of our, our, our newly built build, ready knowledge and assets, so we can help to, in to inform that process.

Chair Kauffman:

Okay, great. So then the, the second, I dunno if it's a question or comment, but, you know, Liz, you talked about the rate payer impact of some of the phase two projects. Yeah. And I'm just wondering how we're thinking about since you've, since you've really done a great job with this study, we ought to be ready to to the degree, to which it's possible to bring forward projects, whether they're in phase one or phase two for, for funding if the infrastructure bill gets enacted. And so we should just be thinking that through.

Elizabeth Grisaru:

I'll refer you to my boss, the Chair, because we have been talking about some of those issues and, and you know, the, the bill is not insignificant.

Carl Mas:

Yeah.

Chair Kauffman:

John, do you have any comments?

PSC Chair Howard:

Yes. You know, I've been saying all along, so we in New York shouldn't be punished for being first.

Chair Kauffman:

Mm-Hmm

PSC Chair Howard:

And we, we improve the climate, improve the climate for all Americans, everyone on the globe. And again, this Liz will tell you, my mantra has always been, how much is this gonna cost? And can we find better and cheaper ways to do this? I do say with some pride, we saw the LS power transmission proposal drop significantly in price on its own volition. Again, I think particularly those projects that are new, unusual, particularly the offshore transmission projects, some of our phase one projects that were in phase two are going to be done to enable the offshore, to, to come to market. I, I believe they are a national and priority, and I believe we should avail ourselves of, of everything we can get. Also need to remind folks that New York's retail rates are among the highest in the State to begin with. So, and we use the phrase headroom. We do not, I don't believe we have a lot of headroom to, to hit great payers a lot more. So the more we can tie down this from creative federal programs it would be a big, big help.

Chair Kauffman:

Great. Thank you.

Vice Chair Quiniones:

And Mr. Chairman, it's Gil. Just one other thing. I think we, it would, we would be remiss if we're not carrying the principles that you have started and embedded in us when we started the reforming the energy vision. One of the goals of this build, out's not just to build out, but also applying new technologies so that the system efficiency and the capacity utilization of the grid increases as you know, our grid in New York State is about 54% in terms of system efficiency or capacity utilization, because it was built to, to meet the hottest of the hottest days in July and August. So if we can do this build out at the same time, incorporate new technology and design intelligence into it, our goal is to increase the system efficiency and flexibility and resiliency of the grid so that we can moderate the cost impact over time.

Chair Kauffman:

No, I really appreciate that Gill, cuz I know transmission, sometimes you can have really high if you don't use new technology, you can have really high capitalization on some lines and really low, really low capitalization on others.

Vice Chair Quiniones:

Absolutely.

Chair Kauffman:

It's so when you talk about that average, it's really almost wor almost worse than that number.

Vice Chair Quiniones:

Correct, correct. And, and by the way, Chairman Howard it's the LS power NYPA transmission line forward that lower its cost.

Vice Chair Quiniones:

I appreciate that on behalf of all rate payers. Yes.

Chair Kauffman:

All right. Unless there are comments, I, I really wanna thank, thank you for this really excellent study and the report here to the Board.

Carl Mas:

Great. Our, our pleasure and a great collaborative Liz. So thank you for joining us today and, and look forward to coming back again later.

Elizabeth Grisaru:

Yes. Yes, indeed. Thank you.

Chair Kauffman:

All right. So we now turn to the consent agenda. There are six resolutions to be considered information on each of these items was included in your meeting materials. So resolutions number 1615, 1616, 1617, 1618 and 1619, where these are all recommended and for approval by the various Committees. So we heard from the Committee reports earlier resolution number 1620, would approve the Periodic Contracts Report Council's office has compared the list provided by members of entities with which each member is associated, which he or she believes may enter into contracts by an assert to the list of contracts in the periodic contract report council's office reports that there are no potential conflicts. So there are any questions on these items. They're being, they're being none may have a motion for resolution number one, six, and resolution. Well, I guess through resolution number 1620 right.

Charles Bell:

So moved.

Chair Kauffman:

Can I get a second?

Jay Koh:

Second.

Chair Kauffman:

Yes. Great. When Peter calls your name, please indicate whether you're in favor by stating I, or opposed by stating no

Peter Costello:

Thank you, Mr. Chairman, when I call each name, please indicate your vote. Authority Chair Kaufman.

Chair Kauffman:

Aye.

Peter Costello:

Vice Chair Quiniones.

Vice Chair Quiniones:

Aye.

Peter Costello:

Shere Abbott.

Sherburne Abbott:

Aye.

Peter Costello:

Chuck Bell.

Charles Bell:

Aye.

Peter Costello:

Ken Daly.

Ken Daly:

Aye.

Peter Costello:

Commissioner Dominguez.

Commissioner Dominguez:

Aye.

Peter Costello:

Kate Fish.

Kate Fish:

Aye.

Peter Costello:

Jay Koh.

Jay Koh:

Aye.

Peter Costello:

Commissioner Seggos.

Commissioner Seggos:

Aye.

Peter Costello:
And Mark Willis.

Mark Willis:
Aye.

Peter Costello: Thank you all Mr. Chair, the resolutions have been unanimously approved.

Chair Kauffman:
We now turn to other business. Are there any other matters the members would like to discuss? Okay. So there being, none may have a motion to adjourn. The meeting

Sherburne Abbott:
So moved.

Chair Kauffman:
I was, I didn't think anybody wanted to leave. Okay. All in favor?

Members of the Board:
Aye. Aye.

Chair Kauffman:
Any opposed? All the meeting's adjourned. Thank you all very much.