

NARUC National Association of Regulatory Utility Commissioners

# NARUC TASK FORCE ON EVOLVING GAS INFRASTRUCTURE PLANNING



# **Future Technology Investment Options Commissions are Considering**

#### **Low-Carbon Fuels**

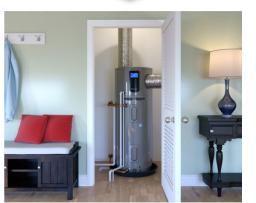
Blending of clean hydrogen and / or renewable natural gas with geologic natural gas to decrease carbon intensity of delivered fuel. Customers remain connected to natural gas infrastructure and retain existing gas appliances, with potential for some modifications to run on H2 / RNG blends.

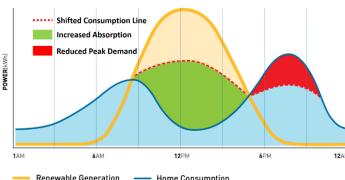
#### Electrification

Shifting residential, commercial, and industrial customers from natural gas to electricity use for space and water heating via electric appliances (e.g. electric heat pumps, stovetops, furnaces, water heaters)



**Demand Response / Energy Efficiency** Reducing demand for natural gas through demand response and energy efficiency programs.





— Home Consumption

Impacts of and trade-offs among these three primary options are not broadly understood and are debated by stakeholders.

#### Key questions:

- Where on the gas / electric grids should these strategies be rolled out?
- How can states avoid disproportionate share of gas system maintenance costs falling on LMI customers?

# **Charting a Course Towards Enhanced Planning**

## Series of convening meetings with participant-led outputs

**Purpose**: Support utility regulators in gas infrastructure investment decision-making given uncertainty about impacts and trade-offs of different technology options

#### **Outcomes**:

Decision process resource kit annotated with supplemental data, information, and questions that can guide state utility regulators in their decision-making on gas infrastructure investments. Resource kit will articulate questions, data needs and possible sources, and steps that state PUCs and their stakeholders can take to support state-specific decision-making.

#### Outputs:

- Roadmap for navigating complex new territory based on collaborative problem solving
   Identified data gaps to influence research and ultimately help inform decision-makers

#### **Participation**:

Representatives from 10-15 state commissions, plus invited experts and stakeholders at key points

#### **Process**:

- 2-year effort to include 3 in-person workshops, 1 virtual workshop, webinars & peer sharing calls, and work in between
- Workshops will be charrette-style working meetings with Chatham House rules
  Professional facilitation team fluent in technical/policy issues
- Regulators are primary audience and participants; input from stakeholders will be sought throughout



# **Two-Phase Effort**

### Phase 1: Baselining and Information Gathering (~Year 1)

- Launch Task Force and recruit members July-Aug 2023
- In-person kick-off workshop w/ peer-to-peer and DOE presentations – November 2023
- Intensive expert + peer learning series
  - Virtual sessions; approx. one per month
- NARUC + DOE + participants determine what final outputs will be and prepare for Phase 2

#### Phase 2: Roadmapping (~Year 2)

- Translate Phase 1 input plus state progress into questions for commissions and related resources
  - Consider breaking into multiple paths (e.g., technology questions, financial questions)
- Series of workshops to develop materials, discuss strategies, support peer exchange
  - Target three workshops over second year: two in-person, one virtual
- Publish and publicize toolkit outputs
  - High quality, strategic and tactical resources that can be immediately used by state commissions
  - National launch to include in-person release at a NARUC meeting



