# London – 15 May 2025

## Building our energy future: transforming electricity transmission

**Sally Librera**
President New York, National Grid

**Matt Barnett**
COO Electric New York, National Grid

### Capital Delivery in the US

#### Sally

Good afternoon everyone. My name is Sally Librera and I am the President of National Grid's New York Business.

In this role, I lead our regulated utilities in New York, which serve over four million customers and represent about a third of the Company's regulated asset base. Our business will deliver $21 billion of capital investment in the 5-year financial framework.

National Grid NY combines three operating companies:

- KEDNY and KEDLI, our downstate gas distribution businesses, are the territories in purple on the bottom right of the map
- The third company is Niagara Mohawk, or "NiMo," our electric and gas utility in Upstate New York.
    - On the map, NIMO territory is everything shaded outside of the downstate KEDNY/KEDLI. The orange depicts territories where we distribute natural gas and electricity, and the blue area is electric-only territory.

Today, we're going to talk about the Upstate Upgrade, a $4 billion investment in NiMo's transmission network, which is a major component of our capital plan. The Upstate Upgrade is the largest investment we've made in our New York electric network in a century.

I'm joined here today by Matt Barnett, Chief Operating Officer of our New York Electric Business. Together we'll share how our New York team is delivering on the Upstate Upgrade, and how we're going to meet our capital commitments.

Since we haven't met, I'll start off with a bit about me. I joined National Grid 9 months ago. I'm new to the utility industry, but I'm not new to New York, I'm not new to building big infrastructure projects, and I'm not new to running big, complicated operations.

I've spent most of my career operating major infrastructure systems in New York. Prior to joining National Grid, I ran the New York City subway system – where I led a team of 30,000 employees.

- Together we moved almost 6 million people across the city every day.
- That's more travelers than every single US airport together moves in a day.
- This means we constantly managed through disruption. And that insane, "one in a million" thing? It happened about 6 times every day, and it happened against a backdrop of intense media, political, and public attention.

In order to be successful, I had to build credibility with New York stakeholders. I had to anticipate challenges and see around corners to minimize risks. And ultimately, I had to lead with a steady hand, and make sure my teams and I were prepared to make good decisions when we hit bumps.

I bring that same focus and approach to National Grid. After my time running New York's subway operations, I moved to the private sector and ran North America's transit infrastructure business for AECOM.

In that position, I worked closely with project teams delivering major infrastructure projects across North America. And I learned a great deal about the risks that drive project delays and overruns, and what it takes to anticipate and mitigate issues before they happen.

But the most important thing I've learned over the course of my career is the value of surrounding myself with terrific leaders. And that's why I'm very pleased to be here today with Matt, who leads our New York electric business.

Matt's been with National Grid for 20 years. He knows our New York electric business like the back of his hand. And you'll know as soon as you talk to him – Matt is passionate about delivering for our customers and neighbors. Matt's New York Electric team is delivering a rapidly growing portfolio of capital work on time and on budget and will continue to successfully deliver big infrastructure for NY.

And with that, I'll pass it to Matt.

**Matt**

Thank you, Sally, and I appreciate that. As Sally mentioned, I run National Grid's electric utility business across Upstate New York and have the privilege to lead a team of over 3,000 highly dedicated and experienced colleagues. We're responsible for a network which serves 1.7 million customers. We also manage a service territory which spans over 25,000 square miles. To provide a sense of scale - that's half the size of England.

Prior to my role as COO, I served as the Vice President of Electric Operations, where I was responsible for the construction, maintenance, and operations of our electric system in Upstate New York - also serving as incident commander for all emergency preparedness and response.

I started my career as an Operations Supervisor – which provided me with invaluable experience working on the front line. In that role, I led crews and gained a first-hand understanding of the work, the challenges, and the opportunities we have ahead of us. And it's from this experience that I say, the investments we are making in our Upstate networks are exciting and innovative – but they are also achievable. And to me, they feel inevitable. And we have the right team to make it happen.

**Sally**

Over the next twenty minutes, we're going to hit a few key topics.

