

NARUC  Summer
Policy Summit

Committee on Gas

Monday, July 15 | 11:15 am – 12:15 pm ET

A Regulator's Guide to 21st Century Gas Planning

Moderator: Hon. Ann McCabe, Illinois

Panelists:

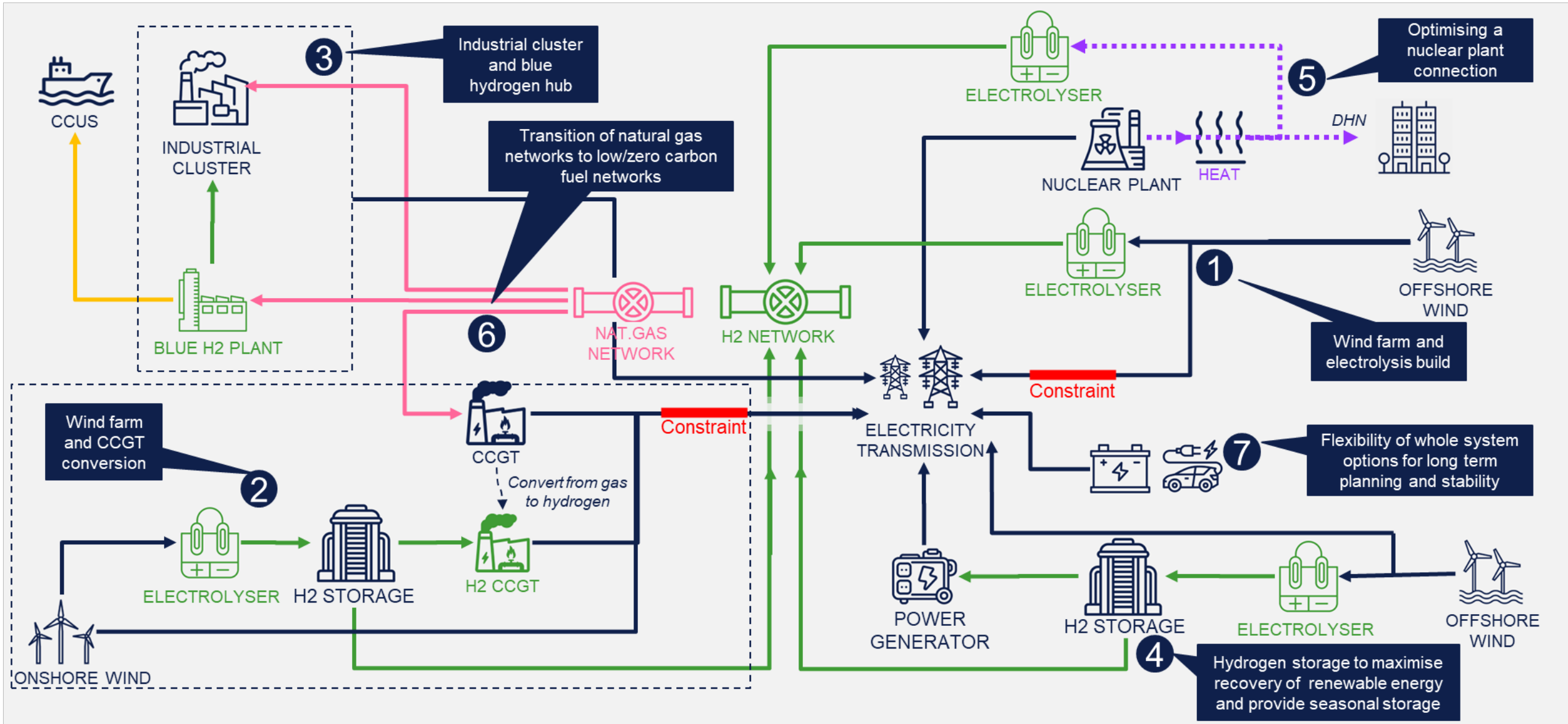
Hon. Megan Gilman, Colorado

Annie Levenson-Falk, Citizens Utility Board of Minnesota

David Barclay, DNV

Rajiv Shah, Octopus Energy Group

Whole system coordination a multifaceted challenge



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Octopus Energy Group

July 2024 NARUC Annual Meeting

A Regulator's Guide to 21st Century Gas Planning

Rajiv Shah, Head of North American Policy & Markets

Octopus Energy Group has four key tentacles, each critical for modernizing energy

