New York Gas Long-Term Plan

Case 24-G-0248 Technical Conference

October 10, 2024

nationalgrid

Welcome to All

Agenda

- 1. Introduction
- 2. Bill Impacts
- 3. Affordability
- 4. Stakeholder Collaboration
- 5. Q&A

Meeting Logistics:

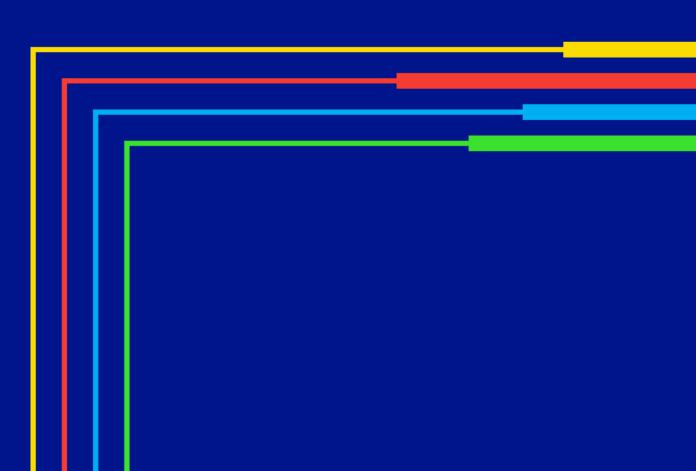
Q&A will be held at the end of the presentation to address matters related to the material presented.

Please use the "raise hand" feature of the meeting platform.

DPS Staff will be moderating the Q&A portion of today's conference.

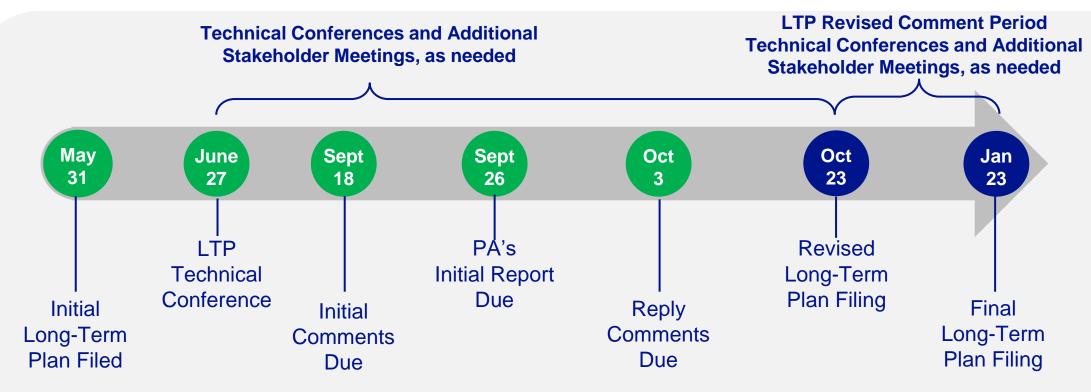
Introduction

nationalgrid



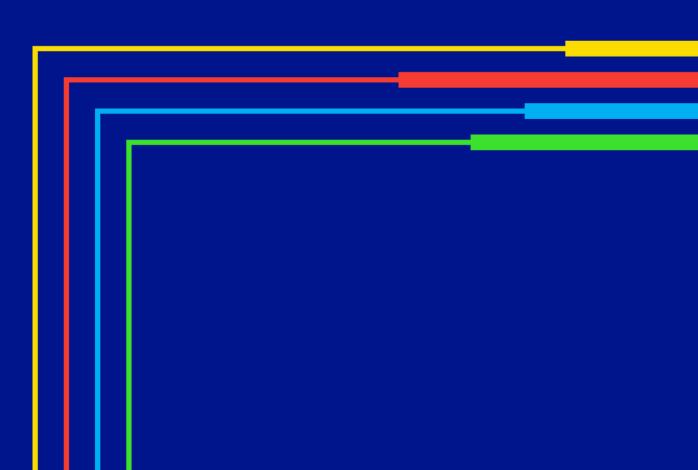
Introduction to National Grid's LTP

- National Grid filed our LTP for KEDNY/KEDLI/NMPC on 5/31/24; <u>Case 24-G-0248</u>; materials available on **ngridsolutions.com**
- We are working on our revised LTP, which will incorporate our latest forecast of customer requirements
- The schedule below is updated to reflect the extended comment and reply comment period



