ATTACHMENT F

EXHIBIT NOS. NMPC-200 – NMPC-201

PREPARED DIRECT TESTIMONY
OF ANDREW BYRNE

Exhibit No. NMPC-200

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Niagara Mohawk Power Corporation d/b/a National Grid	**)** **)**	**Docket No. ER23-_____-000**

PREPARED DIRECT TESTIMONY
OF ANDREW BYRNE
ON BEHALF OF NIAGARA MOHAWK POWER CORPORATION

I. BACKGROUND AND QUALIFICATIONS

Q. Please state your name, current title, and business address.

A. My name is Andrew Byrne. I am employed as the Commercial Development Director, Clean Energy Development for National Grid, the public utility holding company that wholly owns Niagara Mohawk Power Corporation ("Niagara Mohawk" or "NMPC"). My business address is 170 Data Drive, Waltham, MA 02451.

Q. Please summarize your educational background and work experience.

A. I have a Bachelor of Commerce degree and a Bachelor of Business degree from the University of Queensland, Australia. I am also an Australian Certified Practicing Accountant.

I joined National Grid in July 2017 and have held director-level positions in the Clean Energy Development Team and the Finance Business Partner Team. Prior to joining National Grid, I was employed by Novanta, a technology manufacturing company, as the Senior Director and head of corporate Financial Planning and Analysis. Prior to Novanta, I worked for InterGen, an international power producer in multiple finance positions in the United States and Australia.

II. PURPOSE AND SUMMARY OF TESTIMONY

Q. What is the purpose of your testimony?

A. The primary purpose of my testimony is to discuss NMPC's request in this proceeding for incentive treatment associated with its portion of a set of upgrades to the northern New York transmission system known as the Smart Path Connect Project (the "Project" or "SPC Project"). Specifically, NMPC is seeking approval for inclusion of 100 percent prudently incurred construction work in progress ("CWIP") in rate base ("100 Percent CWIP Incentive").

In addition to the 100 Percent CWIP Incentive request submitted herein, the Commission previously granted NMPC's request for authorization to recover 100 percent of prudently incurred costs of transmission facilities that are cancelled or abandoned, in whole or in part, for reasons beyond NMPC's control ("Abandoned Plant Incentive"). The Abandoned Plant Incentive was requested in a separate petition for declaratory order filed with the Commission on November 19, 2021, and ultimately granted by the Commission in an order issued October 24, 2022.[1]

My testimony provides information necessary to support NMPC's requested 100 Percent CWIP Incentive for the Project. As I discuss below, developing and placing the Project into service will impose a number of substantial financial risks and challenges to NMPC, as well as construction risks that may threaten timely completion of the Project. I also discuss the mechanisms

[1] *See Niagara Mohawk Power Corp.*, 181 FERC ¶ 61,065 (2022).

that NMPC is using to mitigate these risks, and how the 100 Percent CWIP Incentive and the Commission's grant of the Abandoned Plant Incentive are appropriately tailored incentives to alleviate those risks and challenges. Lastly, I explain the Cost Containment Mechanism that NMPC proposes to implement to control costs.

Q. Are you sponsoring any exhibits to support your testimony?

A. Yes. In addition to this testimony, I am sponsoring the following exhibit:

- **Exhibit No. NMPC-201** – Copy of NMPC's Corporate Credit Ratings Reports from Moody's

Q. Please provide an overview of NMPC.

A. NMPC is a Commission-regulated public utility company organized and operated under the laws of the State of New York. It provides electric service to over 1.5 million customers and natural gas service to over 540,000 customers in upstate New York. NMPC owns and operates transmission facilities in New York, all of which are subject to the NYISO's operational control. NMPC recovers its FERC-regulated transmission revenue requirements pursuant to formula rates under Attachment H to the NYISO Open Access Transmission Tariff.

The outstanding common shares of NMPC are wholly owned by National Grid USA. National Grid USA is an indirect, wholly-owned subsidiary of National Grid plc, a company incorporated in England and Wales. NMPC is the only National Grid USA subsidiary that owns or operates transmission facilities in New York.

Note that although NMPC does business in New York under the name "National Grid," for purposes of this testimony, in order to avoid confusion, I will use the terms "Niagara Mohawk" or "NMPC" to refer to the New York service company affiliate, and "National Grid" to refer to the parent holding company.

Q. Would you please briefly summarize the SPC Project, why it is needed, and how it benefits the New York transmission system?

A. Yes. The SPC Project involves rebuilding approximately 100 miles of existing 230kV transmission lines along with associated equipment, converting nearly all of these facilities to 345kV, and upgrading approximately 10 substations in northern New York. The Project is being jointly developed by National Grid and the New York Power Authority ("NYPA"), and is a direct outgrowth of New York climate-related legislation: (1) the Climate Leadership and Community Protection Act, which requires significant reductions in greenhouse gas emissions over the next 30 years, and (2) the Accelerated Renewable Energy Growth and Community Benefit Act, which provides for significant transmission investment in New York, including the ability of the New York Public Service Commission ("NYPSC") to designate certain projects as Priority Transmission Projects, which will be developed by NYPA, subject to approval by its Board of Directors, along with joint development partners selected by NYPA. The SPC Project was designated by the NYPSC as a Priority Transmission Project based on findings

that it will "unbottle" both existing and future renewable generation and is needed on an expedited basis to meet New York's emissions reduction mandates.

A full discussion of the underlying legislation, the NYPSC's findings, and the costs and benefits that the Project will provide to New York is set forth in the Prepared Direct Testimony of Brian Gemmell, included as Exhibit No. NMPC-100 to this filing.

III. FINANCIAL REPERCUSSIONS AND RISKS ASSOCIATED WITH THE SPC PROJECT

A. Magnitude of the Investment Relative to Other National Grid and Niagara Mohawk Capital Projects

Q. Please discuss the magnitude of the SPC Project.

A. The total cost for the Project is approximately $1.2 billion. NMPC's portion of the Project costs is estimated at approximately $534.5 million, or $495 million excluding financing costs, making it a major financial undertaking for the company. Below is a cost forecast and spending timeline for NMPC's share of the Project investment through the anticipated in-service date of December 30, 2025.

Figure 1 - SPC Project Spending Projections ($m)[2]

	Prior	FY22	FY23	FY24	FY25	FY26	FY27	Total
SPC	4	69	73	145	132	53	19	495

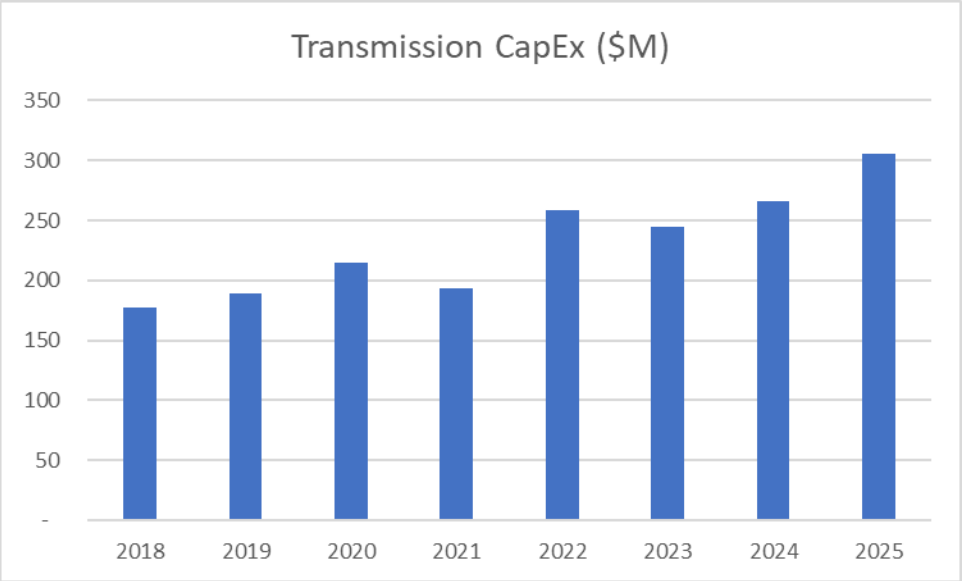
Expenditures for the SPC Project represent a substantial increase in the overall level of NMPC's transmission investment in New York, compared to previous years and other capital investments that NMPC plans to make during the period that the Project will be in development.

Q. Please provide a general overview of Niagara Mohawk's transmission investment plans.

A. NMPC has historically increased its annual investment in transmission to meet the growing needs of its transmission customers. NMPC's transmission investments grew from $177 million in FY18 to $193 million in FY21. That trend is expected to accelerate going forward. NMPC invested $259 million in transmission in FY22 and projects its annual transmission investments to grow to $305 million in FY25. *See* Figure 2 below.

[2] For purposes of my testimony, references to fiscal years are to National Grid's fiscal years. National Grid fiscal years start April 1 of the prior year, continuing to the next March 31 (*e.g.*, FY22 runs from April 1, 2021 through March 31, 2022).

Figure 2 - NMPC Historical and Projected Transmission CapEx



Q. Please discuss the magnitude of Niagara Mohawk's transmission investment plans within the context of Niagara Mohawk's overall capital expenditure program.

A. Overall capital expenditure ("CapEx") across electric distribution, sub-transmission, and transmission is expected to grow from $647 million in 2022 to $895 million in 2025. Transmission investments are expected to represent between 33.6 percent and 36.6 percent of annual electric CapEx investment over that period. Also, it is reasonable to expect that NMPC's need to invest in transmission infrastructure will increase more dramatically over the next ten years as efforts to "unbottle" renewable energy and meet emissions reduction targets in New York intensify. The potential increase in transmission investment due to New York's emissions reductions goals is likely to increase the proportion of NMPC's investment in electric infrastructure that is dedicated to transmission.

Q. How does the investment in the SPC Project compare to Niagara Mohawk's transmission plant in service?

A. Transmission capital projects undertaken by NMPC are typically much smaller than the SPC Project, with 85 percent of all capital projects budgeted at less than $20 million. To further put the scope of the Project investment in perspective, NMPC's electric transmission plant in service as of March 31, 2021, was approximately $3,220,641,000. The SPC Project will increase NMPC's transmission investment approximately $495,000,000 or 15 percent. In addition to the unusually large size of the investment, it is also worth noting that NMPC is voluntarily investing in a project that is beyond the typical investment required of NMPC as a transmission-owning member of NYISO.