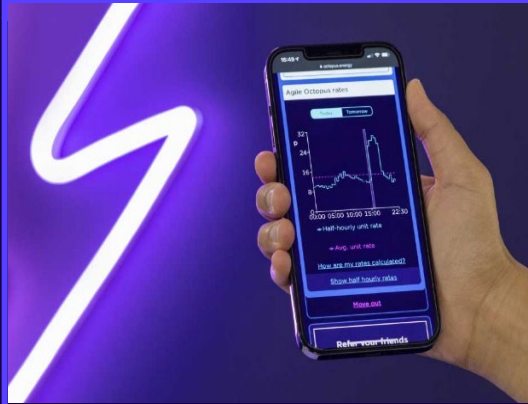
Octopus Energy 

Generation



- **\$7bn** generation assets managed
- **14** countries
- Fan Club community generation

Energy Supply



- **8m** customers / **12m** accounts
- **8** countries
- **#1** for customer service
- **World-leading** consumer flex
- Europe's **largest VPP** (150k+ devices)

Services



- **EV** leasing & **EV** charger installation
- **Heat pump** tech & installations
- **Solar** and **meter** installations
- **Electroverse** **EV** charging network

Kraken 

Tech



- **Single platform** to manage customers and assets
- **18** countries
- **54m** contracted retail accounts
- **38GW** flexible assets contracted

Since 2016, we've been building the first fully integrated post-transition energy company

27

countries

8m

customers

6,000

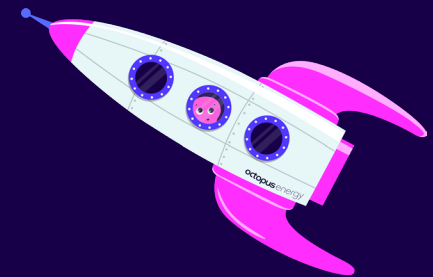
employees

54m 38GW

accounts & capacity contracted
to Kraken platform

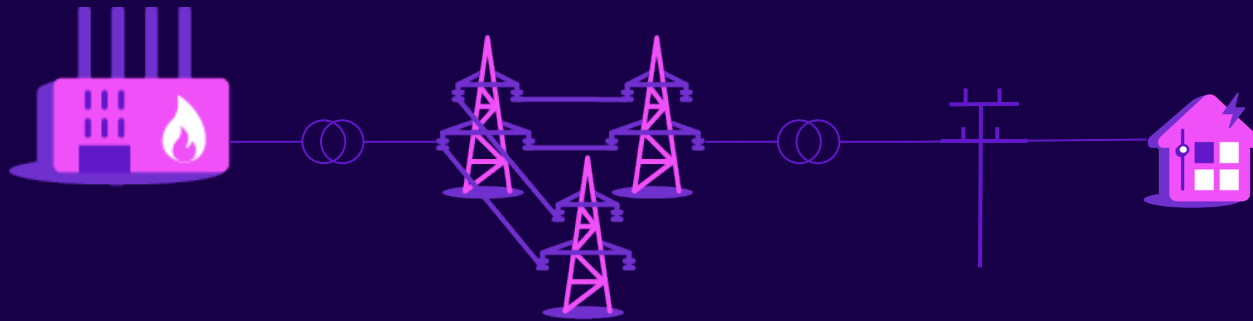
\$7bn

renewable
assets under
management



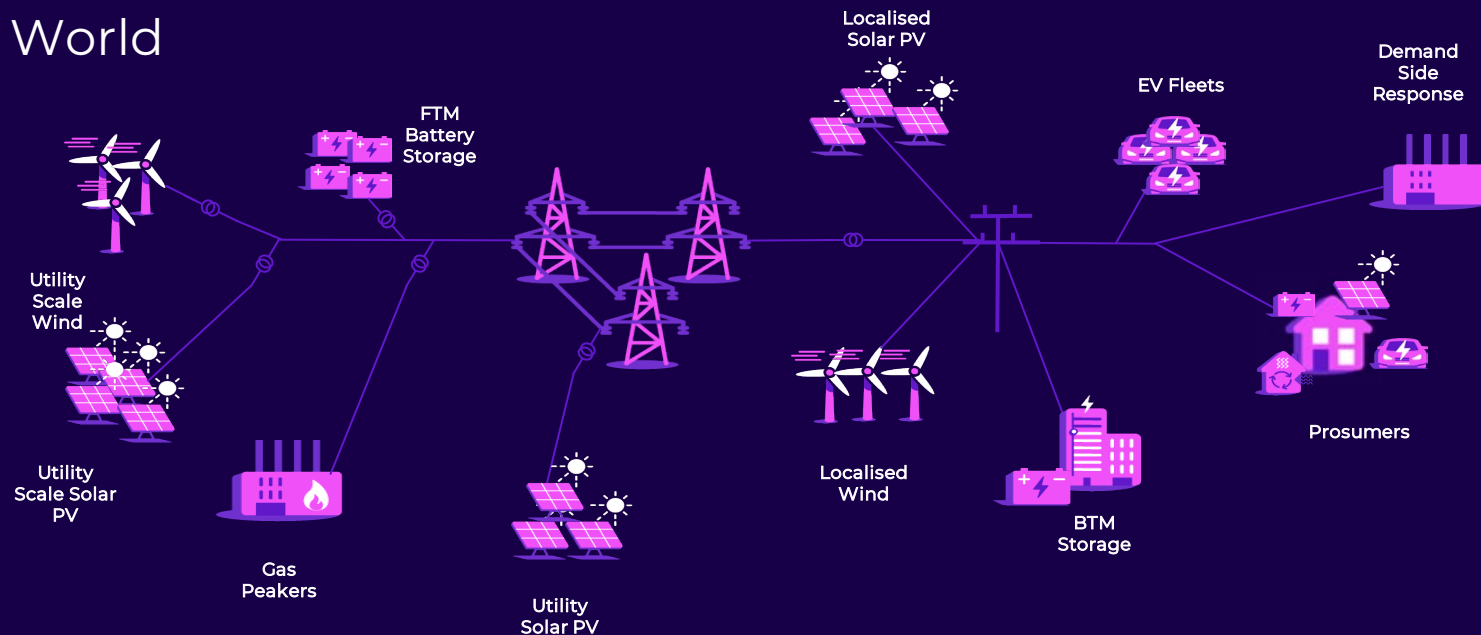
Background | The energy landscape is changing rapidly, and the change is bringing about unprecedented complexity

