

5 Year Gas Supply Plan

Jamie LeBlanc
Erin Liberty

Storage

Benefits of Storage

- Enhances Operational Reliability: Physical storage assets provide the flexibility to increase/decrease supply within the day, which improves operational capability to balance intra-day demand swings
- Provides Supply Security: Since supply is injected during the summer and is in the utility's storage accounts, the portion of demand met with storage assets is more likely to be available when it is needed vs relying entirely on third-party suppliers' ability to provide supply on the day
- Limits exposure to risk of high winter commodity prices: Natural gas storage assets allow for purchase of supply in the summer months when commodity prices tend to be lower for use in the winter months when prices tend to be higher

Storage Pricing & Allocation

Union Rate Zone

- 100 PJ of cost-based storage
- “Excess storage” sold at market rates
 - Sharing Mechanism
 - 90% Ratepayer
 - 10% Shareholder

Enbridge Rate Zone

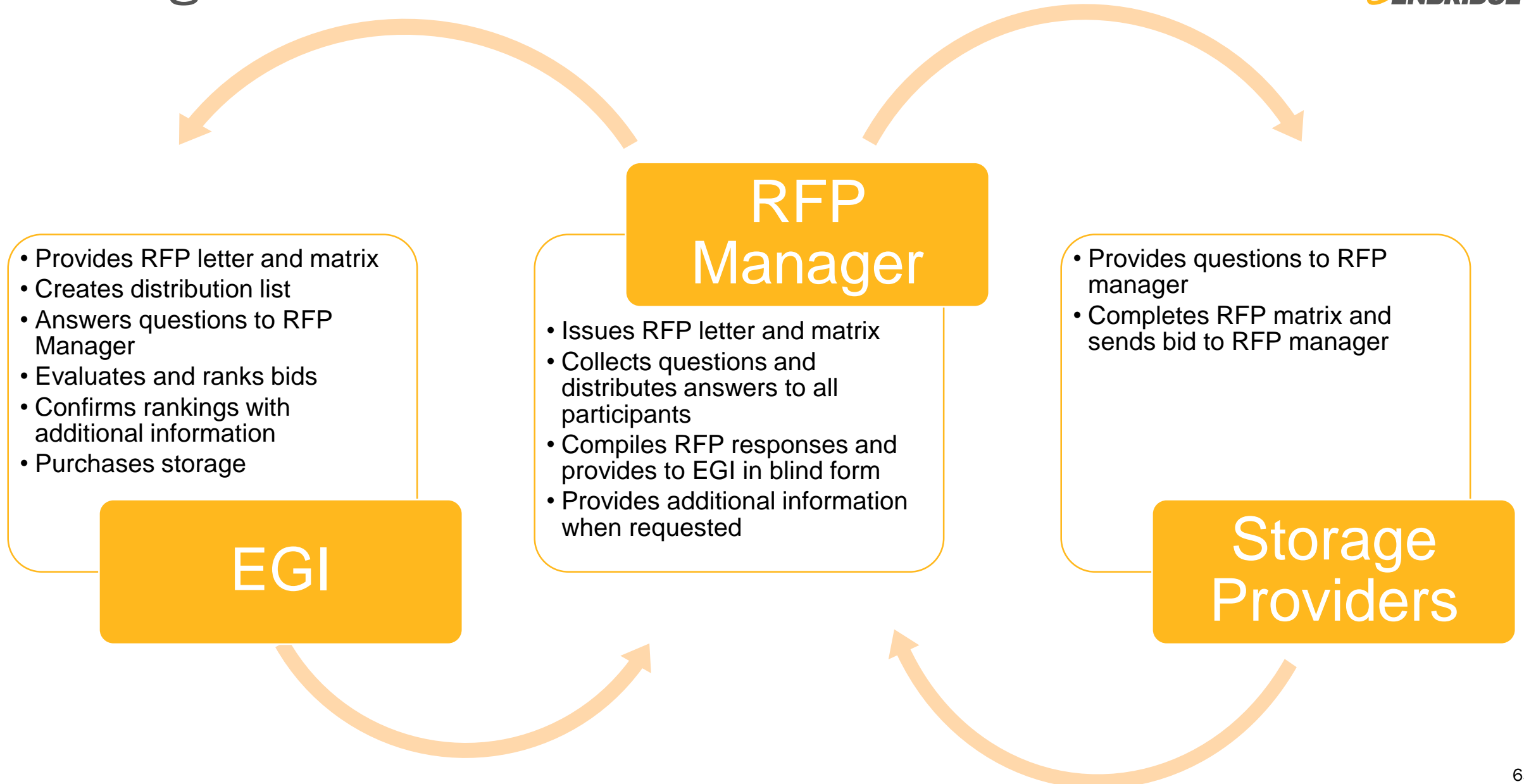
- 99.4PJ of cost-based storage
- 26.4PJ of market-based storage
- Will continue to purchase storage using “blind RFP” process