B. Financial Impact of the Investment in the SPC Project and Other Capital Projects

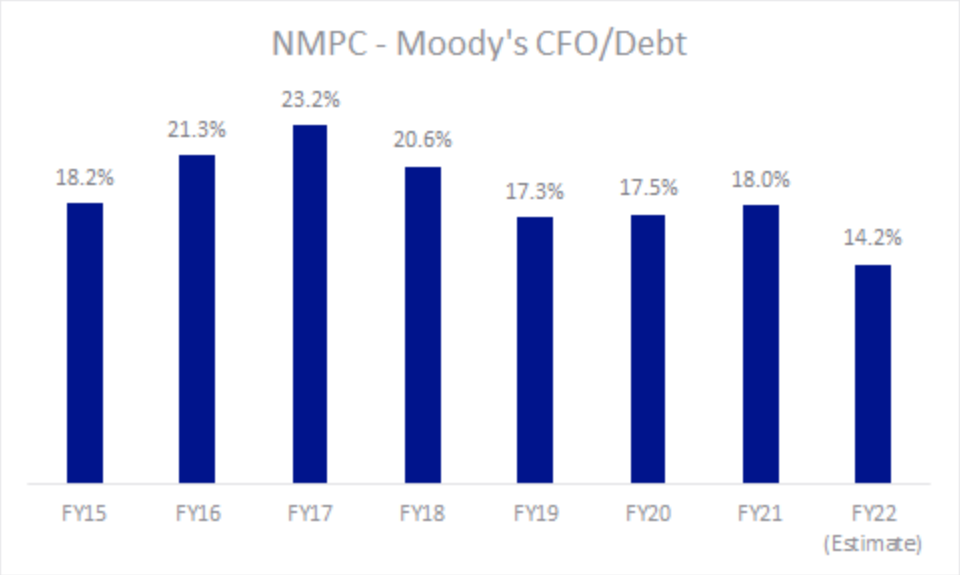
Q. How will Niagara Mohawk finance the construction of the SPC Project?

A. NMPC will finance the costs of the Project as it is being constructed through a mix of internally generated cash flow, capital infusions from its parent company, National Grid, and debt financing. NMPC will choose the most cost-effective method, or combination of methods, for raising the necessary capital. Once placed in service, NMPC expects to finance the assets with a combination of equity and long-term debt in line with industry standards.

Q. Please discuss Niagara Mohawk's current financial condition.

A. As discussed above, NMPC's investments in electric infrastructure have steadily increased over time. Over the same period, NMPC has endured a deterioration of key financial ratios used by credit reporting agencies, *i.e.*, credit metrics, that reinforces the negative correlation between increasing CapEx and financial health. NMPC's free cash flow to debt ratio dropped from a high of 23.2 percent in 2017 to 18 percent in 2021. *See* Figure 3. NMPC's expanding CapEx program has historically placed downward pressure on its credit metrics, and I expect that trend to continue.

Figure 3 - NMPC's Historical Cash Flow to Debt Ratio



Q. How will the Project investments affect Niagara Mohawk's financial health?

A. The SPC Project will impact NMPC's credit metrics during the construction period, as well as after the Project is placed in service. As shown in Figure 1 above, NMPC will incur annual costs of up to $145 million during the construction phase of the Project. These substantial expenses, in conjunction with the significant additional transmission CapEx that NMPC anticipates over the next several years, will increase the need for NMPC to seek external financing in order to support this additional spending. This, in turn, puts pressure on NMPC to ensure that it supports its credit metrics in order to ensure cost-effective access to capital markets.

Q. Why are credit ratings important to a utility?

A. Credit ratings are used to evaluate a utility's ability to make timely payments of principal and interests on debt. Accordingly, they have a significant impact on the terms under which a utility will be able to raise capital. The higher the credit rating, the lower the cost of borrowing, which benefits customers. The converse is also true. A higher credit rating also enhances the quality of National Grid's equity investment in NMPC and could provide better access to capital should National Grid seek additional equity investment for NMPC. These benefits are especially important during times of stress. A highly rated entity can ensure it retains access to capital markets, to remain liquid and continually fund business operations, while a lower-rated entity may have its access to capital markets limited.

Q. How do a utility's credit ratings affect the availability and cost of capital?

A. Credit ratings provide an objective basis for investors or lenders to compare credit quality of companies within an industry and across industries. A higher rating, even within the band of ratings considered investment-grade, gives utilities access to a larger segment of both public and private capital markets. Greater access to capital markets has the effect of lowering the cost of capital. Higher-rated utilities can issue debt at lower costs, which benefits customers by lowering the overall rate of return. Companies with lower credit ratings have a more difficult time accessing capital when markets are strained, particularly if liquidity dries up.

Q. Please discuss NMPC's and National Grid's credit ratings.

A. National Grid plc, the holding company, has senior unsecured debt ratings of Baa2 and BBB from Moody's Investors Service and Standard & Poor's, respectively. The US subsidiary, National Grid USA, also currently maintains senior unsecured ratings of Baa2 and BBB from Moody's and Standard & Poor's. Both are investment-grade ratings. Most of the operating companies in the group, including NMPC, have senior unsecured debt ratings of Baa1/BBB+.

Q. What do these ratings generally show about NMPC and National Grid?

A. The credit ratings for National Grid and NMPC suggest that, while both entities remain investment-grade, they are subject to risks in the utility sector. In the NMPC credit opinion published by Moody's on November 1, 2021, Moody's downgraded NMPC to Baa1, noting that its credit quality was constrained by downward pressure on cash flows following the most recently filed retail rate case.[3] Specifically, the opinion highlighted downward pressure on NMPC's cash flows due to the allowed ROE, capital structure, and the effects of tax reform. The impact of these factors is illustrated by Moody's in the chart below. *See* Figure 4. The projected reduction in NMPC's cash flow relative to its debt drive the downward trend in the key credit metric used by Moody's to assess financial health. Moody's found that NMPC's proposed settlement incorporated sizable rate modifiers which limited the company's cash flow growth at a time when it continues to undertake a large and growing CapEx program. Moody's opinion demonstrates that growth in a company's capital expenditures can increase a company's financial risks and put further strain on credit ratings. Moody's projected that NMPC's credit metrics would continue to weaken. *See* Figure 4.

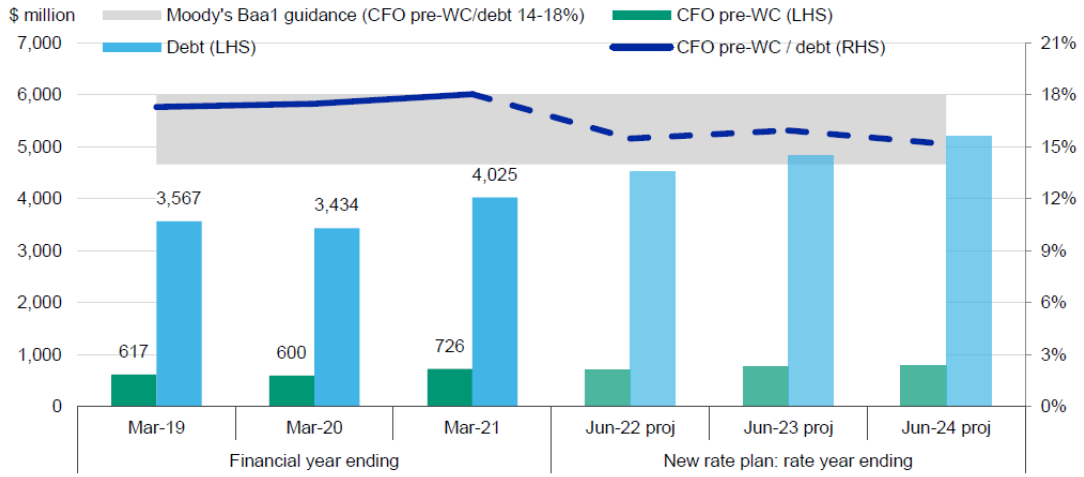
[3] *See* Exhibit No. NMPC-201; Moody's Investors Service, "Niagara Mohawk Power Corporation Update following downgrade to Baa1," Nov. 1, 2021.

Figure 4 - Moody's Investors Service, NMPC CFO/Debt

Exhibit 1

We expect that NiMo's credit metrics will weaken in the forthcoming rate plan

Projections based on Joint Proposal filed in September 2021



Key assumptions for forthcoming rate plan: (1) No timing differences, e.g. those pertaining to remittance of NYSERDA balances; (2) No additional covid-19 related costs of any future recovery of associated costs; (3) Deferred tax for rate year (RY) 1 assumed as the rate plan's tax expense for RY1; (4) other potential adjustments excluded.

Source: Moody's Investors Service

Q. Have the credit reporting agencies expressed concern about Niagara Mohawk's high capital expenditure profile?

A. Yes. As discussed above, Moody's noted in November 2021 that a significant planned CapEx profile (accounting for rate case proposals through November 2021, which excludes the SPC Project), combined with weaker cash flow metrics, were negative credit indicators.

Q. In this context, how could the planned investment in the SPC Project and other future capital investments affect Niagara Mohawk credit metrics and financial health?

A. Credit metrics are an ongoing concern for NMPC at the current rating. Moody's has established 14 percent as the lower limit of the acceptable range of its Cash

Flow/Debt ratio for NMPC at its current rating. Moody's currently projects NMPC's Cash Flow/Debt ratio to drop to 14.7 percent over the next three years. Given the limited room for deterioration of this key financial ratio, negative impacts to cash flows or increases in debt levels caused by future transmission investments, including the SPC Project, may have an impact on the current rating.

After the latest downgrades to NMPC's credit rating, both Moody's and Standard & Poor's have issued a stable outlook. However, that stable outlook is based, at least in part, on the expectation that NMPC maintains a financial profile in line with the guidance for that rating. In order to maintain metrics at their current level, it is important that the SPC Project generates sufficient cash flows both during construction and during the life of the asset.