Bill Impacts

nationalgrid



Overview

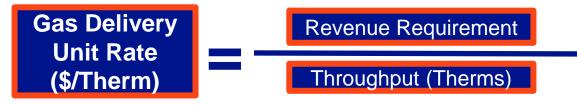
- All results in today's presentation reflect the Companies' Initial LTP filing
- Bill impacts analysis are performed separately for each OpCo, unless otherwise noted
- Analysis and results can also be found in the Initial LTP Section 7.3 as well as Appendix 11.5
- Gas bill impacts are calculated for each scenario for the following service classes:

KEDNY / KEDLI	Service Class	NMPC	Service Class
Residential (Heat)	SC-1B	Residential	SC-1
Small Commercial (Non-Heat)	SC 2-1/SC 2-A	Small Commercial (<50k therms)	SC-2
Small Commercial (Heat)	SC 2-2/SC 2-B	C&I (50k-250k therms annual use)	SC-7
Multi-Family	SC-3	C&I (250k-1M therms annual use)	SC-5
		C&I (>1M therms annual use)	SC-8

Components of Gas Bill Impacts

Delivery Unit Rate (\$/Therm) - Allocation of Revenue Requirement (Cost of Service) divided by throughput (therms) for each Service Classification

- Revenue Allocation was based on current rate plans (KEDNY/LI 2023 Rate Case; NMPC 2020 Rate Case)
- Revenue Allocation was modified for the NMPC Accelerated Electrification scenario due to assumptions included in the sales forecast (as large commercial/industrial customers were decreasing in the later years, costs were shifted to residential and small commercial customers)



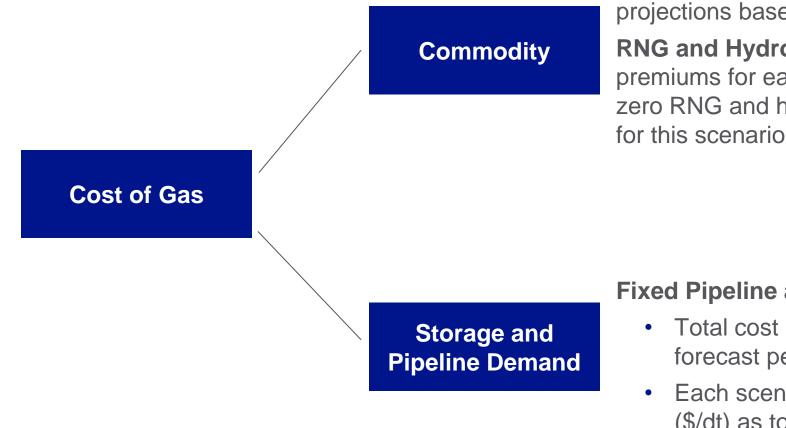
Commodity Unit Rate (\$/Therm) - Includes weighted average cost of gas, demand costs and merchant function charges (commodity related working capital and uncollectible components) for each service classification

Monthly Average Therms – Monthly Average Therms used in the bill impacts were calculated by taking total annual therms divided by the average number of customers divided by twelve months for each service classification

National Grid

Indicates component differs by service classification

How is the cost of gas calculated?



Traditional Supplies: 2024 budgeted levels (\$/dt), projections based on natural gas forward curves

RNG and Hydrogen: Incorporate specific cost premiums for each unit. Reference Case assumes zero RNG and hydrogen, so no costs are included for this scenario.

Fixed Pipeline and Storage Demand Costs

- Total cost (in \$) assumed to increase over forecast period for all scenarios
- Each scenario has different levels of per unit cost (\$/dt) as total fixed costs are spread over different throughput.