Old World



- Unidirectional flow from generation to consumer
- Output easily adjustable in response to demand changes
- Centralized generation connected to the transmission system.

New World



- Distributed energy - Balancing requires real-time changes in supply and demand
- Transportation/Building Electrification - requires coordinated approach to charging & management.
- Bidirectional flow of energy - with the rise in distributed energy resources (DER)

Kraken - a new end-to-end operating system for future utilities

CUSTOMER

CIS & Billing
Meter Data Management
Customer Relationship Management (CRM)
Customer Interaction

FIELD

Job & Workforce Management
Material Management
In-field App
Customer Service & After Care



FLEX

Asset Management & Control
Real-time Alerting
Asset & Portfolio Optimization
Asset Reporting & Analytics

GRID

Distribution Grid Monitoring
Power Quality Analysis
Asset Aging
Fault Detection and Location

ASSET MANAGEMENT

Asset Portfolio Management
Offshore Control Room Management
Contracts Management

Supported Utilities



NY's First Long Term Gas Plans

Overview

Insights from Initial Plans

May 2022 - PSC Order¹ establishes a new long-term gas planning process:

- Utilities file 20-year plans every 3 years
- Plans reviewed by stakeholders and independent consultant
- PSC approval required

Key elements:

- Load forecasting
- Scenario and sensitivity analyses
- Preferred portfolio determination
- Equity and bill impacts modeling
- NPAs for replacing leak-prone mains