Q. What would the consequences be if Niagara Mohawk's credit ratings were to be downgraded further?

A. As discussed above, one of the financial risks NMPC faces in connection with a large capital expenditure, such as that associated with the SPC Project, is that the required cash spending and debt incurrence will harm its credit rating. The primary reason Niagara Mohawk must protect its credit rating is to ensure a reasonable cost of capital for its customers. A lower credit rating will increase the cost of debt for future capital market issuances and would make access to capital markets more difficult. Either of these outcomes would result in higher costs for customers. Additionally, limits on NMPC's ability to access capital markets on

favorable terms could eventually become a hindrance to the development and construction of large capital projects.

IV. PROJECT CONSTRUCTION RISKS FACED BY NIAGARA MOHAWK WITH RESPECT TO THE SPC PROJECT

Q. What regulatory approvals will the Project require?

A. The Project requires both a Certificate of Environmental Compatibility and Public Need ("Certificate") and an approved Environmental Management and Construction Plan ("EM&CP") from the NYPSC.

On June 15, 2021, NMPC and NYPA filed, under Article VII of the New York Public Service Law, an application for a Certificate in NYPC Case No. 21-T-0340.[4] On May 19, 2022, NYPA, NMPC, the New York Department of Public Service, the New York State Department of Environmental Conservation, the New York State Department of Agriculture and Markets, and other parties submitted to the NYPSC a joint proposal to address and resolve all statutory and regulatory issues related to NYPA and NMPC's Article VII Application, and on August 11, 2022, the NYPSC approved the Article VII Application.[5]

NMPC submitted its EM&CP to the NYPSC in three phrases. The first phase of the Project's EM&CP was approved in an order issued by the NYPSC on

[4] Application of New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid for a Certificate of Environmental Compatibility and Public Need for the Rebuild of Approximately 100 Linear Miles of Existing 230 kV to Either 230 kV or 345 kV along with Associated Substation Construction and Upgrades Along the Existing NYPA Moses-Willis 1&2, Willis-Patnode, Willis-Ryan, a portion of Ryan-Plattsburgh and National Grid's Adirondack-Porter 11, 12, and 13 Lines in Clinton, Franklin, St. Lawrence, Lewis, and Oneida Counties, New York, NYPSC Case No. 21-T-0340 (June 15, 2021) ("Article VII Application"), available at https://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=21-T-0340.

[5] Case 21-T-0340, Order Adopting Joint Proposal (issued Aug. 11, 2022) ("Article VII Order").

September 16, 2022.[6] This approval allows NMPC to begin construction of the first segment of its portion of the Project. Approval of the two additional phases of the EM&CP was received on January 20, 2023 for 2A,[7] and is expected in November 2023 for 2B.

Q. With these regulatory approvals already obtained or reasonably anticipated, will the SPC Project face any further development risks?

A. Yes. The SPC Project still faces significant risks and challenges relating to construction. In particular, these risks have the potential to increase the costs and/or delay the in-service date of the Project.

Q. What type of construction-related risks and challenges will the SPC Project face?

A. The Project faces a number of construction-related risks and challenges, including those relating to scheduling outages, increasing material costs, supply chain disruptions, and securing sufficient labor for the duration of project construction. A number of these risks are due to, or exacerbated by, the continuing impacts of the global COVID-19 pandemic.

Q. What are the risks relating to outages that NMPC and NYPA will face in constructing the project?

A. Because the existing facilities provide significant amounts of power to downstate New York, construction will require substantial outage coordination with NYISO

[6] *See* NYPSC Case 21-T-0340, Order Approving Environmental Management and Construction Plan (Sept. 16, 2022).
[7] *See* NYPSC Case 21-T-0340, Order Approving Environmental Management and Construction Plan (Jan. 20, 2023).

between hard and soft outages to ensure transmission network reliability. Outages to perform the necessary facility work may be limited and may require NMPC to accommodate requests from the system operator to safeguard system reliability, *e.g.*, shorter outage/construction durations or temporary transmission lines. The scale of the Project and the volume of additional transmission projects currently underway across New York also raises the risk that required system outages may not be obtainable in the timeframe needed for Project completion, *i.e.*, NYISO may choose not to grant requested system outages due to system operation constraints. These risks related to the outages needed to construct and interconnect the proposed transmission facilities have the potential to affect the Project schedule and increase Project development costs.

Q. Please discuss the procurement-related risks associated with construction of the Project.

A. Current market conditions, such as increased inflation and the impact of the COVID-19 pandemic, have resulted in a significant increase in the cost of raw materials, particularly steel. Although NMPC has taken reasonable steps to mitigate this risk, which I discuss below, given ongoing trends, it seems highly likely that these costs will continue to increase through the procurement and construction phase.

Other procurement-related risks include:

- Demand for structures and conductors, given supply chain challenges and a series of large transmission projects being developed during the same

time period and competing for materials, is creating pressure on the prices of these items and, depending on availability, could also impact the Project's schedule.

- Potential labor shortages and other issues. As with structures and conductors, the large number of transmission projects being undertaken in New York and nationally during the same time period as the Project could strain the availability of transmission line contractors and crews, particularly if there are any Project delays. Moreover, there is ongoing uncertainty related to federal vaccination mandates and the willingness of represented labor to comply with these regulations.
- Manufacturing availability, quality, and delivery logistic risks are significant for a project of this scale. These risks are likely to be exacerbated by the impacts of the COVID-19 pandemic.

Q. What other construction-related risks does the Project face?

A. The NMPC portion of the Project is constructed over 55 miles of right of way. Construction along these rights of way poses risks related to sub-surface geological formations. Those risks include hitting rock (such as Adirondack granite) or encountering unexpected geological conditions, which would require more drilling and changing structure foundation design. Although this risk is somewhat mitigated by geotechnical investigations conducted in advance of any necessary drilling, unexpected geotechnical issues may increase Project costs and lead to schedule delays.

Weather has the potential to increase construction costs and delay the construction schedule beyond the allowances initially included as part of the Project cost estimate and schedule. For example, the access plan includes base-level assumptions for utilizing gravel roads and matting in the rights of way ("ROWs"). However, seasons with more rain or softer ground conditions in winter could result in significantly higher levels of matting required to mitigate environmental impacts.

Also, as explained in NYPA's SPC Project-related filing in Docket No. ER22-1014, there are siting and construction-related risks with respect to certain new and expanded substations included in NYPA's portion of the Project. For example, the location of the proposed Haverstock Substation entails environmental and engineering siting risks that could require NYPA to pursue a more complex construction plan that would add approximately $25 million to the cost of the Project, plus the cost of an enhanced FAA permit for the transmission tower height needed over alternative terrain. Although these risks are specific to NYPA-owned facilities, the SPC Project is a single project, and therefore any risk to one of the co-developers necessarily involves a risk to the overall Project. Moreover, NMPC could be required to make material modifications to its own designs to accommodate any modifications NYPA made to its portion of the

Project in connection with these risks. Such modifications may increase the cost of construction and extend the Project development schedule.

Q. Has NMPC taken steps, beyond requesting the risk-reducing incentives discussed in further detail below, to minimize the various risks associated with the SPC Project?

A. Yes, NMPC has taken a number of steps to minimize the risks associated with developing and constructing the SPC Project. These include the following:

- NMPC is jointly developing the project with NYPA. Joint development will help with outage and schedule coordination, and collaboration on design of structures and substations. Joint development will also help mitigate certain financial risks to NMPC, most notably limiting the scope and resulting costs for which NMPC will be responsible for financing.
- NMPC and NYPA have and will continue to utilize best-in-class project management practices and contracting strategies. This includes the development of a detailed schedule identifying all Project tasks, resources, and sequences for such tasks. The schedule will serve to ensure that the entire Project team knows what needs to be completed, by when, and by whom. Additionally, standard procurement processes will be utilized to secure the materials and labor resources at competitive prices, which may include the use of a competitive bid process for needed materials. Further, best-in-class practices will be utilized to the maximum extent possible to

assist in incorporating lessons learned on previous projects and avoiding new risks.

- As discussed above, NMPC and NYPA have sought, to the greatest extent possible, to site the project using existing ROWs already owned or controlled by NMPC and NYPA. While there are still land rights that NMPC and NYPA will need to obtain in order to effectuate the Project, the maximal use of existing ROWs will significantly reduce the need for additional land rights. NMPC continues to build upon its long-established relationship with NYPA along this shared ROW (portions of which are also occupied by NYPA 765kV Marcy Massena transmission line), which mitigates coordination challenges.
- NMPC is incorporating lessons learned from the ongoing NYPA Smart Path Project. NMPC's portion of the SPC Project is a continuation of NYPA's Smart Path Project. NMPC has worked extensively to gain lessons learned by visiting the construction site, which has allowed us to incorporate best practices into our future construction execution plans. These include outage execution sequencing and helicopter soft line stringing to reduce cost and environmental impact.
- NMPC completed extensive planning studies of the Adirondack-Porter 345-kV upgrade options, enabling a cost-effective solution.
- NMPC has well-established community outreach protocols for the Adirondack-Porter facilities, including relationships with the

approximately 350 landowners along the ROW and with Lewis and Oneida county and town representatives.

V. THE REQUESTED INCENTIVES ADDRESS THE SPECIFIC RISKS FACED IN THE DEVELOPMENT OF THIS PROJECT

A. 100 Percent CWIP In Rate Base

Q. Why is Niagara Mohawk seeking the 100 Percent CWIP Incentive for the SPC Project?

A. As discussed above, the SPC Project is a large-scale transmission project requiring large capital expenditures during the construction period. The additional revenues generated through including 100 percent CWIP in rate base for the Project would generate additional cash flow that will serve to reduce the overall need to raise capital during the long construction period. Including CWIP in rate base would also help to alleviate financial pressures on NMPC's credit metrics. Further, adequate cash flow will also help assure that NMPC obtains financing on reasonable terms to fund the SPC Project and other needed transmission and distribution projects. This is especially important when considering the recent downgrade in NMPC's credit rating, and expectations for inflation and upward pressure on the cost of credit.

The availability of current cash flow through the 100 Percent CWIP Incentive will help NMPC raise debt capital from investors who may otherwise be discouraged by delays in the recovery of the debt and equity carrying costs of the Project investments during the construction period. Generally, the investment community views CWIP in rate base as more favorable than Allowance for Funds

Used During Construction ("AFUDC"), given that AFUDC is not cash income but a promise to pay once the project is completed and placed into service.