Summary

Approach

- 3 separate analyses: bill impact, benefit-cost analysis (BCA), and GHG emissions analysis
- Our goal is not to use these findings to "pick a winner."
- Intended to provide insights into tradeoffs and commonalities between scenarios to inform development of a statewide gas transition plan.
- None of these analyses alone present a complete picture of scenario impacts
- Important factors remain outside the scope of these analyses, including:
 - Impact on equity and justice
 - Induced economic effects
 - Emissions leakage

Key Findings

- The CEV and AE scenarios both achieve substantial emissions reductions 1.2 billion and 1.3 billion metric tons of CO2e respectively by 2050.
- Achieving those emissions reductions is costly for society as a whole and for gas customers in both scenarios.
- The costs of both scenarios outweigh the benefits according to the most comprehensive available benefit-cost test.
- Net costs are higher for the AE, totaling over \$91.8 billion compared to about \$63.2 billion for the CEV.
- The incremental net societal cost per ton of emissions reduction is lower for the CEV, at \$52/ton compared to \$69/ton for the AE.
- Gas customer bill impacts are substantially lower for the CEV, but the CEV is considerably more costly for gas customers than the Reference Case.
- AE bill impacts are incrementally higher than the CEV through about 2040, and then increase exponentially as customers exit the gas network leaving very few remaining gas customers in 2050 to share the costs of the gas network.
- We do not anticipate bill impacts of the magnitude forecasted in either scenario will be acceptable to customers, regulators, or policymakers. This analysis should inform targeted policy and regulatory initiatives to manage affordability and equity risk of the energy transition.

Bill Impact Analysis

Approach

- Based on forecasted revenue requirements and meter counts for each scenario
- Includes forecasted annual values for:
 - Rate base
 - Taxes
 - · Post-tax return on rate base
 - Depreciation
 - O&M
 - DSM program costs
 - Purchased fuel (accounting for fuel costs and fixed costs)
- Does not include:
 - Electric bill impacts
 - Other costs of electrification
 - UTEN customer costs
 - 100% hydrogen customer costs

These items are included in the BCA

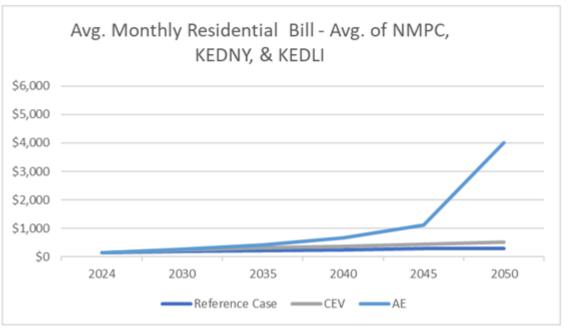
Key Findings

- Both CEV and AE result in significantly higher gas bills for remaining gas customers.
- Bill impacts are significantly lower in CEV than AE, although both scenarios are costly
- New approaches to manage bill impacts for remaining gas customers will be essential for any successful gas decarbonization transition pathway
- Both scenarios face the same essential challenges:
 - The need to continue investing in the gas network to provide same and reliable service even though the gas distribution network is significantly downsized
 - Fewer customers to cover those costs, resulting in higher per-customer revenue requirements and higher individual bills
 - Increased commodity costs for clean alternative fuels relative to fossil fuels.

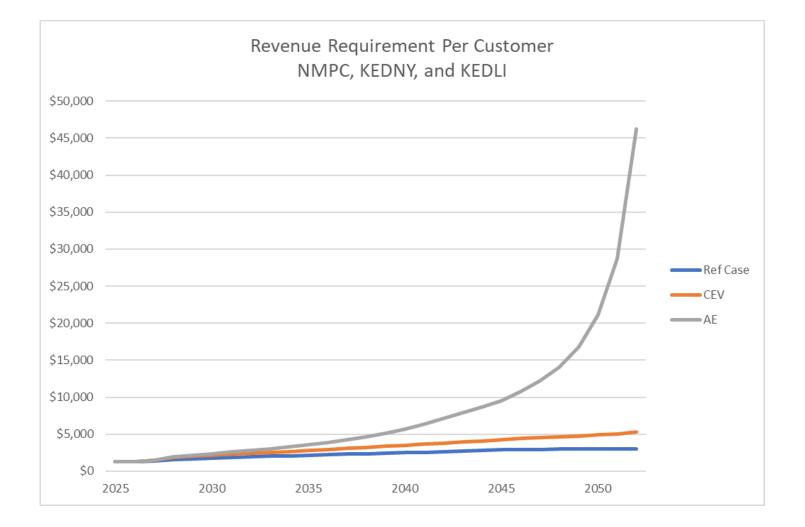
Table 7-1: Average Monthly Residential Bill – Average of NMPC, KEDNY, KEDLI