Key

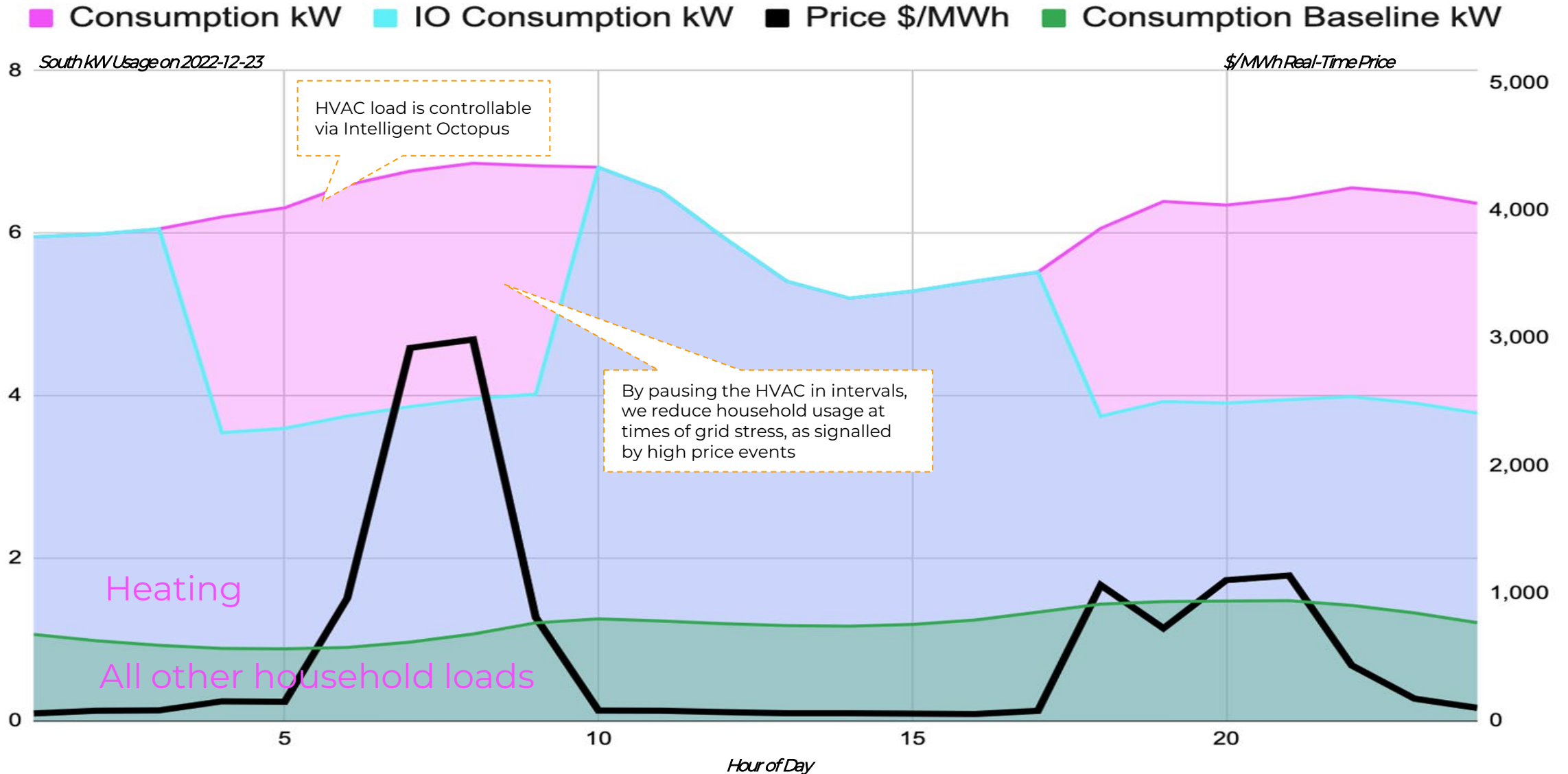
Strengths:

- Independent evaluation and stakeholder process key to vetting proposals
- 20 year planning horizon allows for long-term balancing of various equities
- Portfolio approach to NPAs has helped spur some implementation

Areas for Improvement:

- Lack of gas/electric coordination
- Inflated electrification cost forecasts
- Optimistic RNG + Hydrogen scenarios vs. conservative electrification assumptions
- Data insufficiencies

Inflated Electrification Forecasts: Winter Storm Elliot Example



Coordinated Gas/Electric Planning: Great Britain Regional Energy Strategic Planner

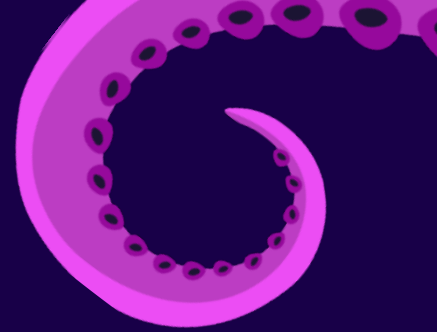
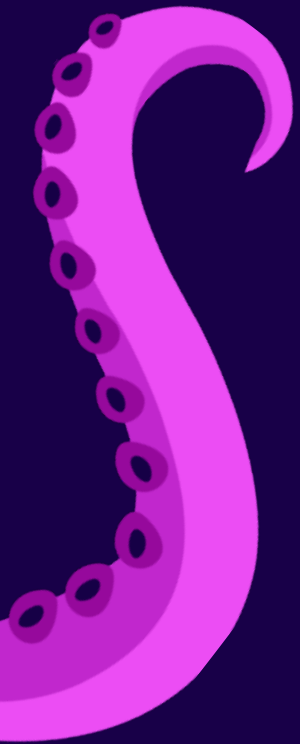
In 2023, Ofgem (UK energy regulator) established Regional Energy Strategic Planners (RESPs) - regional bodies for strategic planning across the gas and electric systems. This effort is still in the design phase, but four key function areas have been identified:

1. Cross-vector strategic planning
2. Technical coordination (e.g. load forecasting, whole-system scenario/sensitivity analyses, processes for resolving disagreements)
3. Localized (regionalized) stakeholder engagement and processes
4. Supporting energy planning by local government entities

RESP framework is intended to influence Ofgem's next rate proceedings (electricity and gas distribution price controls)

Thank you

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This session has concluded.

Committee sessions resume at 2:00 pm.