Q. Will the 100 Percent CWIP Incentive help mitigate the stresses on Niagara Mohawk's credit metrics?

A. Yes. As noted, NMPC's senior unsecured debt is currently rated BBB+. It is critical that the company minimize the impacts of the large investments in the Project on cash flows and financial ratios. NMPC's request for the 100 Percent CWIP Incentive, if granted, will minimize those impacts. Without CWIP, NMPC's free cash flow to debt ratio is projected to drop between 5 and 40 basis points on an annual basis during the construction of the SPC Project.

Q. Are there any benefits derived from the 100 Percent CWIP Incentive that you have not discussed?

A. Yes. In addition to the benefits to NMPC's cash flows, debt levels, and credit metrics discussed above, the 100 Percent CWIP Incentive also directly benefits customers. Unlike the AFUDC cost recovery mechanism, the 100 Percent CWIP Incentive will enable NMPC to recover SPC Project costs during the construction period. The ability to recover costs during construction prevents a large and sudden increase in rates once the Project is placed in service. The gradual increase in rate base provides rate stability for customers that otherwise may realize rate shock once the Project begins commercial operation and NMPC includes in its transmission formula rate a cash return on both the direct cost of the plant and the capitalized AFUDC, as well as a return of capital through

depreciation. In addition, it is well known that the overall revenue requirements paid by customers are lower for projects with the 100 Percent CWIP Incentive versus those that capitalize AFUDC.

Q. Will Niagara Mohawk establish accounting procedures to ensure that customers are not double charged for both CWIP and AFUDC?

A. Yes. NMPC is proposing to adopt accounting procedures to ensure that NMPC does not recover both an Allowance for Funds Used During Construction and the 100 Percent CWIP Incentive for the SPC Project. The details of these procedures are further discussed in the testimony of Ms. Tiffany M. Escalona, Exhibit No. NMPC-400.

Q. How will the incentives for the Project mitigate the risks you have described?

A. As noted earlier in my testimony, the development and construction of this large-scale Project involves significant risk, and its operation will provide important benefits to transmission customers statewide. NMPC's share of the Project is $495 million in development and construction costs, excluding financing costs. This is a significant transmission investment for NMPC, whose financial conditions, as noted earlier in my testimony, are already under pressure as a result of its significant transmission capital expenditure program. The smaller the negative impact of the Project on free cash flow, the less likely that important credit metrics are adversely affected and NMPC's credit ratings are at risk of further downgrade. Moreover, the stronger NMPC's credit metrics and ratings, the more likely it will be able to raise capital on favorable terms to support its

significant ongoing investment needs, including the Project. In addition to these financial risks, the Project faces numerous construction-related risks that I discussed earlier. .

Given the increasing efforts in New York and elsewhere to address the impacts of climate change, the drivers of the development of large-scale transmission projects such as the SPC Project will proliferate. As previously discussed, the development and construction of large-scale transmission projects impose significant financial burdens on project developers and thus the financial challenges associated with these projects will only intensify. NMPC expects that it will need to be prepared to assume the magnified risks of developing numerous large-scale transmission projects to satisfy the mandates of policymakers and adapt to policy changes over time.

B. Abandoned Plant Incentive

Q. Please explain why Niagara Mohawk requested the Abandoned Plant Incentive.

A. As explained in its separate Petition for Declaratory Order filed on November 19, 2021, in Docket No. EL22-17, NMPC requested the Abandoned Plant Incentive to offset some of the uncertainties associated with the SPC Project – *e.g.*, if one or more components of the Project is unable to move forward for reasons outside of NMPC's control.

On March 11, 2022, the Commission conditionally granted NMPC's request for the Abandoned Plant Incentive in light of the risks and challenges

associated with development of the Project.[8] On August 23, 2022, as supplemented on October 11, 2022, NMPC submitted a compliance filing to satisfy the condition in the March 11, 2022 order. The Commission accepted NMPC's compliance filing in an order issued October 24, 2022.

Consistent with the Commission's requirements in Order No. 679, before NMPC recovers any costs related to the Abandoned Plant Incentive, it will make a section 205 filing at the Commission seeking approval of the cancelled transmission plant costs and an amortization for the recovery.

VI. COST CONTAINMENT MECHANISM

Q. Explain the origins and purpose of the proposed Cost Containment Mechanism.

A. NYPSC indicated that it expected that a cost containment mechanism would be included as part of the SPC Project in its order determining that the Project qualifies as a "priority transmission project" for the state of New York.[9] Therefore, NMPC is proposing a Cost Containment Mechanism for the Project that is substantially identical to the mechanism proposed by NYPA in its filing relating to the SPC Project[10] and conditionally accepted by the Commission.[11] The proposed Cost Containment Mechanism would result in NMPC and customers sharing the risk of cost overruns related to costs that are included for

[8] *See Niagara Mohawk Power Corp.*, 178 FERC ¶ 61,173, at PP 29-30 (2022).
[9] *Proceeding on Motion of the Commission to Implement Transmission Planning Pursuant to the Accelerated Renewable Energy Growth and Community Benefit Act*, NYPSC Case 20-E-0197, Order on Priority Transmission Projects at 27 (Oct. 15, 2020).
[10] Docket No. ER22-1014, NYPA SPC Project 205 Filing, Transmittal Letter at 31-36 (filed Feb. 10, 2022).
[11] *N.Y. Power Auth.*, 180 FERC ¶ 61,004, at PP 44-46 (2022).

purposes of the cap (referred to as "Eligible Project Costs"), rather than customers bearing the entire risk of cost overruns (at least with respect to ROE). This type of cost containment mechanism has been previously approved by the NYPSC and the Commission, such as the Central East Energy Connect ("CEEC") Project being developed by LS Power and NYPA.[12]

Q. How will the proposed Cost Containment Mechanism be implemented?

A. Under NMPC's proposed Cost Containment Mechanism, when Eligible Project Costs exceed the Cost Cap, NMPC will earn no ROE for 20 percent of the equity portion of actual costs that exceed the Cost Cap. This will not limit NMPC's recovery of depreciation and debt costs. Additionally, certain Third-Party Costs and Unforeseeable Costs in excess of 2.5 percent of the Cost Cap are excluded from Eligible Project Costs and recovered under the NMPC transmission formula rate.

Q. What is the Cost Cap that NMPC is proposing and how was it calculated?

A. The Cost Cap for the NMPC portion of the Project is $481.8 million, exclusive of interconnection and network upgrades resulting from the NYISO evaluation process and additional financing costs. The Cost Cap is based on the Project cost estimate that NMPC prepared for purposes of the Article VII Application submitted to the NYPSC. The assumptions underlying the development of this estimate were set forth in Exhibit 9 to NYPA and NMPC's Article VII

[12] *N.Y. Indep. Sys. Operator, Inc.*, 175 FERC ¶ 61,210 (2021).

Application and the estimated costs for the Project were considered as part of the NYPSC's approval of that application.[13]

Q. How are Eligible Project Costs defined?

A. Eligible Project Costs are costs incurred to develop, construct, and place the Project in service, excluding Third-Party Costs and Unforeseeable Costs in excess of 2.5 percent of the Cost Cap. This proposal for defining Eligible Project Costs is nearly identical to that conditionally accepted by the Commission with respect to the NYPA portion of the SPC Project, and substantially similar to the mechanism approved by the Commission in connection with the settlement entered into by LS Power and other New York stakeholders with respect to the CEEC Project in Docket No. ER20-716, with certain differences that I will discuss. One difference is that, unlike the cost containment mechanism approved for the CEEC Project, NMPC is proposing to include Project Development Costs. The CEEC Project Cost Cap did not include Project Development Costs because they were not part of that project's bid, but NMPC did include them in its Article VII estimate for the SPC Project, and thus they are appropriately included in Eligible Project Costs.

[13] *See* Article VII Order at 6.

Q. How are Third-Party Costs defined?

A. Third-Party Costs include: (i) interconnection and network upgrade costs resulting from the NYISO evaluation process; (ii) property taxes; and (iii) any increased costs (*i.e.*, costs incurred related to the rescheduling of outages or to the relocation of utility assets), which are beyond the ability of NMPC to control or mitigate. NMPC proposed to define Third-Party Costs the same way they were for the Segment A project, with two exceptions that narrow the scope of the exclusions. First, for Segment A, LS Power and NYPA included certain real estate-related acquisition costs in Third-Party Costs (*i.e.,* excluded from Eligible Project Costs), whereas NMPC is proposing to include such costs in Eligible Project Costs, as they were included in NMPC's Article VII cost estimate. Similarly, LS Power and NYPA included both property taxes and sales taxes in the definition of Third-Party Costs, whereas NMPC is proposing only to include property taxes in the definition of Third-Party Costs, as sales taxes were included in NMPC's cost estimate for the SPC Project.

Q. How are Unforeseeable Costs defined?

A. Unforeseeable Costs are costs that, with the exercise of commercially reasonable diligence, could not have been anticipated at the time the estimate was developed, and include:

- Costs associated with material modifications to the routing or scope of work of the Project that results from a NYPSC order, negotiation, or settlement agreement within the siting process, or are imposed or required

by any other governmental agency. For the avoidance of doubt, foreseeable obligations, as included in the New York State Article VII Certificate Application, or non-material obligations imposed upon NMPC as a normal part of the siting process, shall not be deemed to be Unforeseeable Costs;

- Costs associated with changes in applicable laws and regulations, or interpretations thereof by governmental agencies;
- Costs incurred as a result of orders of courts or action, or inaction, by governmental agencies;
- Costs related to destruction, damage, interruption, suspension, or interference of or with the Project caused by landslides, lightning, earthquakes, hurricanes, tornadoes, severe weather, fires, explosions, floods, epidemics, pandemics,[14] acts of public enemy, acts of terrorism, wars, blockades, riots, rebellions, sabotage, insurrections, environmental contamination or damage, or strike or otherwise unavailability of skilled labor, provided that (i) the cause was not reasonably within the control of NMPC, (ii) NMPC made reasonable efforts to avoid or minimize the adverse impacts of any of the above-listed events, and (iii) NMPC took reasonable steps to expeditiously resolve the event after it occurred;

[14] NMPC proposes to add "pandemics" to the force majeure provision of "unforeseeable costs" in recognition of the ongoing global health emergency. *See, e.g.*, *Business Continuity of Energy Infrastructure*, 171 FERC ¶ 61,007 (2020) (acknowledging the impact of the national emergency caused by COVID-19 on business continuity of regulated entities).