Storage Contracts



| Contract | Start Date | End Date | Maximum Storage Balance (GJ) | Maximum Withdrawal (GJ) | Maximum Injection (GJ) |
|----------|------------|------------|------------------------------|-------------------------|------------------------|
| 1 | 01-04-2015 | 31-03-2020 | 3,000,000 | 36,000 | 22,500 |
| 2 | 01-04-2015 | 31-03-2020 | 3,000,000 | 120,000 | 60,000 |
| 3 | 01-05-2017 | 30-04-2020 | 1,055,056 | 6,988 | 4,930 |
| 4 | 01-05-2018 | 30-04-2020 | 2,110,112 | 13,974 | 9,861 |
| 5 | 01-04-2016 | 31-03-2021 | 1,500,000 | 18,000 | 11,250 |
| 6 | 01-05-2019 | 31-03-2021 | 1,055,056 | 8,648 | 5,734 |
| 7 | 01-04-2019 | 31-03-2021 | 1,582,584 | 13,080 | 6,486 |
| 8 | 01-04-2017 | 31-03-2022 | 5,000,000 | 60,000 | 37,500 |
| 9 | 01-04-2019 | 31-03-2022 | 2,110,122 | 17,672 | 29,542 |
| 10 | 01-04-2018 | 31-03-2023 | 3,000,000 | 36,000 | 22,500 |
| 11 | 01-04-2019 | 31-03-2024 | 3,000,000 | 36,000 | 22,500 |

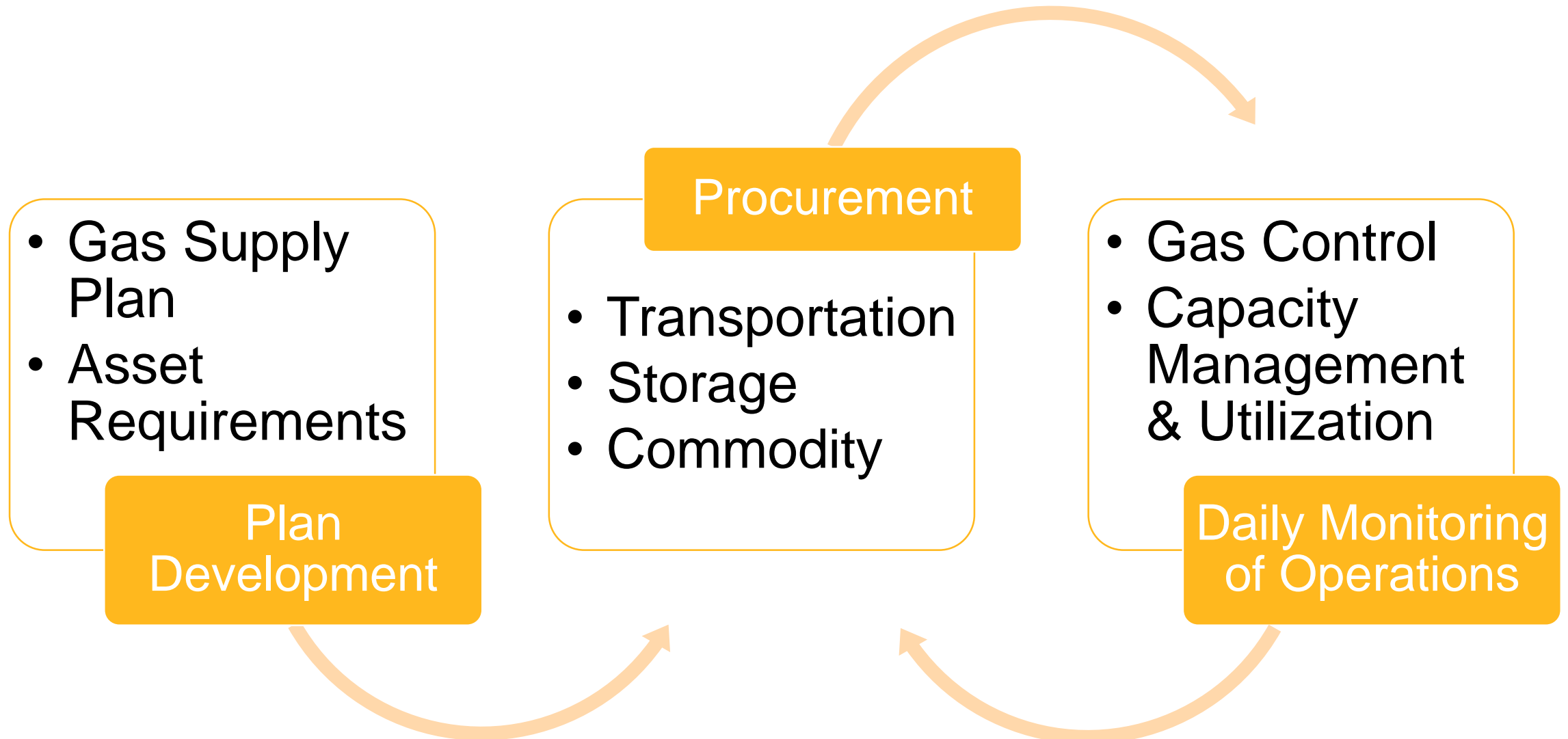
Storage Blind RFP Process



Q & A

Execution & Risk Mitigation

Execution



Procurement Policy

- Objectives
 - Market-sensitive, reasonable price through diversified portfolio
 - Minimize exposure to risk
 - Fair and equitable practices