Avg. Monthly Residential Bill - Avg. of NMPC, KEDNY, & KEDLI								
	Reference Case	% increase	CEV	% increase	AE	% increase		
2024	\$138		\$138		\$138			
2030	\$199	44%	\$257	87%	\$275	100%		
2035	\$227	64%	\$310	126%	\$418	203%		
2040	\$253	83%	\$368	168%	\$676	391%		
2045	\$285	106%	\$438	219%	\$1,105	703%		
2050	\$285	106%	\$530	285%	\$4,022	2822%		

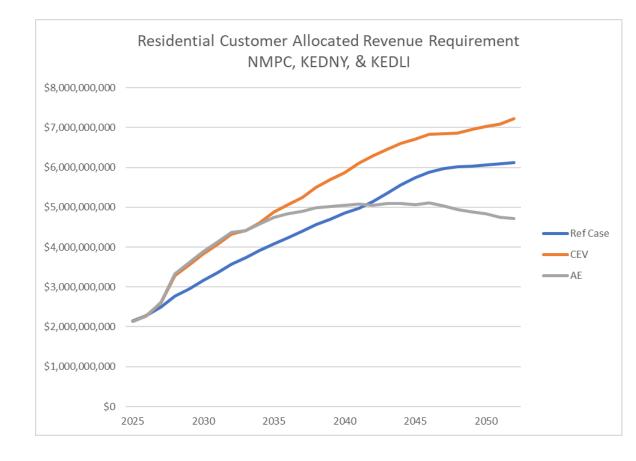
Figure 7-1: Average Monthly Residential Bill