- Steel cost escalation that is greater than the Construction Cost Index applied to steel costs in determining the Cost Cap;[15]
- Total actual project cost escalation, excluding steel costs, that are greater than 150 percent of the Construction Cost Index applied to non-steel costs in determining the Cost Cap; and
- Unforeseeable Costs will be excluded from Eligible Project Costs only if they exceed 2.5 percent of the Cost Cap.

Q. Please explain any differences relative to the CEEC Project definition of Unforeseeable Costs.

A. Based on the specific facts and circumstances relating to the SPC Project, NMPC's proposed definition of Unforeseeable Costs differs in a few respects from the definition adopted for the CEEC Project. These differences were reflected in NYPA's filing to recover the costs associated with its portion of the SPC Project that the Commission conditionally approved.

- NMPC is proposing to reduce the threshold for Unforeseeable Costs to be excluded from Eligible Project Costs to 2.5 percent, from the 5 percent threshold used for the CEEC Project. This change brings NMPC's total exposure for Unforeseeable Costs for the SPC Project (approximately $12.4 million) more in line with the exposure to NYPA ($9.5 million) and LS Power ($15.8 million) associated with the CEEC Project. With a 5

[15] Steel cost escalation is measured by the Handy Whitman Construction Cost Index.

percent threshold, NMPC would be exposed to a substantially greater amount of Unforeseeable Costs – over $24.7 million – for the SPC Project.

- NMPC proposes to add "pandemics" to the force majeure provision of Unforeseeable Costs in recognition of the ongoing global health emergency.
- NMPC proposes to add a provision that accounts for the fact that steel costs have risen significantly since NMPC developed its Project cost estimate in mid-2021. That steel costs would drastically rise was unforeseeable at that time. Resultantly, NMPC proposes to include steel cost escalation, as measured by the Handy Whitman Construction Cost Index, in excess of that included in the Cost Cap, as an Unforeseeable Cost.
- NMPC also expects to see inflationary pressures on non-steel costs, such as on labor costs. This higher than anticipated inflationary pressure was likewise unforeseeable at the time NMPC developed the Project cost estimate. To the degree that the escalation of actual costs other than steel costs, as measured by the Handy Whitman Construction Cost Index, exceeds 150 percent of the escalation included in the Cost Cap, NMPC proposes this amount to be an Unforeseeable Cost.

Q. Does this conclude your testimony?

A. Yes.

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Niagara Mohawk Power Corporation d/b/a National Grid	**)**	**Docket No. ER23-_____**

DECLARATION OF ANDREW BYRNE

I depose and state under penalty of perjury that the foregoing testimony was prepared or assembled by me or under my direction; that I have read the questions and answers labeled as my testimony; that if asked the same questions my answers in response would be as shown; and that the facts contained in my answers are true to the best of my knowledge, information, and belief.

Executed on January 30, 2023

/s/ Andrew Byrne
Andrew Byrne

EXHIBIT NO. NMPC-201

MOODY'S INVESTORS SERVICE

CREDIT OPINION
1 November 2021

Update

Rate this Research

RATINGS

Niagara Mohawk Power Corporation

Domicile	Syracuse, New York, United States
Long Term Rating	Baa1
Type	LT Issuer Rating
Outlook	Stable

Please see the ratings section at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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Niagara Mohawk Power Corporation

Update following downgrade to Baa1

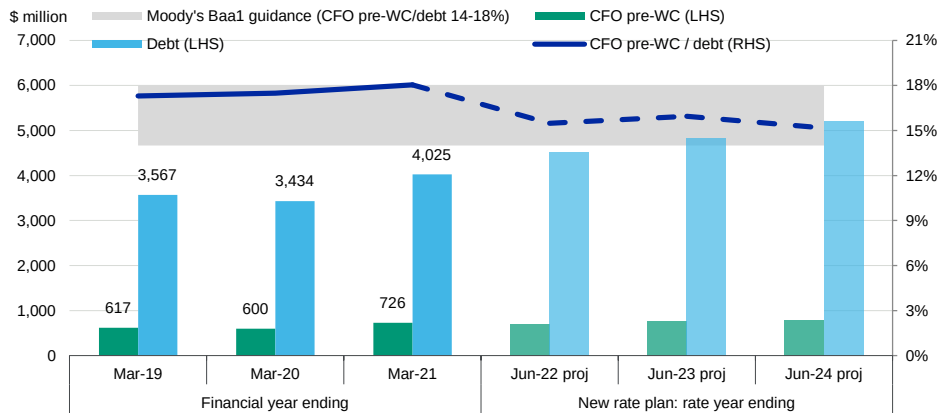
Summary

The credit quality of Niagara Mohawk Power Corporation (NiMo) is underpinned by the low business risk of its transmission and distribution (T&D) operations and a transparent and established regulatory framework with favorable cost recovery provisions. The proposed rate case settlement (Joint Proposal), filed[1] in September 2021, expands the suite of reconciliation/deferral mechanisms, from an already strong base, enhancing cash flow predictability over the period to June 2024. The settlement also maintains strong ring-fencing provisions which protect credit quality from additional leverage at NiMo's parent companies.

Credit quality is constrained by weak cash flow metrics that we expect will persist over the forthcoming rate plan, reflected in projected cash flow from operations pre-working capital (CFO pre-WC) to debt around 14% - 16% over this period. The proposed settlement incorporates sizeable rate modifiers which limit the increase in customer bills but also moderate the company's cash flow growth at a time it continues to undertake a large capex program. This accentuates the pressure on operating cash flows from (1) the continuation of relatively low authorized return on equity (RoE, 9.0%) and thin equity layer (48%) in NiMo's assumed capital structure compared to other state regulated utilities operating outside of New York; and (2) US tax reform.

Exhibit 1

We expect that NiMo's credit metrics will weaken in the forthcoming rate plan
Projections based on Joint Proposal filed in September 2021



Key assumptions for forthcoming rate plan: (1) No timing differences, e.g. those pertaining to remittance of NYSERDA balances; (2) No additional covid-19 related costs of any future recovery of associated costs; (3) Deferred tax for rate year (RY) 1 assumed as the rate plan's tax expense for RY1; (4) other potential adjustments excluded.
Source: Moody's Investors Service

Credit strengths

» Low business risk transmission and distribution utility

» Operates under a well-established and transparent regulatory framework with suite of cost recovery provisions

» Increased cash flow visibility until June 2024 under proposed rate case settlement

Credit challenges

» New rate plan will lead to weaker cash flow metrics than historically

» Sizeable capital expenditure program set to continue

» Some uncertainties surround state energy policy and path towards carbon transition

Rating outlook

The stable outlook reflects our expectation that (1) a rate settlement will be approved in the coming months by the regulator with only minor, if any, modifications; and (2) NiMo will maintain a financial profile over the primary term of this rate plan in line with guidance for the current rating.

Factors that could lead to an upgrade

» Upward rating pressure is unlikely in the medium term, absent a material improvement in the credit supportiveness of NiMo's political and regulatory framework

» However, NiMo's ratings could be upgraded if NiMo's CFO pre-WC/debt were to stay above 18% on a sustainable basis

Factors that could lead to a downgrade

» CFO pre-WC/debt appeared likely to fall persistently below 14%, excluding timing differences (e.g. remittance, to customers, of cash collected on behalf of the New York Stat Energy Research and Development Authority [NYSERDA])

Key indicators

Niagara Mohawk Power Corporation
US GAAP-based credit metrics are impacted by timing differences

	Mar-17	Mar-18	Mar-19	Mar-20	Mar-21	2022-proj.	2023-proj
CFO pre-WC + Interest / Interest	5.9x	5.0x	4.6x	4.7x	6.0x	6.0x	6.1x
CFO pre-WC / Debt	23.2%	20.6%	17.3%	17.5%	18.0%	15.5%	15.9%
CFO pre-WC – Dividends / Debt	23.1%	2.2%	17.3%	17.5%	11.2%	10.8%	13.9%
Debt / Book Capitalization	31.1%	35.7%	38.3%	36.0%	40.0%	41.4%	41.6%
NYSERDA over/(under) collections ($ million)	142	141	-8	-28	-42	0	0

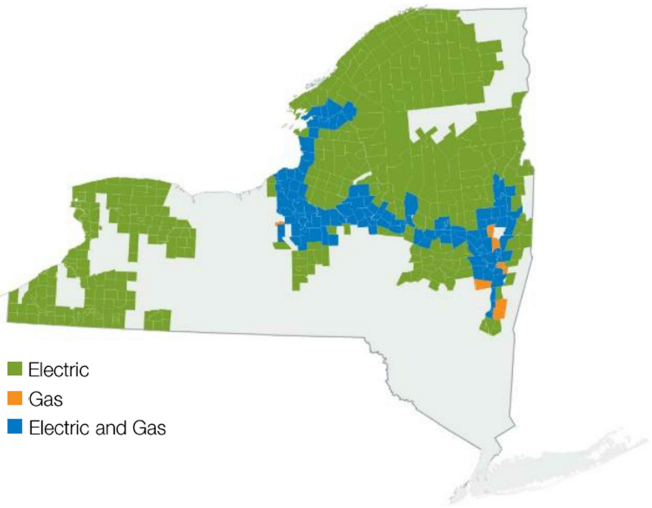
[1] All ratios based on 'Adjusted' financial data and incorporate Moody's global Standard Adjustments for Non-Financial Corporations. Moody's Projections (proj.) are Moody's opinion and do not represent the views of the issuer.
Source: Moody's Financial Metrics™

Profile

NiMo provides utility services to around 1.7 million electricity customers and 0.6 million gas customers in upstate New York in the US. NiMo is regulated by the New York Public Service Commission (NYPSC) and is ultimately owned by National Grid plc (National Grid, Baa2 stable) via intermediate holding companies National Grid USA (NG USA, Baa2 stable) and National Grid North America Inc. (Baa2 stable). NiMo is National Grid's largest operating company in the US and, with $7.67 billion of rate base in 31 March 2021, represents c. 28% of their rate base in the country.