- Controls
 - Executive and management approvals
 - Segregation of duties
 - Credit and risk monitoring
 - Internal audit

- Transaction process and approved instruments

Gas Supply Procurement



- Execution in line with Gas Supply Procurement Policy
- Transportation & storage assets
 - Achieve diversity in path, services, term, contract terms, supply basin
- Commodity
 - Achieve diversity in terms, suppliers, pricing

EGI Supplier Count November 2017-Oct 2018 Gas Year

| | Dawn | Michcon | Niagara | Panhandle | TCPL | Vector | Chippawa | NOVA |
|------------------------|-------------|----------------|----------------|------------------|-------------|---------------|-----------------|-------------|
| Supplier's <1 PJ | 1 | 5 | 3 | 4 | 3 | 4 | | 5 |
| Supplier's 1 PJ< >3 PJ | 8 | 2 | 1 | 3 | 7 | 4 | | 2 |
| Supplier's > 3 PJ's | 11 | 2 | 3 | 1 | 4 | 7 | 2 | 6 |
| Total | 20 | 9 | 7 | 8 | 14 | 15 | 2 | 13 |

UDC – Unabsorbed Demand Charge



- EGD Rate Zone
 - Flow long haul transportation at 100% capacity
- Union North Rate Zone
 - Transportation flows at most-economical capacity
- Union South Rate Zone
 - Transportation flows at 100% capacity

| (\$000s) | 2016 | 2017 | 2018 |
|---------------------------|--------|--------|-------|
| UDC Costs Incurred | 19,568 | 15,343 | 7,748 |
| Released Capacity Revenue | 10,451 | 7,577 | 3,739 |
| Net UDC Costs | 9,117 | 7,766 | 4,009 |
| Released Capacity (PJ) | 19.9 | 14.6 | 7.1 |

Risk Mitigation

Inherent Risks in the Plan

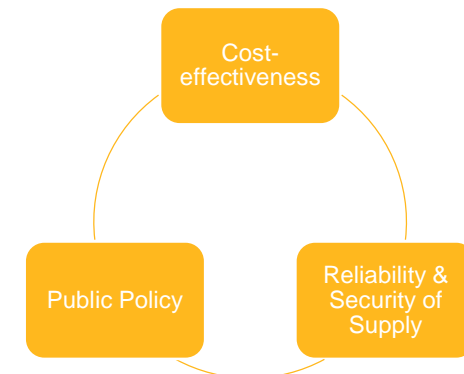
- Variation to planned assumptions
 - Weather variation
 - Demand forecast variation
 - Price variation
- Supply interruption
- Transportation interruption

Risk Mitigation

- 100% creditworthy counterparties
- Large number of unique counterparties
- Supply procurement of varying terms
- Supply basin diversity
- Transportation & storage contracts of varying lengths
- Transportation path diversity
- Storage utilization

Risk Analysis

- Scenario results are illustrative and highlight weather and price risk, which are out of EGI's control
 - Each legacy utility's SENDOUT model is different which creates notable differences (i.e. Apples-to-Oranges)
 - Daily demand vs monthly demand, storage and pipeline utilization assumptions
 - Cannot compare and do not indicate one rate zone is any more at risk than another
- Scenario Creation
 1. Weather variation – Using 80+ years of weather data, ICF simulated most extreme pricing scenarios for North American natural gas supply prices to give 'high', 'base', 'low' scenarios
 2. Demand forecast variation – Using corresponding years for high/base/low, EGI simulated demand changes across its weather zones
 3. Portfolio cost variation – Using existing SENDOUT models, assumed scenario commodity costs and demands to create results
- Risk analysis highlights that energy markets are unpredictable and maintaining flexibility and diversity, in conjunction with reliable supply assets in supply Plans is important to manage unpredictability and manage gas supply costs for ratepayers



Q & A

Performance Measurement

Scorecard/Metric Development

Principles to Achieve

1. Cost Effective

Achieved by:

- 1. Balancing Principles
- 2. Executing Efficiently

2. Reliability & Security

Achieved by:

- 1. Supply to various receipt points
- 2. Meet peak & seasonal delivery requirements

3. Public Policy

Achieved by:

- 1. Support & align where appropriate

Gas Supply Planning Criteria

Demand Forecast Analysis

Supply Option Analysis

Risk Mitigation Analysis

Achieving Public Policy

Procurement Process & Policy Analysis

Strategic Measures

Receipt Points

Reliability

Diversity

Flexibility

Execution of Plan

RNG Procurement



Q & A

Additional Q&A