First, we're going to give you a brief introduction to New York's electric grid and talk about the importance of reinvesting in our high-voltage transmission network.

Second, we're going to introduce you to the Upstate Upgrade, a major initiative to revitalize National Grid's transmission infrastructure in New York.

- Included in this, we'll talk about the policy framework that supports these Upstate Upgrade projects, each of which has ALREADY received approvals through regulatory venues.

Third, we're going to do a deep dive on the major elements of the Upstate Upgrade program and show you how we're delivering these projects and delivering our commitments, which include:

- Smart Path Connect, our single largest transmission project in decades

- And our CLCPA Transmission program, which will rebuild large segments of our local transmission system

And last, we'll talk about how the Upstate Upgrade fits into our 5-year financial framework, and how we're set up for the future.
So let's start with answering a foundational question: why is now the time to upgrade our transmission system in New York?

The first thing you should know about New York's electric grid is this: load growth is returning to the state. The blue bars on the graph show large loads in queue in NY more than doubled from January 2023 to 2025, and several factors are driving this load story.

- The first is electrification. This includes electric vehicles and electric heating.
- The second driver is a story of history repeating itself. In the 1900s, major industry flocked to Upstate New York in part because the state had abundant hydropower.

And now, we're seeing this again, with a diverse range of industrial uses moving into the region. Chip fabrication, data centers, crypto and manufacturing – and the graphic shows the load of just a few examples of those new large loads – Micron in central NY, a collection of data centers up north, and specific manufacturing sites in the west. And a big factor behind industry coming to NY is access to quality electricity. With all of this increasing demand for power, the good news is that Upstate New York has a lot of potential for additional electricity generation.

We've got developers building these generation facilities right now.

- The grey bar shows all of the current electric generation in New York, statewide, about 37 GW. The column to the right is the amount of generation in queue in

Upstate New York – another 30GW, that is nearly as much as already in place throughout the entire state.

- And you can see on the map that those generation pockets, the big purple circles, are distributed across upstate.

But to be clear, this isn't just about growing supply and demand for power, it's also about a strong push to unlock and move more renewable power. New York laws have set out an ambitious plan to significantly grow renewable power across the state. About 90% of the power that's produced in Upstate New York is already emissions-free. But we need more.

And downstate, only 4% of energy comes from emissions-free sources. The ultimate goal in the future is to bring more of upstate's renewable energy to markets downstate. So, we need to bring more energy onto the grid, but we also need the grid capacity to move it. And National Grid's transmission system is key to making that happen. We think of our transmission network as Upstate's "energy highway", over 5,000 miles of transmission lines carrying power across the state. But right now, there simply isn't enough room on our transmission lines to carry all the power that's needed.

The red lines on the map show parts of the network where we don't have the capacity we need, and we developed a plan to address this. When we reinvest in our transmission system, we see benefits across our entire electric network.

- We bring more generation onto the grid
- and we can carry more power across the state on modern, state of the art infrastructure, assets that are more resilient to storms and more efficient to maintain.

Ultimately, a strong transmission grid drives economic growth. It is essentially the high-voltage backbone of New York's economy. And now is the time to make this investment with the Upstate Upgrade. And to show you how we're going to make it happen, I'll hand it off to Matt.

**Matt**

You covered a lot, Sally and as someone who's been in the utility business for twenty years, I just want to say, this really does feel like a unique moment that has a once-in-a-generation urgency to it. What I would like us to do now is pivot and talk about our Upstate Upgrade, which is how we are answering the call.

As you can see on the map, the Upstate Upgrade is addressing those constrained lines Sally was talking about.

To do this, we are rebuilding and modernizing our existing transmission lines in Upstate New York. That means we'll primarily use existing right-of-way.

Today Carl is discussing the Great Grid Upgrade, our major effort to overhaul the UK's electricity grid. We think of the Upstate Upgrade as the New York cousin to what our UK colleagues are undertaking. As we each solve for our own local context, pretty quickly, you'll see some common themes and approaches emerge.