Exhibit 3

NiMo's operating area, which covers most of upstate New York



Source: National Grid

Exhibit 4

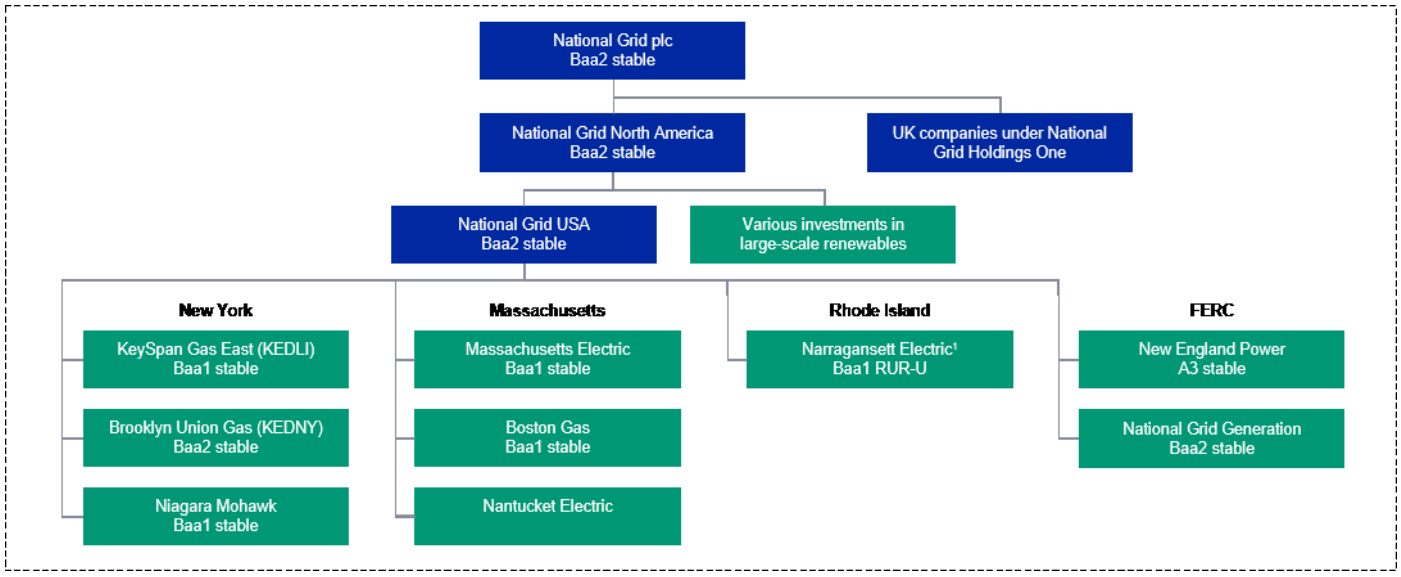
Rate case summary

Regulated Business	NiMo Electric	NiMo Gas
Regulator	NYPSC	
Primary term of current rate plan	Apr-2018 to Mar-2021	
Allowed RoE	9.0%	
Latest achieved RoE (FY2021)	6.3%	7.2%
Assumed equity capitalization	48.0%	
NG reported rate base at March 2021	$6,206m	$1,467m

Source: National Grid

Exhibit 5

National Grid's simplified organization structure for its US business



(1) A sale has been agreed to PPL Corporation (Baa2 positive). We expect the transaction to close by the end of March 2022. (2) Ratings refer to long-term issuer/senior unsecured rating
Source: Moody's Investors Service

Detailed credit considerations

Transparent regulatory framework with a suite of cost recovery mechanisms underpins stable and predictable cash flows

Assessment of the regulatory framework is a key credit consideration for NiMo as a T&D utility operating only in New York. We view the regulatory framework as one most transparent amongst US states with a suite of cost recovery mechanisms that allow NiMo to recover various costs on a timely basis. The most important features include a forward looking-test year (for most expenses and planned capital expenditure), full recovery of purchased electric and natural gas costs, electric and gas revenue decoupling mechanisms (RDMs) for most customers, and deferral accounting treatment for variations in certain expenses, such as pension and other post-employment benefits. All utilities within the state operate under multi-year rate plans, generally three years, which allow recovery of projected capital and operating costs commensurate with the spend.

These features have provided timely cost recovery that has underpinned, to-date, stable and predictable financial metrics. The RDMs, in particular, help to provide stable gross margins regardless of volumes sold to customers. These mechanisms were important in FY2021 when the coronavirus pandemic depressed consumptions volumes; and they will be increasingly important as the industry transitions to a smarter grid.

New Governor's influence over utility regulation remains to be seen

Since 2019, political rhetoric and state actions taken towards various New York utilities have created a more uncertain and challenging operating environment for the state's utilities. Various issues around customer service quality (e.g., gas moratoriums, performance in storms and other unforeseen outages) have resulted in a myriad of fines for the state's utilities, although not, to-date, for NiMo. Furthermore, incrementally severe measures have been taken, such as threatening utility franchise licenses and introducing legislation that would have enacted more punitive measures on a more consistent basis. Greater administration involvement has also been seen in rate cases, extending the time between a utility making a major rate case filing and settlement being reached and reducing the certainty of outcome. This challenging operating environment has adversely impacted our view of the credit supportiveness of the New York political and regulatory environment.

However, in August 2021 Governor Kathy Hochul was sworn into office, following the resignation of former Governor Cuomo. To-date, there have been few opportunities to observe the new administration's direct interaction with the NYPSC. With all the New York investor-owned utilities having agreed, or published proposed, rate case settlements in 2020-21 we expect no new major rate case filings until at least 2022. Consequently, we expect the first indication of any improvement in the political environment to be when the Climate Action Council's draft scoping plan for economy-wide decarbonization efforts, which is due to be published by the end of 2021 (see ESG considerations below).

Proposed rate case settlement enhances cash flow predictability, but we expect cash flow-based credit metrics to weaken

On 27 September 2021 NiMo filed a Joint Proposal with the NYPSC in respect of a three-year rate plan running from July 2021 to June 2024. It is envisioned that the NYPSC will approve the settlement in the coming months, with the new rate plan expected to apply from 1 January 2022. A true-up ('make-whole provision') will take account of the delay in implementing updated rates.

Joint Proposal included a number of credit supportive provisions and comparatively 'favourable' outcomes

The Joint Proposal expands the suite of reconciliation/deferral mechanisms, from an already strong base, enhancing cash flow predictability. Of the incremental measures, we believe that the improved ability and timeliness for storm cost recovery, through an enlarged allowance in base rates for major storms ($30 million per annum compared to $21 million per annum under the existing rate plan) coupled with the introduction of a new minor storm tracker (c. $125 million over the primary term) and pre-staging cost mechanism, provides the greatest benefit. This reflects that New York is prone to severe weather events and the record number of 'minor' storms, along with the coronavirus pandemic, depressed NiMo's achieved ROE for its electric operations (which account for around 80% of the company's rate base) to 6.3% in FY2021, compared to an authorized RoE of 9.0%.

Whilst the New York regulatory framework is relatively stable and predictable, the NYPSC has tended to (1) offer a lower than average RoE (both equity thickness and authorized RoE - 48% and 8.8/9.0% respectively compared to over 53% and at least 9.6% for National Grid's electric and gas businesses in Massachusetts); and (2) follow a more mechanistic approach to setting these parameters, even when external pressures on operational cash flows have arisen, e.g. the US tax reform. This has resulted in cash flow-based credit metrics being depressed. However, the proposed settlement protects NiMo, unlike most peers in the state, from a further cut

in authorized RoE (to 8.8% from the existing 9.0%). The maximum potential uplift to achieved returns from earning adjustment mechanisms (EAMs) has also increased, primarily due to the expansion of EAMs, to 9.86% for electricity and 9.26% for gas (9.61% and 9.1% respectively under the current rate plan), although we expect achieved financial rewards for EAMs to be broadly similar reflecting, in aggregate, challenging regulatory targets.

The majority of the approved revenue requirement increase in rate year 1 pertained to higher operations & maintenance (O&M) allowances for NiMo's electric business, due to (1) increases in vegetation management and storm resilience; and (2) IT investments to facilitate clean infrastructure.[2] The step-up in depreciation allowance for NiMo's gas business pertained to an acceleration of cost recovery for a portion of the cost associated with the company's leak prone pipe program (LPP).

Exhibit 6

Higher O&M was the largest contributor to the increase in NiMo's electric rates

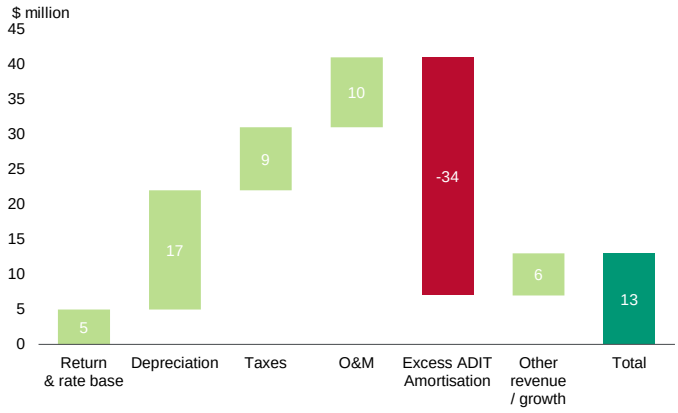
Breakdown of the $49.4 million electric revenue requirement increase for RY1

Source: National Grid

Exhibit 7

Higher depreciation was the largest contributor to the increase in NiMo's gas rates

Breakdown of the $12.5 million gas revenue requirement increase for RY1



Source: National Grid

Growth in regulatory assets combined with a reduction in regulatory liabilities will weaken cash flow-based credit metrics

The growth in regulatory assets combined with a reduction in regulatory liabilities will weaken NiMo's CFO pre-WC / debt compared to under its existing rate plan (see Exhibit 1). A key driver of the joint proposal is the desire to limit rate increases for customers. Rate increases will be kept below 2% per annum in each year of the rate plan for both NiMo's electricity and gas operations through the amortization of regulatory liabilities. This is despite NiMo's ongoing large capital program ($3.3 billion, excluding IT investments vs. $3.5 billon requested over the rate plan) designed to deploy smart meters (advanced metering infrastructure), build transmission projects to facilitate increased renewable generation, and replace LPP (around 50 miles per annum) to reduce methane emissions. The sizeable amortizations are shown in the exhibit below.

