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.

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?
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

<table>
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<tr>
<th><strong>Core Participants</strong></th>
<th>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.</th>
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| **Motivation to Participate** | • Tackle complex issues with peer leaders, learning from each other and national experts  
• Identify low-risk, high-reward initial paths forward (e.g. data requests, first steps) and ways of structuring longer-term decision making  
• Engage with commissioners, staff, experts, and other stakeholders in a constructive environment outside of formal proceedings |
| **Potential Participants** | Open a period for expressions of interest and accept as many states as funding allows  
• States with decarbonization goals affecting gas  
• Commissions charged with exploring future of gas  
• Commissioners focused on future of gas despite lack of state policy

*Ensure geographic, policy, and political diversity*

| **Staffing Team** | NARUC Center for Partnerships and Innovation (Kiera, Danielle, logistics team) with consultant support (NARUC competitive RFP) DOE + National Labs |
### Problem:
Regulators lack sufficient information about technology options and trade-offs to make gas investment decisions within current frameworks.

### In-person kick-off workshop to define status and needs
- Intensive expert learning series (monthly)
- Pathway scoping
- Roadmap development
- Roadmap refinement

### Intensive expert learning series (monthly)
- Establish current status, projections, needs for states
- Support peer sharing
- Make Task Force resources available to participants
- Refine learning plan
- Enhance participants’ knowledge of potential trajectories of technology pathways with SMEs
- Support other needs identified in workshop 1

### Pathway scoping
- Consolidate learning
- Determine what final outputs will be and transition to Phase 2
- Consider potential to divide into multiple paths

### Roadmap development
- Incorporate Phase 1 input into draft products
- Cross-check info gathered in Phase 1 w/ state needs
- Fill gaps w/ stakeholders and SMEs

### Roadmap refinement
- Finalize materials, discuss strategies, support peer exchange
- Identify paths forward
- Work toward removing barriers to decision-making

### In-person event at NARUC meeting
- Share PUC strategies for decision-making
- Publish resources summarizing PUC roles, technology options, financial strategies, and uncertainty

### Key activities
- In-person meeting, PUC participants
- In-person meeting, PUC participants & stakeholders
- Virtual meeting, PUC participants

### Stakeholders
- State commissions
- Regulated utilities
- Consumer advocates
- Customers
- Technology advocates
- Pipeline safety groups
- Labor unions
- Environmental groups
- Investors
- Federal gov’t

### Outputs:
- Roadmap with questions and paths forward for PUCs
- Data and resources from DOE, SMEs, stakeholders with information about technology and policy options

### Vision
PUCs will improve their understanding of technology pathways and exchange / implement strategies to align system 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?