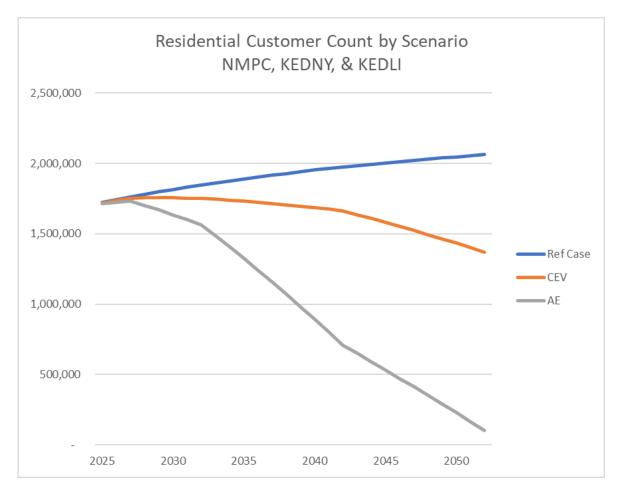


Revenue Requirement per Customer Shapes Bill Increases



Factors Driving Per-Customer Revenue Requirement

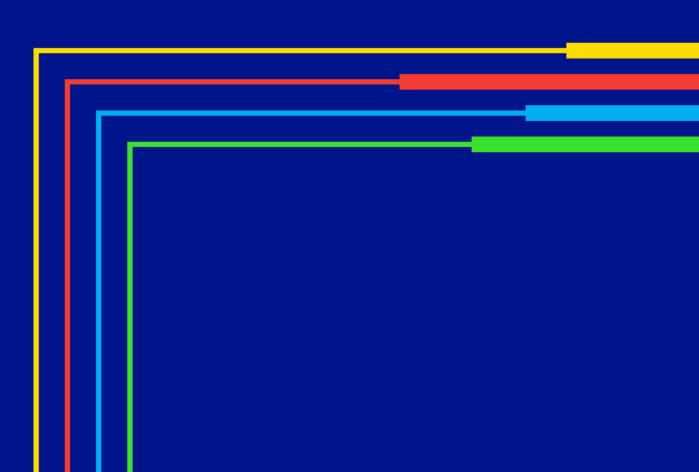




Affordability

nationalgrid

3





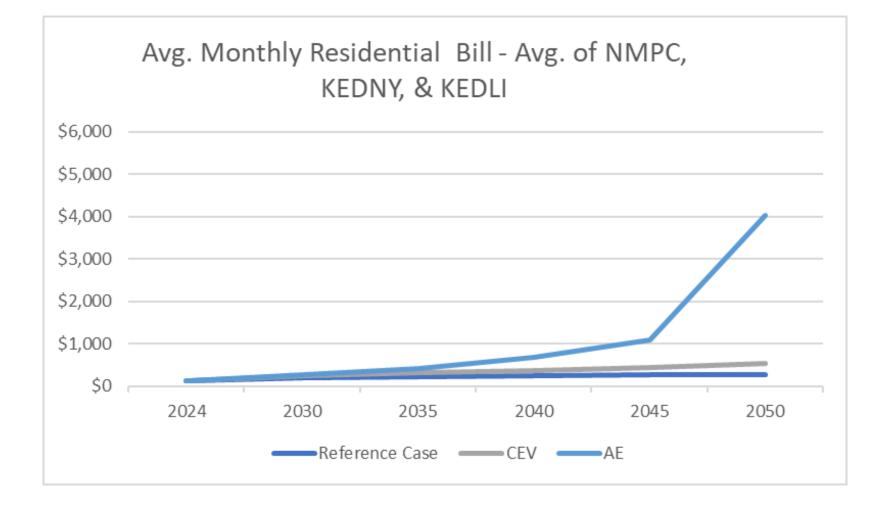
Any CLCPA-compliant scenario will put pressure on affordability for remaining gas customers

> Distribution costs are the main cost driver in AE and CEV scenarios

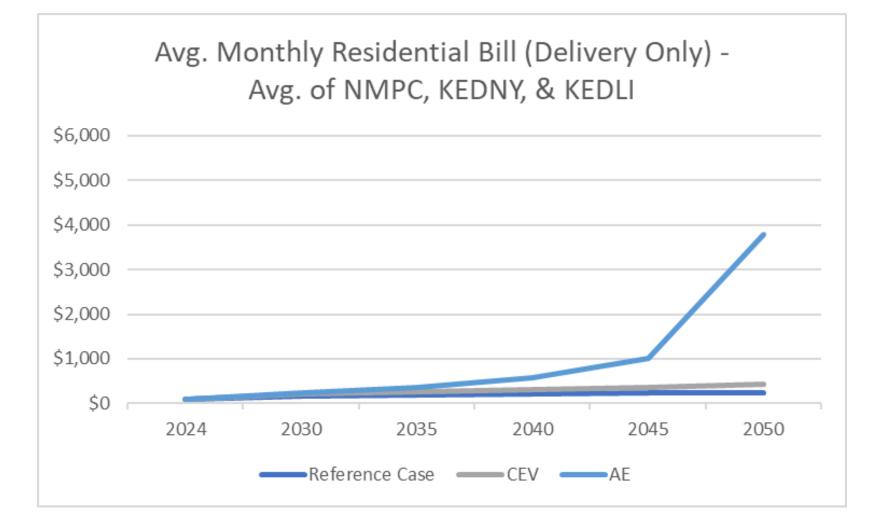
> Shaping an orderly transition is essential for any scenario

> At higher levels of electrification, affordability for remaining gas customers becomes more acute and will require new approaches to cost allocation