Exhibit 8

Rate increases are kept below 2% per annum through the amortization of regulatory liabilities

Final revenue increases by rate year by fuel

	Revenue requirement increase	Rate compression	Amortization of deferred credits	Associated reduction in gross receipts tax	Final revenue increase (post credits)	% change
Elec						
RY1	49.4		-26.5	-0.4	22.5	1.81%
RY2	95.6	-22.5	-10.3	-0.5	62.3	1.92%
RY3	109.8		-45.9	-0.6	63.3	1.94%
Cumulative RY	**254.8**	**-22.5**	**-82.7**	**-1.4**	**148.1**	
Gas						
RY1	12.5		-3.5	-0.1	9.0	1.45%
RY2	29.1	-6.5	-6.8	-0.2	15.7	1.94%
RY3	33.0		-16.4	-0.3	16.3	1.90%
Cumulative RY	**74.6**	**-6.5**	**-26.7**	**-0.5**	**40.9**	

Source: Joint proposal

Timing differences will impact reported metrics over the next rate plan

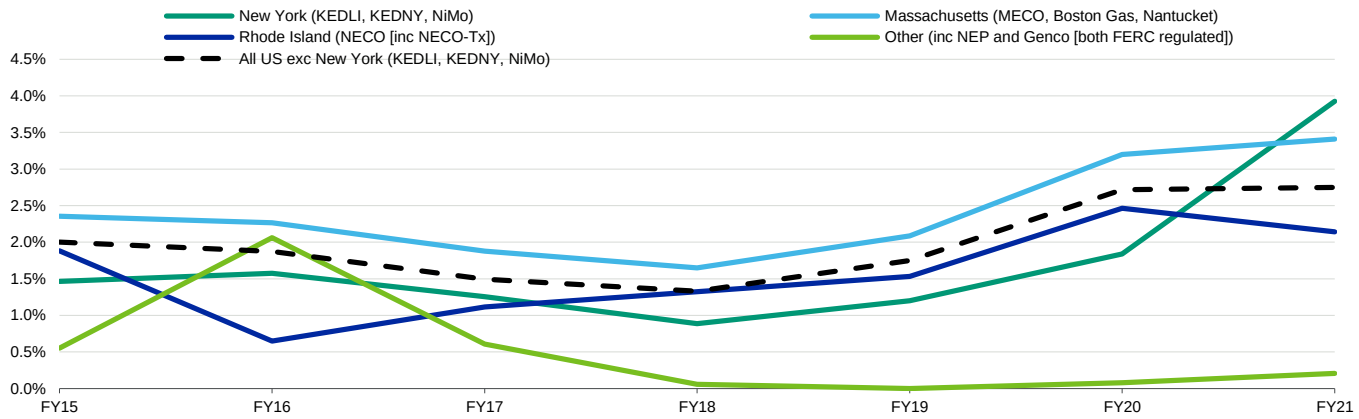
NiMo's reported metrics over the next rate plan will be impacted by the speed of remittance, to customers, of cash collected on behalf of the New York State Energy Research and Development Authority (NYSERDA). The cumulative balance at the start of this rate plan was $315 million, primarily due to increases of over $140 million in both FY2017 and FY2018 following all New York utilities being instructed to immediately stop any scheduled payments to NYSERDA (under the NYPSC's 2016 Order regarding the Clean Energy Fund), and has declined steadily to $246 million at March 2021. Whilst the rate of remittance is highly uncertain, if the cumulative balance was returned in the full over the forthcoming rate plan, i.e. around $75 million per annum over the period to June 2024, this would reduce reported CFO pre-WC/debt by over 1% per annum (our ratio guidance excludes timing differences pertaining to NYSERDA).

NiMo, along with National Grid's other utilities in New York, has reported a material increase in bad debt expense since the start of the coronavirus pandemic which has depressed achieved equity returns. Over FY2015-19 NiMo's bad debt expense averaged $49 million per annum but this increased to $67.9 million in FY2020 and then to $118.5 million in FY2021 (2.2% and 3.6% of revenue in FY2020 and FY2021 respectively). We believe that the large increases reflect that the company has ceased, either voluntarily (from March to June 2020) or being subject to a moratorium (since June 2020, which could last until June 2022), residential service terminations. The regulator has initiated a proceeding for coronavirus cost recovery provisions for utilities in New York but a decision is still pending. NiMo continues to evaluate the impact on both customers and its financial performance in the intervening period.

Exhibit 9

National Grid's New York subsidiaries have seen the largest growth in bad debt expense since the start of the coronavirus pandemic

Bad debt expense as a % of revenue for National Grid's US businesses by region



Source: Company accounts; Moody's Investors Service

Strong ring-fencing provisions mitigate concerns about high leverage at parent holding companies

Although there is significant additional debt located at NiMo's parent holding companies (around 24% of NGNA's consolidated debt at March 2021 we estimate), the strong regulatory ring-fencing provisions applicable to NiMo reduce the potential for debt to be pushed back down into NiMo, increasing its leverage. Notably, the explicit dividend payment restriction in case NiMo's debt-to-capitalization ratio exceeds 57% (which is only five percentage points above the regulatory assumption) provides, in our view, the most credit support at the current rating level. This provision compares favorably against other utilities outside of New York within the National Grid group (where debt-to-capitalization is almost twice the regulatory assumption).

Additional ring-fencing provisions imposed by the NYSPC for NiMo, which we view as credit supportive, include: (1) a 'special preferred share' provision that reduces the probability of bankruptcy in a distressed situation, and (2) the requirement for NiMo to hold an investment-grade rating.

ESG considerations

Environmental

NiMo's high environmental risk reflects its elevated exposure to physical climate risk given its geographical concentration in upstate New York, which exposes the company to material and extreme weather events. However, the resulting cash flow variability caused by storms should be less material over the next rate plan than in FY2021 because of the expansion and upsizing of the storm tracker in the proposed settlement. NiMo also has a limited amount of water and pollution exposure from contingent nuclear decommissioning liabilities, which add around 5% (c. $178 million) to the company's reported debt at March 2021.

NiMo's Joint Proposal contains provisions that are intended to support New York State's ability to meet the goals of the Climate Leadership and Community Protection Act (CLCPA), which was signed into law in July 2019 and include reducing greenhouse gas emissions by 40% by 2030 and by 80% by 2050. NiMo's gas network, which represents around 20% of the company's rate base, is required to achieve a net-zero increase in billed gas usage compared to the sales forecast underlying the Joint Proposal. At the same time, non-infrastructure capex will increase from c. 1% of total gas capex in FY2021 to around 10% by FY2025 because of an increased focus on non-pipe alternatives and enhancing electrification strategies. The CLCPA created a Climate Action Council which is responsible for issue a draft scoping plan by the end of 2021 outlining strategies to attain emissions limit. We expect this to provide greater clarity on long-term utility planning; NiMo is conducting studies on how it should modify its business and depreciation rates to address issued raised by the CLCPA.

Social

Social risks are primarily related to health and safety, demographic and societal trends, as well as customer relations in the company's attempts to provide reliable and affordable service to customers and safe working conditions to employees.

Rate increases in the 2020-21 rate case settlements were generally limited to a maximum of 2% per annum for New York utilities in recognition of the financial impact of the coronavirus pandemic on customers, which may in turn cause rate pressure in future years. The CLCPA is likely to accentuate this. NiMo's electric capex will materially increase to facilitate the move to a smarter grid with more renewables (electric capex will rise from $589 million in FY2021 to $895 million in FY2025 under the joint proposal). In parallel, we expect that a material shortening in regulatory asset lives for gas assets (thereby accelerating cash flows) is likely to be required to meet greenhouse gas emissions reduction targets.

Governance

A key financial policy for NiMo is to maintain the capital structure established in the last rate order with any dividends paid to its parent, NG USA, offset by sufficient equity injections to maintain the target capital structure.

Liquidity analysis

Although NiMo has inadequate liquidity on a stand-alone basis, with limited unrestricted cash and cash equivalents ($9.2 million at June 2021) and no revolving credit facilities in its own name, we regard the liquidity risk as manageable because the company benefits from group funding arrangements.

National Grid manages its financing and liquidity on a group basis, with a central finance committee setting the rules by which individual entities can raise capital. For the US subsidiaries, including NiMo, short-term liquidity requirements are managed via the group's regulated money pool. All of the regulated subsidiaries can lend and borrow from the pool; however, the unregulated holding

companies — NG USA and NGNA — may only act as lenders. The interest rate for borrowing under the pool is determined by reference to the cost of meeting the group's funding needs, typically a mix of 30-day P-2 commercial paper (CP) and any other long- and short-term funding sources.

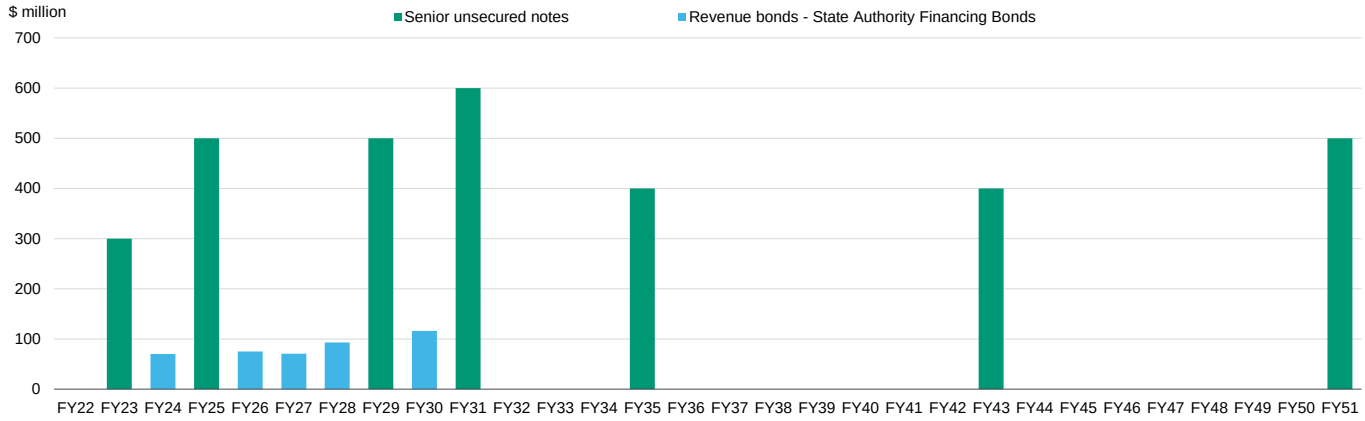
To support the regulated money pool, the US parent holding companies have in place bilateral facilities totaling $4.2 billion that they can draw on, with the vast majority ($3.8 billion) not maturing before May 2024. NG plc, NGNA and NG USA are named borrowers for these facilities. All facilities were undrawn as of March 2021. NGNA also has two CP programs totaling $8.7 billion; a $4 billion US CP and a €4 billion Euro CP program. As of March 2021, c. $0.5 billion were outstanding across the two commercial paper programs.