What the Upstate Upgrade shares with the Great Grid Upgrade and the ASTI projects is that:

- One, there's a clear need for action
- Two, there's a supportive regulatory framework and broad stakeholder buy-in
- And three, there's an incredible scale to both the challenge and the solutions we're bringing forward.

And what you'll also hear today is that on each side of the Atlantic, we are evolving our execution model to deliver.

So let's talk about what the Upstate Upgrade entails. Over the next few years, we are rebuilding sections of our existing transmission system from Western NY to the Capital Region and all the way up to the North Country, near the border of Canada.

This will "unbottle" those renewable generation pockets that are being built across Upstate New York and deliver that power where it's needed most. At the same time, these upgrades will provide additional value in addressing some of our most immediate asset condition needs, replacing existing assets with new infrastructure – which will provide greater resilience to extreme weather events.

Within the company, we talk about how our teams are delivering what we call "BIG Work" every day, serving our customers and tackling these massive challenges head on. And the Upstate Upgrade is definitely "BIG Work."

Through the Upstate Upgrade:

- We will deliver more than 70 individual projects
- We will rebuild and modernize 1,000 miles (~20%) of our transmission system. That includes replacing over 5,000 transmission poles and structures.
- We will create over 1,700 local construction jobs.

And our communities will see approximately $2 billion in local economic benefits from construction. This is something I want to emphasize; our employees, Sally and I included, live, work, and play in the communities we serve so our impacts on them are personal and hugely important to us.

**Sally**

So you've probably picked up on the fact that we take a tremendous amount of pride in what we're delivering with the Upstate Upgrade. But we're not the only ones who are pushing this critical work forward.

Upgrading New York's transmission system is really a whole-of-state effort. New York's government was early to recognize that the state's transmission system needed to be right-sized and passed laws that set out a regulatory process for utilities to obtain approval for these types of projects. In fact, every project we talk about today is a project that has been filed and approved for cost recovery by our regulators.

Some of the Upstate Upgrade projects you will hear about today are funded through the NIMO rate case. Others will be recovered through statewide agreements. From an affordability perspective, this is key because it means that, in these cases, only about 25% of the project cost will come through National Grid customer utility bills. And the state continues to push forward efforts to streamline and accelerate this work. Just last year, the state passed a law called the RAPID Act, which is meant to reduce the time it takes to permit these transmission projects. Our New York stakeholders know these transmission upgrades are foundational investments in the state's economy. And that is the strong policy, regulatory, and stakeholder framework that underpins the work we are talking about today.

So now, let's get under the hood of the Upstate Upgrade a bit, and show you what our team is delivering for our customers.

**Matt**

To radically simplify this very complex set of projects, we can break it down into two major portfolios of work:

- The first is Smart Path Connect – A high-voltage transmission rebuild in Northern New York, and
- The second is the CLCPA Transmission Program – Which will rebuild what we call our "local" transmission system across Upstate New York in two phases

As I said earlier, we're updating our execution model to deliver.

- We're partnering with leading construction firms earlier in the process
- We're continuing to improve how we proactively secure resources and manage supply chain risk
- We're leveraging our local relationships to make sure our communities are part of this effort
- And we're already delivering on it

Case in point: Smart Path Connect is our largest transmission project in New York in a generation and one of the first projects we'll complete in the Upstate Upgrade.

And it will go in service on time and on budget later this year. We are rebuilding existing National Grid transmission lines from Croghan in Northern New York down to Marcy. When we rebuild these lines, we'll upgrade them from 230,000 volts to 345,000 volts. That's like adding two lanes to a four-lane highway.

When we are complete, we'll be able to deliver an additional gigawatt of renewable power from Northern New York to the rest of the state. To put that in perspective, that's about a 50% increase from the prior line, and the equivalent of powering 500,000 homes.

And there's a point here that I really want to highlight, which is that this line will reduce congestion on the transmission system, bringing low-cost power to where the demand is. That's going to create hundreds of million dollars of savings for

customers across the state, so this is also a great story from an affordability perspective.

Work is well underway on Smart Path Connect.