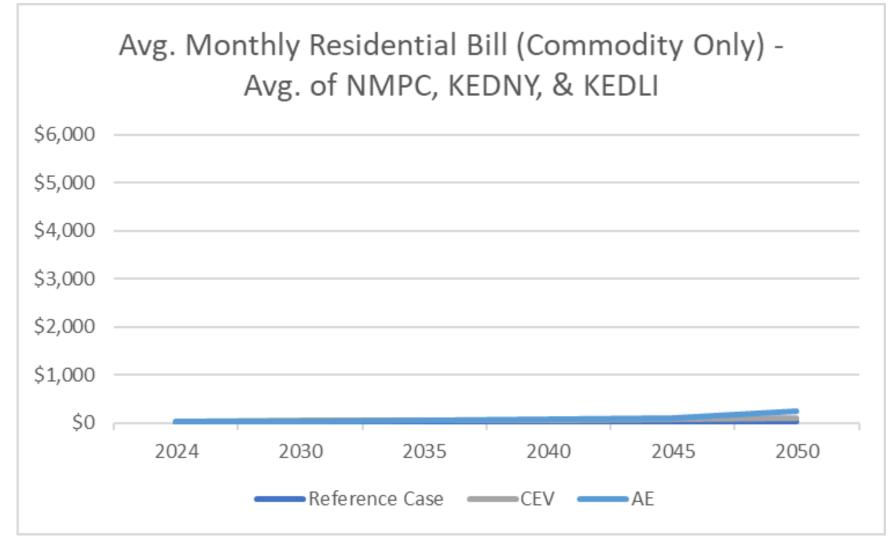
Impact on Affordability by Scenario



Impact on Affordability by Scenario - Delivery



Impact on Affordability by Scenario - Commodity



Customer Demographics

Energy Affordability Program (EAP)

Households that meet the low-income criteria are eligible for the Company's Energy Affordability Program which provides a bill discount to customers with the goal that a customer pays no more than 6% of their income on their energy bills.

Estimated Low-to-Moderate Income Population

- Low income criteria considers households with a total income of 60% or below the State Median Income.
- Moderate income criteria considers households with a total income in the range of 61% of State Median Income 80% of State or Area Median income (whichever is higher).

	Gas Customers Enrolled in EAP	% Gas Customers Enrolled in EAP	Potentially Low Income	Potentially Moderate Income	Actual + Potential LMI Customers
NMPC	58,842	10%	19%	8%	37%
KEDNY	141,970	12%	20%	17%	48%
KEDLI	13,555	2%	15%	13%	31%

EAP data as of August 2024 and potential data as of October 2024

Based on purchased income data, National Grid estimates 19% of customers are potentially low income and 12% of customers are potentially moderate income.

Low- and moderate-income (LMI) customers are also eligible for energy efficiency and building electrification programs offered either through the Company or through NYSERDA.

Outreach and Education



In 2022, National Grid, in partnership with the National Grid Foundation, allocated \$17 million in additional funding for low- and moderate-income customers to manage higher energy bills. With this funding, grants were created to help moderate-income families access assistance. ~

At National Grid, we're committed to providing reliable and affordable energy. Customers facing financial pressures that are impacting their ability to pay their energy bill may qualify for our **Energy Affordability Program (EAP)**



Customers are automatically enrolled in EAP when a Home Energy Assistance Program (HEAP) payment is added to their national grid account

HEAP is a federal grant program that can help income-eligible households to pay their energy bills. Customers can also apply online or by email, fax, or direct mail.

More information about our programs can be found on our website:

- National Grid Grant Programs
- Energy Affordability Program

NY LMI Winter Overview 2023-2024

Outreach to income-eligible customers promoted HEAP and EAP throughout the season and also used a multi-channel approach, which included emails, postcards targeted to customers in disadvantaged communities, bill inserts and a paid social/digital campaign.



20

You may qualify for assistance. See today

National Grid

Targeted EAP + HEAP Postcard for UNY Disadvantaged Communities (approx. 275K recipients)

In-Person Customer Savings Events Winter 2023-2024

Customer Savings Events have been a great way to connect customers in need of assistance with Consumer Advocate teams. We continue to promote these events, along with reoccurring *Connect to Care* advocate hours through targeted emails and texts. Local news and press coverage helps to spotlight these activities to wider audiences across other channels.







News clip from Syracuse outreach event on 12/1/23

Ensuring Long-Term Energy Affordability

- According to the Scoping Plan, "reduc[ing] energy burdens and address[ing] energy affordability concerns" is a "key principle" of the gas system transition.
- The Scoping Plan recommends identifying "ways to mitigate impacts on remaining gas customers as customers transition to electrification and away from the use of the gas system, with a particular focus on low-income customers."
- This is consistent with our analysis, which indicates customer bills increase exponentially if the overall year-over-year rate of gas customer departures accelerates due to high levels of total customer departures.
- Ensuring the gas transition is affordable will require new frameworks for cost recovery so that remaining gas customers are not burdened with the costs of today's gas system in the future.