NiMo has remaining long-term debt authorization of $2.3 billion over the period to June 2024. The company's next maturity is a $300 million note due in November 2022.

Exhibit 10

NiMo has a well-spread debt maturity profile

Debt maturity profile as of June 2021



Source: Company's reports and Moody's Investors Service

Rating methodology and scorecard factors

NiMo is rated in accordance with the Regulated Electric and Gas Utilities rating methodology, published in June 2017. The scorecard-indicated outcome for NiMo is A3 based on historical metrics and on a forward-looking basis, one notch above the assigned Baa1 rating.

Exhibit 11

Rating Factors Grid

Niagara Mohawk Power Corporation

Regulated Electric and Gas Utilities Industry Grid [1][2]	Current FY 31/3/2021		Moody's 12-18 Month Forward View As of October 2021 [3]	
Factor 1 : Regulatory Framework (25%)	**Measure**	**Score**	**Measure**	**Score**
a) Legislative and Judicial Underpinnings of the Regulatory Framework	A	A	A	A
b) Consistency and Predictability of Regulation	A	A	A	A
Factor 2 : Ability to Recover Costs and Earn Returns (25%)				
a) Timeliness of Recovery of Operating and Capital Costs	Aa	Aa	Aa	Aa
b) Sufficiency of Rates and Returns	Baa	Baa	Baa	Baa
Factor 3 : Diversification (10%)				
a) Market Position	Baa	Baa	Baa	Baa
b) Generation and Fuel Diversity	N/A	N/A	N/A	N/A
Factor 4 : Financial Strength (40%)				
a) CFO pre-WC + Interest / Interest (3 Year Avg)	5.1x	A	5.5x - 6.5x	Baa/A
b) CFO pre-WC / Debt (3 Year Avg)	17.6%	Baa	14% - 16%	Baa
c) CFO pre-WC – Dividends / Debt (3 Year Avg)	15.1%	Baa	10% - 14%	Baa
d) Debt / Capitalization (3 Year Avg)	38.1%	Aa	40% - 42%	A
Rating:				
Scorecard-indicated Outcome Before Notching Adjustment		A3		A3
HoldCo Structural Subordination Notching	0	0	0	0
a) Scorecard-indicated Outcome from Grid		A3		A3
b) Actual Rating Assigned				Baa1

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. [2] As of 31/03/2021. [3] This represents Moody's forward view, not the view of the issuer, and unless noted in the text, does not incorporate significant acquisitions and divestitures.
Source: Moody's Financial Metrics™

Ratings

Exhibit 12

Category	Moody's Rating
NIAGARA MOHAWK POWER CORPORATION	
Outlook	Stable
Issuer Rating	Baa1
Senior Unsecured	Baa1
Pref. Stock	Baa3
ULT PARENT: NATIONAL GRID PLC	
Outlook	Stable
Issuer Rating	Baa2
Senior Unsecured	Baa2
Commercial Paper	P-2
Other Short Term	(P)P-2
PARENT: NATIONAL GRID NORTH AMERICA INC.	
Outlook	Stable
Issuer Rating	Baa2
Senior Unsecured	Baa2
Commercial Paper	P-2
ST Issuer Rating	P-2
PARENT: NATIONAL GRID USA	
Outlook	Stable
Issuer Rating	Baa2

Source: Moody's Investors Service

Appendix

Exhibit 13

Peer comparison table

Niagara Mohawk Power Corporation

	Niagara Mohawk Power Corporation			Consolidated Edison Company of New York, Inc.			New York State Electric and Gas Corporation			Rochester Gas & Electric Corporation			KeySpan Gas East Corporation		
	Baa1 Stable			Baa1 Stable			Baa1 Stable			Baa1 Stable			Baa1 Stable		
	FYE	FYE	FYE	FYE	FYE	LTM	FYE	FYE	LTM	FYE	FYE	LTM	FYE	FYE	FYE
(in USD million)	Mar-19	Mar-20	Mar-21	Dec-19	Dec-20	Jun-21	Dec-19	Dec-20	Jun-21	Dec-19	Dec-20	Jun-21	Mar-19	Mar-20	Mar-21
Revenue	3,412	3,147	3,286	10,821	10,647	11,139	1,548	1,564	1,664	893	872	894	1,260	1,115	1,119
EBITDA	831	847	763	3,851	3,979	4,041	359	392	398	304	291	276	351	353	333
Total Assets	13,178	13,363	14,372	46,557	50,967	51,515	5,926	6,451	6,633	4,049	4,368	4,417	5,552	5,878	6,282
Total Debt	3,567	3,434	4,025	17,817	20,710	20,900	1,848	1,916	1,980	1,205	1,387	1,387	1,285	1,456	1,561
Net Debt	3,551	3,425	3,976	16,884	19,643	19,915	1,848	1,916	1,980	1,204	1,387	1,370	1,239	1,450	1,555
(CFO Pre-W/C + Interest) / Interest Expense	4.6x	4.7x	6.0x	4.2x	3.9x	4.0x	4.7x	3.2x	3.1x	4.3x	4.0x	4.2x	4.1x	5.1x	4.4x
(CFO Pre-W/C) / Debt	17.3%	17.5%	18.0%	13.9%	11.0%	11.2%	17.3%	9.2%	6.9%	23.4%	13.8%	12.2%	16.1%	19.8%	16.4%
(CFO Pre-W/C - Dividends) / Debt	17.3%	17.5%	11.2%	8.8%	6.2%	6.5%	11.9%	4.0%	1.8%	23.4%	10.2%	8.6%	16.1%	19.8%	16.4%
Debt / Book Capitalization	38.3%	36.0%	40.0%	47.1%	49.3%	48.2%	47.9%	43.5%	41.9%	46.0%	46.9%	45.8%	31.4%	32.5%	32.9%

All metrics are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.
Source: Moody's Financial Metrics™

Exhibit 14

Moody's-adjusted CFO pre-WC breakdown

Niagara Mohawk Power Corporation

(in USD million)	FYE Mar-17	FYE Mar-18	FYE Mar-19	FYE Mar-20	FYE Mar-21
As Reported CFO Pre-W/C	661	608	580	547	645
Leases	4	3	6	48	53
Hybrid Securities	(1)	(1)	(1)	(1)	(1)
Net Income	(1)	(1)	(1)	(1)	(1)
Non-Standard Adjustments	29	4	31	6	29
Moody's Adjusted CFO Pre-W/C	694	615	617	600	726

Source: Moody's Financial Metrics™

Exhibit 15

Moody's-adjusted debt breakdown

Niagara Mohawk Power Corporation

(in USD million)	FYE Mar-17	FYE Mar-18	FYE Mar-19	FYE Mar-20	FYE Mar-21
As Reported Total Debt	2,762	2,764	3,256	3,002	3,609
Leases	32	27	104	230	223
Hybrid Securities	14	14	14	14	14
Non-Standard Public Adjustments	186	186	192	187	178
Moody's Adjusted Total Debt	2,994	2,991	3,567	3,434	4,025

The vast majority of Non-Standard Public Adjustments pertain to nuclear contingencies - disposal of nuclear fuel.
Source: Moody's Financial Metrics™

Exhibit 16

Select historical Moody's-adjusted financial data

Niagara Mohawk Power Corporation

(in USD million)	FYE Mar-17	FYE Mar-18	FYE Mar-19	FYE Mar-20	FYE Mar-21
INCOME STATEMENT					
Revenue	2,849	3,040	3,412	3,147	3,286
EBITDA	713	785	831	847	763
EBITDA margin %	25.0%	25.8%	24.4%	26.9%	23.2%
EBIT	458	501	536	508	397
EBIT margin %	16.1%	16.5%	15.7%	16.1%	12.1%
Interest Expense	143	155	173	161	146
Net income	197	232	281	264	191
Operating Expenses	1,042	1,076	1,278	1,266	1,461
BALANCE SHEET					
Net Property Plant and Equipment	8,642	9,076	9,611	10,271	10,829
Total Assets	12,598	12,400	13,178	13,363	14,372
Total Debt	2,994	2,991	3,567	3,434	4,025
Cash & Cash Equivalents	5	5	16	9	49
Net Debt	2,989	2,986	3,551	3,425	3,976
Total Liabilities	7,864	7,950	8,412	8,324	9,391
CASH FLOW					
Funds from Operations (FFO)	437	446	667	655	590
Cash Flow From Operations (CFO)	847	767	642	601	737
Dividends	1	551	1	1	276
Retained Cash Flow (RCF)	437	(104)	666	654	314
Capital Expenditures	(630)	(705)	(725)	(861)	(900)
Free Cash Flow (FCF)	217	(489)	(84)	(261)	(438)
INTEREST COVERAGE					
(CFO Pre-W/C + Interest) / Interest Expense	5.9x	5.0x	4.6x	4.7x	6.0x
LEVERAGE					
(CFO Pre-W/C) / Debt	23.2%	20.6%	17.3%	17.5%	18.0%
(CFO Pre-W/C - Dividends) / Debt	23.1%	2.2%	17.3%	17.5%	11.2%
Debt / Book Capitalization	31.1%	35.7%	38.3%	36.0%	40.0%

All metrics are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.
Source: Moody's Financial Metrics™

Endnotes

1 Available at https://documents.dps.ny.gov/public/Common/ViewDoc.aspx?DocRefId={03E0246C-C385-4591-8CC5-A37DCD1152F5}

2 The service company [ServCo] of the immediate parent of National Grid's US regulated businesses, NG USA, undertakes the capex but the US regulated businesses, including NiMo, are given an opex allowance to cover NG USA's associated depreciation and provide a return on this invested capital).

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