- Earlier this year, we completed the final installation of over 600 new steel structures
- In the video you can see some of the final construction to install conductor, that's the wires that carry power, along those structures.

- And Sally and I were on-site to witness the installation of the final span of conductor just three weeks ago.

We are going to complete construction within five years of being selected to deliver the project, which is a major accomplishment for a transmission project of this scale. And most importantly, I'm pleased to share that we're exceeding industry safety metrics with over one million plus man-hours worked to date.

You heard earlier from John and the panel how critical partnerships are to executing on projects like this. The first thing we did when we began was find a strategic partner who could help us get it done. We decided to partner with Burns and McDonnell, a nation-leading construction and engineering firm with a history delivering similar projects. What's great about this partnership approach is it allowed us to leverage the strengths of each organization. It allowed us to secure the workforce upfront. That's huge, because there is more and more competition for the same resources. Burns also managed supply chain risk which helped us successfully navigate inflationary pressures early in the project.

The other reason this project has been so successful is we have great people at National Grid taking ownership of its success. They are on-site every day with our

construction partner, making sure we're able to execute the project on time and problem-solve together.

**Sally**

While Smart Path Connect is a critical transmission project on our bulk power system, our local transmission lines are the "workhorses" of our electric transmission grid. They're the "on-ramp" for renewable generation to access the grid and they are the focus of the CLCPA program. We recognized early that we have an opportunity here to not only unlock and bring on a backlog of generation, but to strategically reinvest in our workhorse transmission lines to make them stronger so that we will continue to deliver reliable service to our customers.

Similar to the ASTI Program Carl's team is executing on in the UK, our CLCPA Transmission Program will come in two phases.

First, we have Phase 1. These are transmission lines we were already planning to replace. So we right-sized those replacements to make sure the lines can carry even more power across them. This will help bring on more generation in Western New York, and additional generation in the Capital Region, these are the teal lines on the map.

Next, we have Phase 2. These are transmission lines which weren't immediately due for replacement, but didn't have enough capacity to accommodate all the generation that's being built in the surrounding area. These projects are needed to address a huge surge in generation buildout in Central and Northern New York. These are the blue lines on the map.

And as an added benefit, we'll replace decades-old infrastructure with state-of-the-art assets. So let's learn a bit more about what these projects entail.

**Matt**

Let's talk about one of our CLCPA Phase 2 projects in Northern New York. What you see here is the Taylorville line in Northern NY, which was originally built in the 1920s to deliver power to rural communities. There's significant interest in building out renewable generation in this area. In fact, if you squint, you can actually see a wind farm in the top left of the screen. Right now, there just isn't enough room on the system to accommodate all this generation. In fact, to deliver all of it, we need to more than double the capacity on this line.

To do that, we're going to replace the Taylorville transmission line. In the process we're also going to update this line to the latest standards, replacing each of those wooden structures you see with steel structures to once again capture multiple benefits for our customers by improving reliability and resiliency.

This is just one example of work in our Phase 2 portfolio and when completed, our Phase 2 upgrades will create another gigawatt of capacity for new power generation being developed across the region. Alternatively, some of our smaller, initial projects are already in service for CLCPA Phase 1, while the rest remain on schedule to hit our in-service dates.

To execute this portfolio, we're using a similar playbook as we did for Smart Path Connect, and we're incorporating learnings we've gained through that project. First, just like we did with Smart Path Connect, we've brought on additional major construction and engineering firms as our partners and have continued our relationship with Burns and McDonnell. That ensures we've got the resources necessary to execute on a portfolio of this magnitude while continuing to leverage the benefits of existing partnerships.

I mentioned earlier we are adapting our delivery model. One example of this is where we're using a "Limited Notice to Proceed" model with our construction partners in certain situations to shorten the up-front timeline of the project. We're bringing those vendors on early in the process, so they can inform our engineering and design. But we'll finalize our contract only after we have those detailed designs in hand, which limits the potential for expensive change orders.

We're also being very strategic when we bring our contracting partners on. For instance, we were able to create significant efficiencies for our projects in Northern New York by optimizing our outage plan before we went to bid for construction resources. That's going to bring down costs and give us greater visibility to hitting our in-service dates.