# Task Force Convening

Core Participants	Public utility commissioners and commission staff. Each commissioner should bring 1 – 2 staff (to ensure attendance and continuity) Must include a commissioner; no states with only commission staff.				
Motivation to Participate	<ul> <li>Tackle complex issues with peer leaders, learning from each other and national experts</li> <li>Identify low-risk, high-reward initial paths forward (e.g. data requests, first steps) and ways of structuring longer-term decision making</li> <li>Engage with commissioners, staff, experts, and other stakeholders in a constructive environment outside of formal proceedings</li> </ul>				
Potential Participants	<ul> <li>Open a period for expressions of interest and accept as many states as funding allows</li> <li>States with decarbonization goals affecting gas</li> <li>Commissions charged with exploring future of gas</li> <li>Commissioners focused on future of gas despite lack of state policy <i>Ensure geographic, policy, and political diversity</i></li> </ul>				
Staffing Team	NARUC Center for Partnerships and Innovation (Kiera, Danielle, logistics team) with consultant support (NARUC competitive RFP) DOE + National Labs				

	Phase 1		Phase 2				
PUCs time	Workshop 1 (Nov 2023)	Virtual (Jan-Jun 24)	Workshop 2 (Fall 24)	Workshop 3 (Early 25)	Workshop 4 (Spring 25)	Materials Release	
Problem:	In-person kick-off	Intensive expert	Pathway scoping	Roadmap	Roadmap	In-person event	<u>Key</u>
sufficient ਰਿ information about	workshop to define status and needs	learning series (monthly)		development	refinement	at NARUC meeting	In-person meeting, PUC participants
technology options and trade-offs to make gas investment decisions w/in current	<b>Î</b>		<b>Î</b>				In-person meeting, PUC participants & stakeholders Virtual meeting, PUC participants
frameworks	_• Establish	• Enhance	Consolidate		• Finalize	Share PUC	Outpute
Stakeholders     State     commissions	current status, projections,	participants' knowledge of	<ul> <li>Consolidate</li> <li>learning</li> <li>Determine what</li> </ul>	<ul> <li>Incorporate</li> <li>Phase 1 input</li> <li>into draft</li> </ul>	materials, discuss	strategies for decision-	<ul> <li><u>Outputs:</u></li> <li>Roadmap with questions and</li> </ul>
<ul> <li>Regulated utilities</li> <li>Consumer</li> </ul>	needs for states <ul> <li>Support peer</li> </ul>	potential trajectories of	final outputs will be and	products • Cross-check info	strategies, support peer	making • Publish	paths forward for PUCs
• Consumer	sharing	technology	transition to	gathered in	exchange	resources	• Data and
advocates <ul> <li>Customers</li> </ul>	<ul> <li>Make Task Force resources</li> </ul>	pathways with SMEs	Phase 2 • Consider	Phase 1 w/ state needs	<ul> <li>Identify paths forward</li> </ul>	summarizing PUC roles,	resources from DOE, SMEs,
Technology	available to	Support other	potential to	<ul> <li>Fill gaps w/</li> </ul>	<ul> <li>Work toward</li> </ul>	technology	stakeholders with
<ul><li>advocates</li><li>Pipeline safety</li></ul>	<ul><li>participants</li><li>Refine learning</li></ul>	needs identified in workshop 1	divide into multiple paths	stakeholders and SMEs	removing barriers to	options, financial	information about technology
groups <ul> <li>Labor unions</li> </ul>	plan				decision-making	strategies, and uncertainty	and policy options
Environmental			options				
groups PUCs will improve their understanding of technology pathways and exchange / implement strategies to align system							
<ul><li>Investors</li><li>Federal gov't</li></ul>	planning and investments with decarbonization goals.						

# **Key Questions Commissions and Stakeholders will Answer**

- What are the likely trajectories for the full range of technology options? What technologies can be deployed in the near- and long-term to achieve decarbonization goals while ensuring customers have access to safe, reliable, and affordable energy services?
- Where gas distribution utilities are required to achieve emissions reductions, how should the costs and benefits be quantified?
- How might PUCs evaluate and prioritize investments in gas distribution infrastructure given the multi-decade lifetimes for many of these assets and the timing of interim / final targets for decarbonization goals?



 What strategies can PUCs consider to limit the risk of stranded assets, especially considering that those stranded assets may become a substantial financial burden of those who can least afford it?