Recommended Areas for Policy and Regulatory Development:

• Equitable Depreciation

•

- Effective and equitable decarbonization will require recovery of utility gas network capital costs through depreciation at a more rapid rate than in the past in anticipation of declining demand and related retirement of assets.
- There is value in beginning to accelerate recovery of depreciation now, and considering novel depreciation mechanisms that can balance the traditional principles of intergenerational equity, cost causation, and avoidance of rate shock, while maintaining near-term affordability most effectively.

Cross-utility Cost Coordination

- As the gas transition progresses, coordination among gas and electric utilities will be essential to ensure costs associated with meeting today's gas demand are not borne disproportionately by gas customers who are unable to electrify in the future.
- We recommend regulatory enablement of coordination between electric utilities whose service territories overlap with that of a gas utility on system planning and the evaluation of options to support the financing of alternatives to gas capital investment.

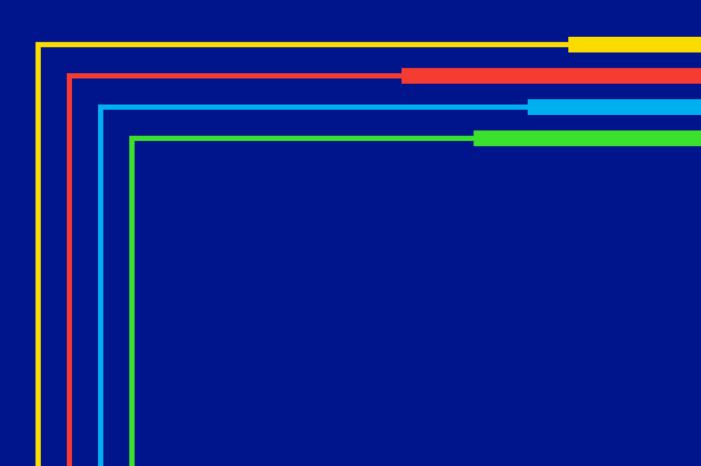
Optimizing New York Cap & Invest ("NYCI")

- Ensure gradualism to avoid price shocks
- Tailor price signals to customers' unique situations
- Optimize revenue reinvestment
- Advance complementary policies including sectoral decarbonization performance standards for transportation and heating fuels



Stakeholder Collaboration

nationalgrid



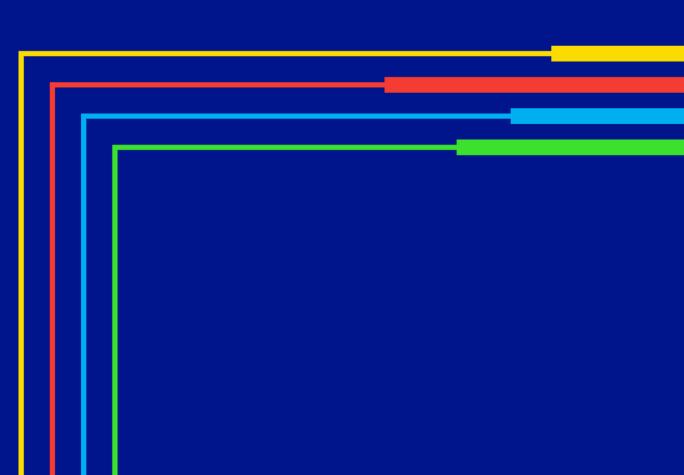
We Welcome Your Involvement

• National Grid and DPS Staff are eager to hear your comments about our LTP

- We believe the best path forward is for parties to bring feedback and suggestions to improve our LTP.
- We would appreciate the opportunity to understand your position regarding a clean, fair, and affordable energy transition.
- PA Consulting will be working with DPS Staff to facilitate the Information Request process.
- We invite your full participation in this and all future technical sessions. Requests for technical session topics should be routed through PA & DPS Staff.
- This and future presentations will be posted to ngridsolutions.com

Q&A

nationalgrid



nationalgrid