Similar to our UK colleagues, we've established a single "Major Projects" team to manage this portfolio of major capital investments. Establishing this team has helped us take a strategic approach to how we execute the CLCPA Transmission Program, including how we proactively manage risks relating to supply chain.

We've proactively secured production slots for critical materials, structures and conductors, which we will transfer to our construction partners. We've also accelerated order placement for long lead-time items like substation equipment. We did this early on so we could ensure material availability, while benefitting from National Grid's global scale and procurement expertise. Additionally, and very importantly, we're taking a front-footed approach with our state and local partners.

I've mentioned how important our communities and neighbors are to us, we haven't built on this scale in a generation, so it's absolutely critical we bring our communities along on the journey. It's also important we let them know we're replacing existing lines, and that we're building from existing right-of-way wherever we have it. And

when we do that, we really do benefit from the relationships and credibility we have in these areas as their local utility.

We are also having productive engagement with state agencies, which is already helping us as we go to permit these projects. We've submitted all our "Article 7" permit applications, which is the major permit for transmission facilities in New York, and a big milestone for the program.

**Matt**

We just went through some of the major projects we're undertaking to rebuild our transmission system in New York. As you can see, we are already delivering the Upstate Upgrade and our investment commitments. We're able to do that not only because of our expertise, but also through our credibility. Projects like Smart Path Connect show our regulators and our stakeholders that we will meet the commitments we have made to them. We are relentlessly focused on executing this capital plan and revitalizing our transmission system in New York. This is a significant responsibility – but also a significant opportunity to deliver for our customers, for our communities, and for our investors.

And I firmly believe we have the right people with the passion and commitment to deliver. And I'm really excited to be leading this team and this effort.

**Sally**

Last, we want to talk about how the Upstate Upgrade fits into our 5-year framework. The Upstate Upgrade is fuelling the rate base and capital investment growth of NiMo.

As we discussed earlier, the Upstate Upgrade projects are recovered through different venues, but will have similar return profiles

- We'll recover Smart Path Connect and CLCPA Phase 2 through a cost-share agreement across the state.
- In the NiMo Rate Case we will recover CLCPA Phase 1 and other closely related projects.

I want to take a moment to briefly talk about the NiMo rate case. Last month, we filed a joint proposal for a three-year electric and gas rate plan. That joint proposal was supported by stakeholders including regulatory staff, major employers, the U.S. Department of Defense, and our Upstate labor union.

To put it all in context, overall, the New York business is a critical contributor to National Grid's 5-year plan, making up nearly 30% of the Company's 5-year capital commitment.

Of our $21 billion investment over the 5-year framework, about 45% is Gas, and 55% is electric.

- About 20% of our 5-year plan has already been delivered in FY25;
- About 15% will be delivered via the Downstate Rate Case over the next 2 years; and
- A further 35% will be delivered via the NiMo Joint Proposal and already approved statewide filings such as CLCPA Phase 2.

That puts us in a position that, by the end of the summer, we expect over 70% of the capital base in the 5-yr frame will have regulatory approval.

The reason our investments have received this level of support is because we are viewed as a trusted partner in New York. We have shown our stakeholders that we can meet our commitments, and we're always looking to improve how we deliver for our customers and for our state.

These capabilities we're developing to deliver major electric projects in Upstate New York are also going to support our delivery of infrastructure projects across our entire business, whether gas or electric.

And because of that, our New York business is in an incredible position to deliver on our capital plan.

So let me leave you with a few points. We are already delivering this program. We are innovating.

- Smart Path Connect, the largest transmission project in our NY history is on schedule and budget – and will complete this year
- CLCPA phase 1 – is under construction, proceeding on schedule and budget
- CLCPA phase 2 – is underway, contracts are awarded, and we're progressing design and cost estimates
- All of Upstate Upgrade regulatory approvals are in place.

We are proud to deliver this generational investment for New York. We appreciate everyone's time today and look forward to hearing your thoughts and any questions you may have.